OPENING PHASE
PROJECT MANAGEMENT PLAN
FORMER GRIFFISS AIR FORCE BASE
ROME, NEW YORK

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ACRONYMS AND ABBREVIATIONS

AF	Air Force
AFB	Air Force Base
AFCEC	Air Force Civil Engineer Center
AFRPA	Air Force Real Property Agency
AOC	Area of Concern
BCT	BRAC Cleanup Team
BEC	BRAC Environmental Coordinator
Bhate	Bhate Environmental Associates, Inc.
BRAC	Base Realignment and Closure
CAP	Corrective Action Plan
CDRL	Contract Data Requirements List
CDUT	Contractor Data Uploading Tool
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CIBE	BRAC Program Management Execution Branch
CIH	Certified Industrial Hygienist
CO	Contracting Officer
COC	Chemical of Concern
COR	Contracting Officer's Representative
CPSMR	Contractor's Progress, Status, and Management Report
CST	Central Standard Time
DPT	Direct push technology
ERD	Enhanced reductive dechlorination
ERPIMS	Environmental Resources Program Information Management System
ESD	Explanation of Significant Differences
FFA	Federal Facilities Agreement
FYR	Five-Year Review
GSA	General Services Administration
GIS	Geographic Information System
GTS	Geostatistical Temporal-Spatial
H&S	Health and safety
HASP	Health and Safety Plan

HSM	Health and Safety Manager
IC	Institutional Control
ISEB	In-situ enhanced bioremediation
ISCO	In-situ chemical oxidation
IMS	Integrated Master Schedule
LCC	Life Cycle Cost
LFG	Landfill gas
LTM	Long term monitoring
LTO	Long term operations
LUC	Land Use Control
µg/L	Micrograms per liter
MAROS	Monitoring and Remediation Optimization Systems
MNA	Monitored Natural Attenuation
MPS	Milestone Payment Schedule
NFA	No further action
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
O&M	Operation and maintenance
OES	Optimized Exit Strategy
OPS	Operating properly and successfully
OSHA	Occupational Safety and Health Administration
PA	Public Affairs
PBR	Performance-Based Remediation
PCB	Polychlorinated Biphenyl
PE	Professional Engineer
PG	Professional Geologist
PGM	Program Manager
PhD	Doctor of Philosophy
PM	Project Manager
PMP	Project Management Plan
POC	Point of Contact
POP	Period of Performance
PWS	Performance Work Statement
QAPP	Quality Assurance Project Plan

QC	Quality Control
QSM	Quality Systems Manager
RAB	Restoration Advisory Board
RACR	Remedial Action Completion Report
RAO	Remedial Action Objectives
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
ROD	Record of Decision
SC	Site Closeout
SQ	Status Quo
SSHP	Site Safety and Health Plan
SSVM	Sub Slab Vapor Mitigation
SVE	Soil Vapor Extraction
SVI	Soil Vapor Intrusion
TCE	Trichloroethene
TO	Task Order
UFP	Uniform Federal Policy
USEPA	U.S. Environmental Protection Agency
VOC	Volatile Organic Compound
WSA	Weapons Storage Area

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1 INTRODUCTION

Bhate Environmental Associates, Inc. (Bhate), was awarded a task order (TO) FA8903-16-F-0012 under General Services Administration (GSA) contract GS10F0312K by the Air Force Civil Engineer Center (AFCEC) on June 8, 2016. The Performance Work Statement (PWS) issued by AFCEC for this TO is dated May 3, 2016, and is titled "Environmental Remediation at Base Realignment and Closure (BRAC) Eastern Region Bases". Attachment 5 to the PWS presents the Base Specific Information for the Former Griffiss Air Force Base (AFB) in Rome, New York. This is the first update to the Project Management Plan (PMP) issued in 2016 per the outlined contract milestones.

The Bhate Team is composed of Bhate and Arcadis. Our team has experience with the New York State Department of Environmental Conservation (NYSDEC), New York State Department of Health (NYSDOH), and the U.S. Environmental Protection Agency (USEPA) Region 2. The Bhate Team's technical strategy to meet the objectives of this GSA order is to reduce the overall liability and life-cycle costs (LCCs) for the Air Force (AF) 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 AF for the remaining sites.

1.1 Facility Background

Griffiss AFB was designated for realignment under the BRAC in 1993 and formerly realigned on September 30, 1995. The former Griffiss AFB 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 1-1). The base was opened on February 1, 1942, as the Rome Air Depot. In 1987, the USEPA added the base to the National Priorities List, and in 1990, the AF, the NYSDEC, and the USEPA entered into a Federal Facilities Agreement (FFA). In 1993, Griffiss AFB was designated for realignment under the federal BRAC and subsequently deactivated. This Performance-Based Remediation (PBR) project is part of the BRAC 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

The former Griffiss AFB 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 435 feet above mean sea level in the southern extremity of the property to 595 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. There are two permanent streams within the boundary of the former AFB. Six Mile Creek is the longer stream entering at the base northeast boundary and flowing in a southeasterly direction. Three Mile Creek is located in the central part of the base and also flows to the southeast.

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

The 24 Griffiss AFB sites under this contract are summarized in Table 3-1. Nineteen (19) of the 24 sites included in this PBR contract are being addressed following the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process. Four (4) of the remaining 5 sites are petroleum sites requiring closure under the NYSDEC Spills Program. Finally, the 24th site is being addressed following the Resource Conservation and Recovery Act (RCRA) process. The sites are shown on Figure 1-2. They are divided into several contractual end state categories which are discussed in the following sections.

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

Over the last 5 years, RAB Meetings and onsite meetings with all stakeholders have been completed on November 16, 2011; December 6, 2012; December 11, 2013; June 16, 2015, September 8, 2016; and June 8, 2017. It should be noted that the RAB Meeting scheduled for December 11, 2014, was postponed due to Winter Storm Damon and was rescheduled for June 2015. Semi-annual onsite meetings with the USEPA and the NYSDEC have been completed on March 11, 2011; April 24, 2012; June 27, 2013; June 12, 2014; June 16, 2015; and June 16, 2016. Annual meetings have been completed under this contract in September 2016 and June 2017.

1.3.1 Status Quo Sites

The five sites listed below are classified as Status Quo (SQ) sites under the contract. By definition, maintaining SQ includes continuing current activities without optimization, for

example, landfill cap Long Term Monitoring (LTM), groundwater monitoring, other Long Term Operations (LTO)/LTM activities, land use control/institutional control (LUC/IC) monitoring, and Five-Year Review (FYR). These activities by site are as follows:

- **AOI66 Steam Plant APDO Storage Yard)**: Annual LUC/IC inspections to document the continued LUC/IC implementation and FYR.
- **SS008 (Building 112/Polychlorinated Biphenyl [PCB] Dump Area)**: Annual LUC/IC inspections to document the continued LUC/IC implementation and FYR.
- **SS033 (Coal Yard Storage Area-PCB Site)**: Annual LUC/IC inspections to document the continued LUC/IC implementation and FYR.
- **SS044 (Substation, Electrical Power-PCB Site)**: Annual LUC/IC inspections to document the continued LUC/IC implementation and FYR.
- **SS060 (STW-1300 Building 35/36 Area of Concern [AOC])**: Annual LUC/IC inspections to document the continued LUC/IC implementation and FYR (AF Policy Review).

1.3.2 Optimized Exit Strategy (OES) Sites

There are seven sites with OES as the contractual end state. For three of these sites (SD052-01, SD052-04, and SD052-05), the goal of the OES is to treat hot spots and to optimize performance monitoring requirements to reduce AF LCCs in the out-years until the Remedial Action Objectives (RAOs) are achieved. Performance monitoring will focus on ensuring protection of human health and the environment as well as providing useful information regarding the treatment system overall effectiveness. Specific activities to be performed at each of these sites are as follows:

- **SD052-01 (Apron 2 Chlorinated Plume)**: Prepare Remedial Optimization Work Plan to complete pilot study of enhanced reductive dechlorination (ERD) in-situ treatment. Prepare Explanation of Significant Difference (ESD) for In-situ Enhanced Bioremediation (ISEB) with monitored natural attenuation (MNA) remedy, if necessary. Conduct focused ISEB injections based upon microcosm study data; use Monitoring and Remediation Optimization Systems (MAROS) or Geostatistical Temporal-Spatial (GTS) software to optimize groundwater monitoring; conduct LUC/IC monitoring and FYR. Prepare OES Report.
- **SD052-04 (Landfill 6 Chlorinated Plume) and SD052-05 (Building 817 Chlorinated Plume)**: Conduct follow-on ISEB injections within existing injection wells at SD052-04 and via direct push technology (DPT) at SD052-05; use MAROS or GTS software to optimize groundwater monitoring; conduct LUC/IC monitoring and FYR. Prepare Remedial Optimization Work Plan and OES Report.

- **SD052-SVI (Soil Vapor Intrusion [SVI] System)**: Continue operation and maintenance (O&M) of SD052-02 sub slab vapor mitigation (SSVM) system and convert SD052-01 SSVM system to a passive system.

- **SS054 (Building 781 Pumphouse, Petroleum Site)**: For site SS054 the goal of the OES is primarily to reduce the chemicals of concern (COCs) to levels that allow for Site Closeout (SC) by 2027. The secondary goal is to reduce LTM requirements and decrease LCCs until the RAOs are achieved. These goals will be achieved by optimizing the biosparge system and monitoring well network; continued O&M of the existing biosparge system, groundwater sampling and reporting, annual LTM and LUC inspections/reporting; and submittal of Corrective Action Plan (CAP), Optimization Plan, OES Report, and FYR (as part of AF Policy).

- **SS062 (AOC 9 Weapons Storage Area [WSA] Landfill Chlorinated Plume)**: The goal of OES for site SS062 is primarily to reduce the COCs to levels that allow for achievement of Response Complete (RC) by 2024 through MNA. The secondary goal is to reduce LTM requirements to decrease LCCs until the RAOs are achieved. These goals will be achieved by continued optimization of selected remedy and the monitoring well network; continued groundwater and LUC/IC monitoring and reporting; and submittal of optimization work plan, OES report, and FYR.

- **SS067 (Building 789 Type II Fuel System, Petroleum Site)**: The OES goal for site SS067 is to eliminate free product followed by optimization of LTM. A CAP will be prepared to delineate free product and present the design to eliminate free product via excavation coupled with a recovery trench. After free product elimination, optimization of LTM; continued O&M of systems, soil vapor/air/groundwater monitoring/reporting, LUC/IC inspection; and submittal of optimization work plan, OES report, and FYR as part of AF Policy.

1.3.3 Response Complete Sites

Five of these six CERCLA sites are all capped landfills with ongoing post-closure activities that include the performance of routine, preventive, predictive, scheduled, and unscheduled inspections. Groundwater and surface water sample results are compared to NYSDEC Class GA Groundwater Standards and NYSDEC Class C Surface Water Standards. Site activities are conducted under the supervision and recommendations of the USEPA, Region 2 and NYSDEC. The goal of RC is to obtain formalized documentation for the AF that each landfill is considered to have achieved the RAOs presented in the approved record of decision (ROD). OES is primarily to reduce LTM requirements to decrease LCCs in an effective manner through 2045. LTM will focus on ensuring protection of human health and the environment. The sixth site (SD052-02 Building 775) is a chlorinated solvent plume associated with a degreasing system in Building 774. Specific activities to be completed at each site during the period of performance (POP) are as follows:

- **LF001 (Landfill 1)**: Reduce landfill gas (LFG) monitoring by 50% and to annual from semi-annual within POP, reduce groundwater monitoring locations by 25% and all sampling to biennial, and perform annual cap inspections.

- **LF002 (Landfills 2 & 3)**: Reduce LFG monitoring by 40% and to annual from semi-annual within POP, begin sampling every 5 years with FYR starting in 2019, and perform annual cap inspections.

- **LF003 (Landfill 7)**: Reduce sample locations by 25%, begin sampling every 5 years with FYR starting in 2019 and perform annual cap inspections.

- **LF007 (Landfill 5)**: Begin sampling every 5 years with FYR starting in 2019 and perform annual cap inspections.

- **LF009 (Landfill 6)**: Reduce LFG monitoring by 50% and to annual from semi-annual within POP. Reduce groundwater monitoring locations by 50% and move to biennial sampling within POP and begin sampling every 5 years with FYR starting in 2019. Perform annual cap inspections.

- **SD052-02 (Building 775)**: Prepare Remedial Optimization Work Plan to evaluate alternative remedies including completion of an ISEB pilot study, and prepare Focused Feasibility Study, Proposed Plan, and ROD Amendment or ESD. Shutdown the groundwater extraction system based upon recent groundwater results demonstrating asymptotic conditions coupled with treatment of the 50 micrograms per liter (µg/L) trichloroethene (TCE) plume within the radius of influence. Continue LUC/IC monitoring and reporting and FYR until RC is achieved.

1.3.4 Site Closeout Sites

Six sites have a contractual end state of SC, which will be achieved differently at each site. Specific activities to be complete at each site are as follows:

- **ST006 (Building 101)**: Perform soil vapor extraction (SVE) treatment system O&M, soil vapor/air/ groundwater monitoring, LUC/IC monitoring and FYRs until TCE is remediated; then evaluate rebound and revise risk assessment; prepare ESD to remove ROD restrictions; prepare Remedial Action Completion Report (RACR) and then remove/abandon SVE system and monitoring wells. Achieve SC through SC Report. Note: this site is currently being managed by FPM Remediations Inc., under their PBR contract as the contracted end-state has not been achieved. Rebound study completed by FPM did not support SC. FPM suggested that a continuing source may be present. Further direction is needed from the Contracting Officer (CO).

- **SS017 (Lot 69 Former Hazardous Waste Storage Area), DP022 (Building 222), and SS025 (T-9 Storage Area)**: Collect current site data, as necessary, to perform direct soil screening

followed by an assessment, if necessary, to demonstrate sites meet criteria for unrestricted land use; prepare ESD to remove ROD restrictions; continue LUC monitoring (and FYR if necessary) until no further action (NFA) determination is achieved and documented via RACR; abandon monitoring wells. Achieve SC through SC Reports.

- **CSS681-Apron 1 (LCP-E9, Petroleum Site)**: Submit CAP to delineate plume and to complete in-situ chemical oxidation (ISCO) injections, perform quarterly performance monitoring/reporting, perform rebound analysis, submit spill closure report, decommission monitoring wells, and submit SC Report.

- **CSS682-Building 785 Pipeline (Petroleum Site):** Collect groundwater and soil samples to assess current status of remedy implemented in 2015 and then complete additional in-situ treatment, if necessary; continue performance monitoring until cleanup goals are achieved; monitor for another year to verify no rebound; prepare/submit a spill closure report, decommission monitoring wells, and prepare SC Report to achieve SC.

2 PROJECT RESOURCES

The Bhate Team will execute this contract in order to achieve the site objectives and performance milestones, while ensuring that safety, quality, and regulatory goals are met. The Bhate 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 LCCs, and achieve the performance goals and objectives of this GSA order.

This section identifies the key Bhate Team resources that are in place to perform this TO. As prime, Bhate 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 Arcadis, as necessary, into our management approach. Arcadis will be overseeing the work performed at Former Plattsburgh AFB awarded under this TO.

2.1 Program Manager

The Program Manager (PGM), Mr. Frank Gardner, Professional Geologist (PG), has the overall responsibility for all technical, contractual, safety, and administrative matters for Bhate under this contract. Mr. Gardner serves as the focal point for coordination of all contracts-related issues with AFCEC, and facilitates the Bhate Team's ability to consistently deliver a high-quality work product, on time and within budget. Mr. Gardner delegates 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. Gardner's 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

Ms. Kim Nemmers is assigned as the PM for the former Griffiss AFB. The role of the PM is 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 is the primary point of contact (POC) with AFCEC and Griffiss AFB, and is responsible for the overall execution of this project including cost, project status, schedule updates, and technical quality.

The PM works 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 AFB
- 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 Program Health and Safety Plan (HASP), Site-Specific Safety and Health Plans (SSHPs) as needed, Griffiss requirements, and Occupational Safety and Health Administration (OSHA) regulations
- Managing dedicated professional subcontract activities

2.3 Safety and Health Manager

Ms. Sally Smith, Certified Industrial Hygienist (CIH), acts as the Health and Safety Manager (HSM) and is responsible for overseeing project safety performance. She authorizes all aspects of the Program HASP and SSHP. Any proposed deviations from the approved Program HASP and SSHP or changes in expected site conditions are immediately presented to the HSM for consideration/approval. The HSM coordinates with the PM, but reports directly to Bhate's Chief Executive Officer.

Duties of the HSM include, but are not limited to, the following:

- Serving as the liaison between corporate health and safety (H&S) and the PM
- Overseeing the administration of the Bhate Health and Safety 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 H&S 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 Program HASP or SSHP
- Conducting random H&S audits in the field
- Assisting in accident investigations with field personnel and reporting to accident review boards, if necessary

2.4 Quality Systems Manager

The QSM for this project is Corey Green of Bhate. 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. She provides overall direction to the program QC function; performs audits, surveillance, and document reviews; and executes other quality functions as required in the Quality Project Plan. She interfaces with Ms. Nemmers on the quality functions of the program and coordinates all QC activities.

Implementation of the QC duties are 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

2.5 Senior Engineer

Dr. Mark Stapleton, Professional Engineer (PE), Doctor of Philosophy (PhD), 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. Dr. Stapleton also coordinates the technical efforts of Bhate'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

2.6 Bhate Team Subcontractors

Bhate directs all subcontractors and ensures that subcontractors are performing work in accordance with schedule, safety, and quality requirements of this GSA order. Proper

subcontract management generates effective work progress that is compliant with federal, state, and local requirements and provides AFCEC with seamless execution. Contractual agreements between Bhate and the Bhate Team subcontractors contain flow-down clauses that require subcontractors to meet all appropriate Griffiss, Federal, and State requirements. Onsite subcontractors coordinate their activities through Bhate Team personnel and are required to submit daily reports documenting their activities.

Bhate Team members and their primary responsibilities are discussed below. Other subcontractors may be used by the PM as needed.

2.6.1 Arcadis

Arcadis will utilize their experience at the former Plattsburg AFB CERCLA sites identified in the PBR. Ardadis' value to the Bhate Team includes experience in site closure and completing property transfers. Arcadis will provided technical resources as necessary to support contract objectives.

3 TECHNICAL APPROACH

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

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

- Status Quo
- Optimized Exit Strategy
- Response Complete
- Site Closeout with Unrestricted Reuse (i.e., no remaining Air Force financial liabilities)

Bhate recognizes that changes to the technical approach may occur over the course of the project. These revisions will be discussed with AFCEC/BRAC Program Management Execution Branch (CIBE), the CO if necessary, and upon concurrence, will be documented within the PMP as a revision.

3.1 PBR Transition

The Bhate Team will work effectively to keep the project on schedule and maintain compliance. The Bhate Team has longstanding existing relationships with AFCEC, the former Air Force Real Property Agency (AFRPA), NYSDEC, NYSDOH, and USEPA regulators which will support a seamless transition to the new contract. The Bhate PM for the former Griffiss AFB completed a site walk with the BRAC Environmental Coordinator (BEC) on June 27 and 28, 2016. The Bhate Team will work closely with the BEC and his support staff to obtain information for transitioning as seamlessly as possible. Bhate subcontracted Parsons, who has recent and relevant experience at the former Griffiss AFB, to provide local field support to complete treatment system maintenance and LTM activities. The Bhate Team will work to establish a dynamic and open communication with the applicable regulators with support from the BEC to hopefully minimize schedule delays due to document reviews or acceptance of approaches presented previously.

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Table 3-1. Griffiss PBR Sites

Site #	Site Identification and Site Name	Performance Objective	Regulatory Program	Technical Approach	PPO Date	SC Date
SQ Sites						
1	AOI66-Steam Plant APDO Storage Yard	SQ	CERCLA	LUC/IC monitoring/reporting and FYR.	NA	Indefinite
2	SS008-Building 112/PCB Dump Area	SQ	CERCLA	LUC/IC monitoring/reporting and FYR.	NA	Indefinite
3	SS033-Coal Storage Area – PCB site	SQ	CERCLA	LUC/IC monitoring/reporting and FYR.	NA	Indefinite
4	SS044-Substation, Electrical Power – PCB Site	SQ	CERCLA	LUC/IC monitoring/reporting and FYR.	NA	Indefinite
5	SS060-STW-1300 Building 35/36 AOC	SQ	RCRA	LUC/IC monitoring/reporting and FYR (FYR is an Air Force Policy requirement).	NA	Indefinite
OES Sites						
6	SD052-01 (Apron 2 Chlorinated Plume)	OES	CERCLA	Conduct focused ISEB injections as pilot study; prepare ESD to support ISEB with MNA remedy, if necessary; use MAROS or GTS software to optimize groundwater monitoring; conduct LUC/IC monitoring and FYR. Prepare OES Report.	04/2021	12/2036
7	SD052-04 (Landfill 6 Chlorinated Plume)	OES	CERCLA	Conduct follow-on ISEB injections within existing injection wells; use MAROS or GTS software to optimize groundwater monitoring; conduct LUC/IC monitoring and FYR. Prepare Optimization Plan and OES Report.	03/2021	12/2038
8	SD052-05 (Building 817 Chlorinated Plume)	OES	CERCLA	Conduct follow-on ISEB injections via DPT; use MAROS or GTS software to optimize groundwater monitoring; conduct LUC/IC monitoring and FYR. Prepare Remedial Optimization Work Plan and OES Report.	02/2021	12/2040
9	SD052-SVI (Soil Vapor Intrusion System)	OES	CERCLA	Continue O&M of SD052-02 SSVM system and convert SD052-01 SSVM system to a passive system.	05/2018	12/2025
10	SS054-Building 781, Pumphouse – Free Product on Groundwater (NYSDEC Spill #9202658)	OES	NYSDEC	Optimize biosparge system and monitoring well network; continue O&M of existing biosparge system, groundwater sampling and reporting, annual LTM and LUC inspections/reporting; submit CAP, Optimization Plan OES reports, and non-CERCLA FYR (FYR is an Air Force Policy requirement).	02/2021	12/2027
11	SS062-AOC 9 Weapons Storage Area Landfill Chlorinated Plume	OES	CERCLA	Optimize selected remedy (ISCO) and optimize monitoring well network; continue groundwater and LUC/IC monitoring and reporting; submit optimization work plan, OES report, and FYR.	03/2021	12/2027
12	SS067-Building 789 Type II Fuel System (NYSDEC Spill #9810713)	OES	NYSDEC	Prepare CAP to delineate free product and eliminate free product via excavation coupled with a free product recovery trench; after free product elimination, optimize LTM; continue O&M of systems, soil vapor/air/groundwater monitoring/reporting, LUC/IC inspection; submit optimization work plan, OES report, and FYR (FYR is an Air Force Policy requirement).	10/2020	12/2027
RC Sites						
13	LF001-Landfill 1	Achieved RC in 2017	CERCLA	Prepared technical memorandum to document that RAOs have been achieved to document RC; reduce LFG monitoring by 50% through reduction of gas vents monitored and to annual from semi-annual within POP; reduce groundwater monitoring locations by 25% based upon continued non-exceedance of landfill leachate indicators or Volatile Organic Compounds (VOCs) and all sampling to biennial; and perform annual cap inspections. Prepare Optimization Plan and OES Reports.	11/2016	Indefinite
14	LF002-Landfills 2 & 3	Achieved RC in 2017	CERCLA	Prepare technical memorandum to document that RAOs have been achieved to document RC; reduce LFG monitoring by 40% and to annual from semi-annual within POP; begin sampling every 5 years starting in 2019 before the FYR in 2020; eliminate sampling from 2 groundwater monitoring wells; and perform annual cap inspections. Prepare Optimization Plan and OES Reports.	11/2016	Indefinite
15	LF003-Landfill 7	Achieved RC in 2017	CERCLA	Prepare technical memorandum to document that RAOs have been achieved to document RC; reduce sample locations by 25% and begin sampling every 5 years starting in 2019 before the FYR in 2020; perform annual cap inspections. Prepare Optimization Plan and OES Report.	11/2016	Indefinite
16	LF007-Landfill 5	Achieved RC in 2017	CERCLA	Prepare technical memorandum to document that RAOs have been achieved to document RC; reduce sample locations by 25% and begin sampling every 5 years starting in 2019 before the FYR in 2020; and perform annual cap inspections. Prepare Optimization Plan and OES Report.	11/2016	Indefinite
17	LF009-Landfill 6	Achieved RC in 2017	CERCLA	Prepare technical memorandum to document that RAOs have been achieved to document RC; reduce LFG monitoring by 50% and to annual within POP; reduce groundwater monitoring to 10 locations; begin sampling every 5 years in 2019 before the FYR in 2020 and perform annual cap inspections. Prepare Optimization Plan and OES Report.	11/2016	Indefinite

Table 3-1. Griffiss PBR Sites

Site #	Site Identification and Site Name	Performance Objective	Regulatory Program	Technical Approach	PPO Date	SC Date
18	SD052-02	RC	CERCLA	Prepared Remedial Optimization Work Plan to evaluate alternative remedies, including completion of an ISCO pilot study; prepare Focused Feasibility Study, Proposed Plan, and ROD; use MAROS or GTS software to optimize groundwater monitoring; conduct LUC/IC monitoring and reporting and FYR.	02/2021	12/2022
SC Sites						
19	ST006-Building 101	SC	CERCLA	Perform SVE treatment system O&M, soil vapor/air/groundwater monitoring, LUC/IC monitoring and FYRs until TCE is remediated; then evaluate rebound and revise risk assessment; prepare ESD to remove ROD restrictions; prepare RACR and then remove/abandon SVE system and monitoring wells. Achieve SC through SC Report.	06/2021	06/2021
20	SS017-Lot 69 Former Hazardous Waste Storage Area	SC	CERCLA	Collect current site data to perform assessment demonstrating sites meet criteria for unrestricted land use; prepare ESD to remove ROD restrictions; continue LUC monitoring (and FYR if necessary) until NFA determination is achieved and documented via RACR; abandon monitoring wells. Achieve SC through SC Reports.	06/2020	06/2020
21	DP022-Building 222	SC	CERCLA		06/2020	
22	SS025-T-9 Storage Area–contaminated soil/groundwater	SC	CERCLA		06/2020	
23	CSS681-Apron 1 Area LCP-E9 (NYSDEC Spill #1501553)	SC	NYSDEC	Submit CAP to delineate plume and to perform ISCO for petroleum impacted groundwater and smear zone; perform quarterly performance monitoring/reporting, perform rebound analysis, submit spill closure report, decommission monitoring wells, submit SC Report.	12/2020	12/2020
24	CSS682-Building 785 Pipeline (NYSDEC Spill #1408594)	SC	NYSDEC	Complete additional in-situ treatment, if necessary; continue performance monitoring until cleanup goals are achieved; monitor for another year to verify no rebound; prepare/submit a spill closure report, decommission monitoring wells, prepare SC Report to achieve SC.	11/2020	12/2020

3.2 Technical Support

The Bhate 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 agendas, handouts, and meeting minutes
- Supporting regulatory meetings of the BRAC Cleanup Team (BCT), 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 AF data calls, meetings, annual work cell events, real property-related actions, etc.
- Supporting Property Transfer Management Actions (deed modifications to add/delete environmental requirements and preparation of Operating Properly and Successfully [OPS] Determinations)

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4 PROJECT SCHEDULE

The Contract POP expires on June 2020. All actions required to meet the objectives of this TO (identified in the Milestone Payment Schedule [MPS] and the Integrated Master Schedule [IMS] as Appendices C and E, respectively), are presently on track to be accomplished by that date. Bhate will work with AFCEC and the regulatory community to stagger the delivery of documents as much as possible to avoid delays.

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.

Contractor's Progress, Status, and Management Reports (CPSMRs) will be issued by the 10th business day of each month and will include document delivery schedule and minutes from the monthly team meetings and monthly meetings with NYSDEC CERCLA Group and USEPA 2 representatives. The CPSMRs will include site status updates to facilitate review of specific performance objectives for each site.

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5 MANAGEMENT APPROACH

The general management approach for this TO is described in this section. 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 contract are summarized below and forecasted milestones have been updated on the performance MPS 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 using statistical and/or graphical/tabular interpretation. The data analysis will be relied upon to make optimization, remediation, or SC 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.

5.2 Documents

Working Copy documents will be submitted to AFCEC for review and comment. Following AFCEC review, the draft version documents will be submitted to NYSDEC and USEPA for review and comment. Bhate will provide responses to regulatory comments. Draft final documents may be submitted that incorporates regulator comments. Once all comments are received, final documents addressing all comments will be submitted.

To the 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:

- LUC/IC Sites
- Landfills
- Petroleum Spill Sites
- SVI Sites

5.2.1 PMP

Bhate will submit the draft PMP to AFCEC for review. The PMP will meet the requirements of Contract Data Requirements List (CDRL) A002. The final document will be submitted within 14 calendar days of receipt of Government comments to the draft PMP. Once written approval

from AFCEC is received, Bhate will invoice for the PMP performance milestone in accordance with the proposed performance milestone and payment schedule. Annual updates will be submitted and invoices will be submitted for the PMP performance milestones when the PMP updates are approved.

5.2.2 Five-Year Review

FYRs will be conducted for all Griffiss Sites containing contamination above levels that allow for unrestricted use. Of the 24 sites listed in Table 3-1, 19 will undergo the FYR as prescribed under CERCLA. The five, non-CERCLA sites listed in Table 3-1 will undergo AF policy required reviews as part of the FYR process unless they achieve SC before the next FYR.

5.2.3 Uniform Federal Policy-Quality Assurance Project Plan and HASP

The Bhate Team will submit the Working Copy Uniform Federal Policy (UFP)-Quality Assurance Project Plan (QAPP) and Program HASP to AFCEC for review and comment. Following AFCEC review, the draft UFP-QAPP will be submitted to the NYSDEC and the USEPA for review. Bhate will provide responses to regulatory comments. The final document will be submitted within 14 calendar days of receipt of Government comments to the draft documents. After receiving approval from AFCEC, the USEPA, and the NYSDEC, Bhate will invoice for the UFP-QAPP and Program HASP performance milestone in accordance with the proposed performance milestone and payment schedule. Annual Program HASP updates will be submitted and invoices will be submitted for the PMP performance milestones when the UFP-QAPP and Program HASP updates are approved.

5.2.4 Annual Well Inventory/Maintenance Reports

The Bhate Team will submit the Working Copy annual site inspection and repairs reports to AFCEC for review and comment. Inspections will document features such as monitoring wells, piping, remediation equipment, and fencing. Well location information along with a list of wells not located during field inventory/inspection requiring follow-up during the next inspection event will also be reported. The draft reports will document inspection findings and any repairs conducted. Following AFCEC review, the final annual site inspection and repairs reports will be submitted to the NYSDEC and the USEPA for informational purposes. Bhate will provide responses to regulatory comments to the final documents through correspondence or as part of the next reporting cycle for that document. Once approval from AFCEC, the USEPA, and the NYSDEC is received, Bhate will invoice for the Annual Inspection and Repairs Reports performance milestone in accordance with the proposed performance milestone and payment schedule.

5.2.5 Annual LTM Reports

The Bhate Team will submit the Working Copy of annual LTM Reports to AFCEC for review and comment. The annual LTM Report will consist of the Data Quality Control Report, the annual groundwater monitoring report, data validation, the Environmental Resources Program Information Management System (ERPIMS) data submittal, and the required GIS data. The annual LTM Reports will include monitoring results, site conclusions, and recommendations.

Following AFCEC review, the final LTM Report will be submitted to the NYSDEC, NYSDOH, and the USEPA for informational purposes. If regulatory comments are received they will be addressed either via correspondence or as part of the next reporting cycle for that document. Once approval from AFCEC, the USEPA, NYSDOH, and the NYSDEC is received, Bhate will invoice for the annual Final Annual LTM Report performance milestone in accordance with the proposed performance milestone and payment schedule. The Final LTM Report will include the Electronic Data Deliverables from the laboratory for NYSDEC use.

Data review will be done on 100% of sample data, and level IV data validation will be performed on 10% 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.

5.2.6 Annual LUC/IC Inspection Reports

The Bhate Team will submit the Working Copy annual landfill LUC/IC inspection reports to AFCEC for review and comment. The LUC/IC report will include property owner certification of compliance with the applicable LUC/ICs. Following AFCEC review, the final annual landfill LUC/IC inspection reports will be submitted to the NYSDEC, NYSDOH, and the USEPA for informational purposes. If regulatory comments are received they will be addressed either via correspondence or as part of the next reporting cycle for that document. Bhate will provide responses to regulatory comments to the draft documents, and will submit final reports. Once approval from AFCEC, the USEPA, NYSDOH, and the NYSDEC is received, Bhate will invoice for the Annual LUC/IC Inspection Reports performance milestone in accordance with the proposed performance milestone and payment schedule.

5.2.7 Optimization Plans

The Bhate Team has submitted Working Copy Optimization Plans to AFCEC for review and comment. Following AFCEC review, the draft Optimization Plans were submitted to the NYSDEC and the USEPA for review. Bhate provided responses to regulatory comments to the draft documents, if received, and then issued final documents. Once approval from AFCEC, the USEPA, and the NYSDEC was received, Bhate invoiced for the Optimization 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. Necessary mitigation actions needed to keep moving the site toward achievement of the proposed objective will be implemented as soon as practical.

5.2.8 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, Design/Plan Remedy Optimization plans, Optimization plans, Site Closure Reports, Groundwater Monitoring Reports, Corrective Action Plans, and ESD. After receiving individual approval from AFCEC, the USEPA, and the NYSDEC for these deliverables, Bhate will invoice for each individual performance milestone in accordance with the proposed performance milestone and payment schedule.

5.2.9 ERPIMS

Bhate will provide an ERPIMS Data Submission Schedule within 30 days of contract award (CDRL B009). ERPIMS submittals will be provided within 90 days of the sampling event unless a written waiver or extension is obtained from the CO in coordination with the Contracting Officer's Representative (COR) (CDRL B010). Additionally, documentation of successful uploads will be provided to AFCEC and included as backup as appropriate with invoices.

5.2.10 AFCEC Website Uploads

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 to use the Contractor Data Uploading Tool (CDUT) which is an electronic data delivery, storage, and retrieval system used to standardize electronic delivery and document management for deliverables related to this AFCEC contract. Over the past several years there has been repeated difficulties with the AFCEC website for uploading final deliverables. As a temporary remedy, Bhate will be providing, per AFCEC direction, compact discs with PDF files of final documents to the CO designee that will be inclusive of GIS data. These deliverables will be suitable for uploading to the Administrative Record (including metadata sheets with electronic copies submitted to Mr. Monico Luna).

5.3 Communications

The Bhate Team will 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 Bhate Team, and regulatory stakeholders to achieve the project goals and SCs proposed for the successful execution of this PBR Contract.

The Bhate Team will work with the AF, NYSDOH, NYSDEC and USEPA Region 2 to ensure the document review process remains within the established review time periods per the FFA. Bhate will continue to conduct monthly BCT meetings with AF, NYSDOH, NYSDEC and USEPA Region 2 personnel to review needed action by these agencies for submitted documents, to provide a forecast for upcoming document submittals, and to discuss progress and issues at applicable sites as necessary. A summary table of document submittals requiring their action and a forecast of upcoming document deliverables will be updated and provided each month. Bhate will continue to proactively communicate its needs to NYSDEC and the USEPA and seek their support in meeting contract objectives. Additional weekly internal contract status meetings between the AF and Bhate will be held until the COR and Bhate determine the frequency should be reduced.

The PM will continue to make her primary objective the achievement of a level of communication which is appropriate, efficient, and focused on project goals and agreed upon initiatives. The PM previously met with the BEC onsite on June 27 and 28, 2016, to visit the sites and discuss our approaches. Monthly BCT meetings along with annual in-person meetings will facilitate open communications. At this time, all stakeholders will agree to communication protocols and meeting document review periods as established in the FFA. In the interim, on board reviews and scoping sessions will be scheduled as necessary, to provide open lines of communication and input as the Bhate Team finalizes works plans and prepares for field efforts. The Bhate Team will provide advance notification for planned field work as well as notification of system outages.

Communication protocols were designed to build trust and a commitment of cooperation among stakeholders while addressing the AF's need to close sites and reduce LCCs.

5.3.1 Project Management Team

The first avenue of communication is between the project management team and AFCEC. This team consists of our PM, PGM, 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.

5.3.2 Program Management Team

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

5.3.3 Field Weekly Status Reports

During active field project activities, Bhate will notify the BEC, who is also the 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. Every attempt will also be made to notify the regulatory agencies in advance of any planned field work to facilitate any necessary or desired site visits. Field activity updates will be provided 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.

Any immediate issues encountered during field activities or other contract activities will be addressed promptly in accordance with the appropriate reporting procedures required by law and the critical issues notification procedures outlined in the PWS.

5.3.4 Conference Calls

Bi-weekly conference calls will be conducted with the Bhate 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. Weekly conference calls will be scheduled for every Wednesday at 10:00 AM Central Standard Time (CST). An Action Item tracker for these weekly meetings is prepared by the Bhate PM and distributed prior to the next weekly meeting for project team review.

In addition, monthly meetings (BCT meetings) have been scheduled on the fourth Thursday of each month with AFCEC, Bhate, NYSDEC, and USEPA CERCLA representatives. These meetings are scheduled for 10:00 AM CST. Minutes for these monthly meeting are prepared by the Bhate 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, AFCEC
- Adalberto Ramirez, AFCEC
- Kim Nemmers, Bhate
- Frank Gardner, Bhate

5.3.5 Monthly Project Reports

Monthly project reports (CPSMR) will be prepared and submitted to AFCEC by the third week of each month and address progress and issues noted during the preceding month as well as a

forecast of planned future activities including fieldwork. Monthly reports will include updates to the milestone schedule as needed. The project schedule is attached as Appendix E.

5.3.6 Annual Onsite Meetings

Annual onsite meetings will be held between the PM, AFCEC personnel, NYSDEC representatives, and USEPA Region 2 representatives. This meeting will be scheduled to coincide with the Annual RAB meeting typically held in the second quarter of each calendar year (e.g. June).

5.3.7 Written Correspondence

All written correspondence pertaining to this TO will be addressed to the COR unless otherwise directed by the 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 PM. Written directions or clarifications to the PWS will only be provided by the CO.

5.3.8 Community Relations

Issues relating to public relations will be resolved in a timely manner to the satisfaction of the Government. Bhate 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 BRAC Environmental Coordinator (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 866-725-7617. For 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."

5.3.9 Contracts Office Communication

Bhate will maintain active communication with the AFCEC CO and their designated representative. Currently these individuals are Edward Flores and Nathan McGowan. AFCEC Contract representatives are provided the minutes for 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 Flores and McGowan) will be immediately notified and a solution based on the contract requirements and the Federal Acquisition Regulations will be decided. Contact information for these individuals are included in Appendix D.

FIGURES

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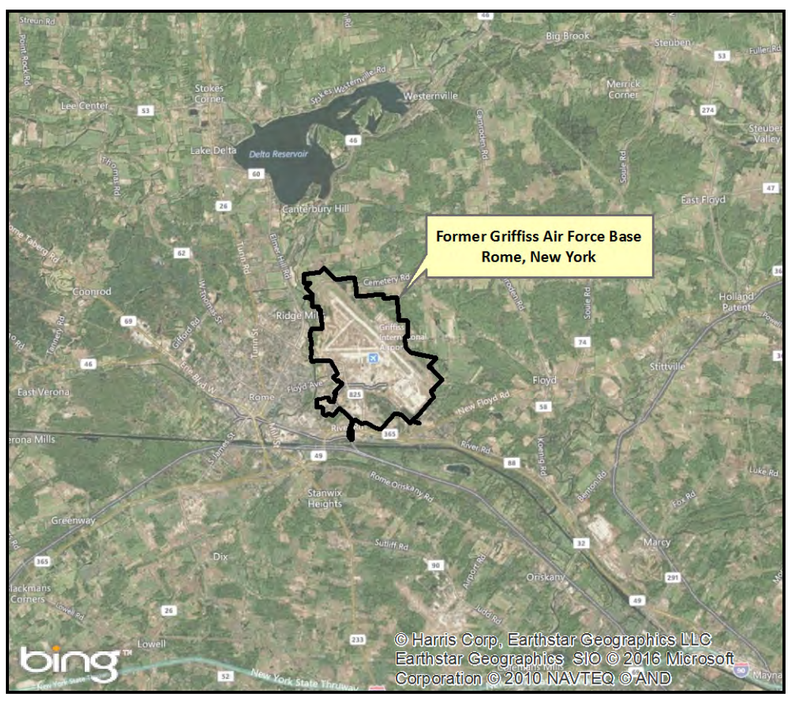
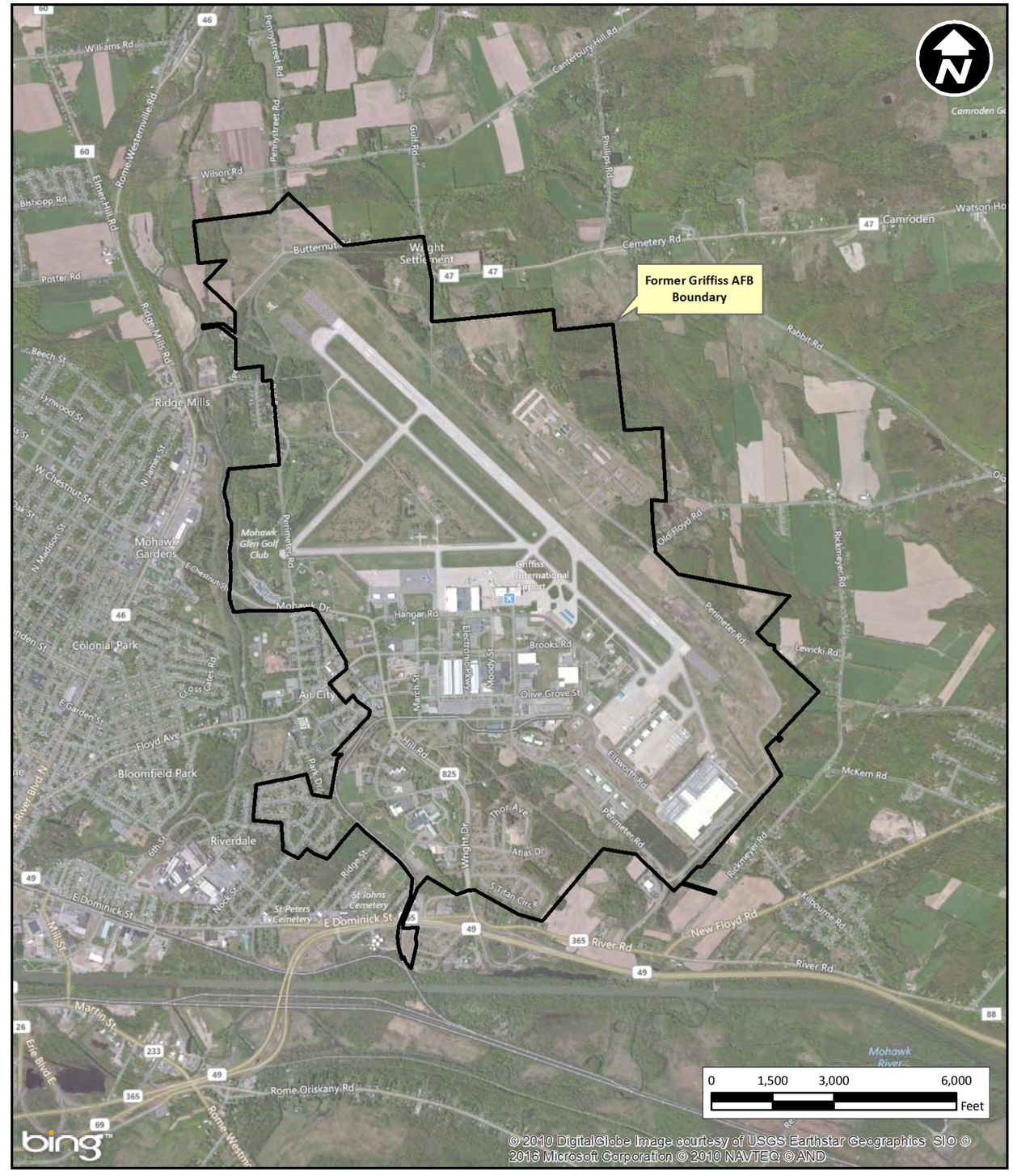




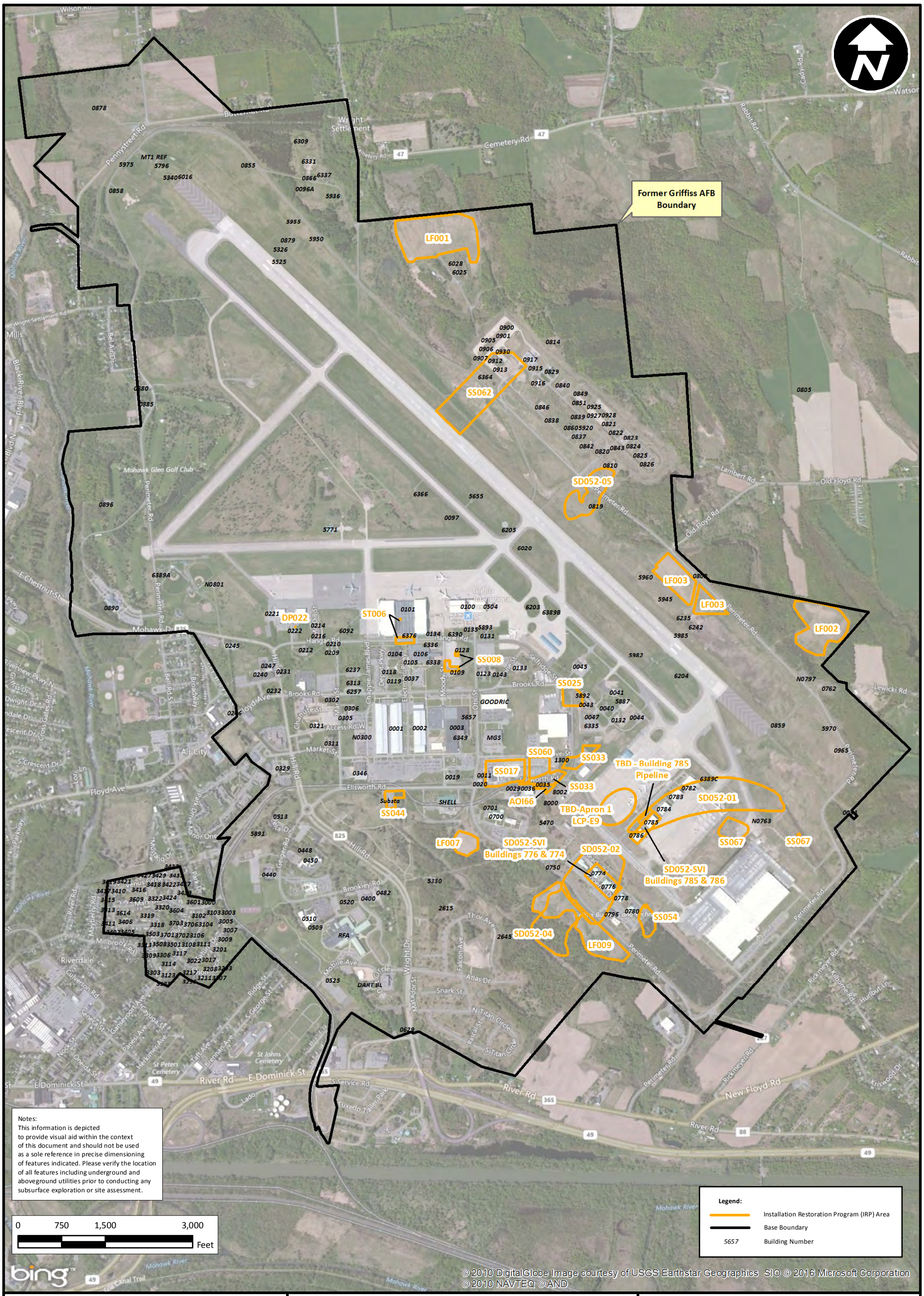
Former Griffiss AFB Site Map

Figure 1-1

Opening Phase Project Management Plan for
Performance-Based Contract
Former Griffiss AFB, Rome, New York

PROJECT NO:	SCALE:	DATE:	DRAWN BY:
AFCGSA3, 2000.0001	As Shown	6/30/2016	MRM

bhate ENVIRONMENT INFRASTRUCTURE



bhate ENVIRONMENT INFRASTRUCTURE

Opening Phase Project Management Plan for
Performance-Based Contract
Former Griffiss AFB, Rome, New York

PROJECT NO:	SCALE:	DATE:	DRAWN BY:
AFCGSA3.2000.0001	As Shown	6/30/2016	MRM

Former Griffiss AFB
Installation Restoration Program (IRP) Locations

Figure 1-2

APPENDIX A
PROJECT MANAGEMENT PLAN REVISION SUMMARY

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PROJECT MANAGEMENT PLAN REVISION SUMMARY
FORMER GRIFFISS AIR FORCE BASE
ENVIRONMENTAL REMEDIATION AT BRAC EASTERN REGION BASES

PMP Revision Description	Date of Revision
Appendix B Revised to document updated site-specific approaches	November 2017
Appendix C Revised with 2017 Approved Milestone Payment Structure	November 2017
Appendix D Revised the NYSDOH contact	November 2017
Appendix E Revised IMS based upon 2017 changes	November 2017

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APPENDIX B
SITE SPECIFIC SUMMARY SHEETS

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Griffiss Air Force Base Understanding of Work

Griffiss Air Force Base (AFB) was designated for realignment under the Base Realignment and Closure Act (BRAC) in 1993 and formerly realigned September 30, 1995. The former Griffiss Air Force Base (AFB) has a Federal Facilities Agreement (FFA) signed in 1990 that was supplemented by a letter re-establishing review times for documentation (April 1991). Twenty-four (24) sites are included in this contract with 19 sites following the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process, 1 site following the Resource Conservation and Recovery Act (RCRA), and 4 petroleum sites requiring closure under the New York State Department of Environmental Conservation (NYSDEC) Corrective Action (Spills) Program.

To significantly reduce Air Force (AF) Life Cycle Costs (LCCs) and advance sites towards Site Closeout (SC), Bhate will optimize the exit strategy at 7 of the 24 sites, achieve SC at 6 sites, and achieve Response Complete (RC) at 6 sites. We have elected to maintain Status Quo (SQ) at 5 sites that only have Land Use Control (LUC)/Institutional Control (IC) inspections and Five Year Reviews (FYRs). SQ was determined to be the lowest LCC for the AF for those sites due to the high remediation costs required to achieve SC. FYRs and LUC/IC inspections will be conducted for all Griffiss sites containing contamination above levels that allow for unrestricted use.

To ensure achievement of the Proposed Performance Objectives (PPOs) and maintain regulatory compliance, we will participate in monthly teleconferences with the BRAC Cleanup Team (BCT) as well as weekly internal contract status teleconferences. We will participate in the semiannual face-to-face BCT meetings and the Restoration Advisory Board (RAB) meetings, currently held annually. We will coordinate with the county airport to obtain access to the flightline area, when necessary, including facilitation of site inspections within the boundaries of the airfield. We will complete the annual inspection and inventory of existing wells, including an annual well inventory/maintenance report. Bhate will subscribe and respond timely to utility location request tickets from the New York Dig Safe Program. Bhate will maintain a log of all dig request tickets and notify the AF as appropriate including any specific details that may need input from the Contracting Officer's Representative (COR)/BRAC Environmental Coordinator (BEC). Bhate will prevent and/or mitigate potential flooding impacts due to beaver activity by removing beavers and dams, as necessary, including coordination and permitting with the property owner(s) and appropriate regulatory agencies. Specifically, breach of beaver dams, when necessary, requires U.S. Army Corps of Engineers (USACE)/New York District approval and permitting as well as a NYSDEC Environmental Conservation Law Title II Permit.

Technical approaches by sites or site grouping are presented here in.

Site # 1, 2, 3, 4, and 5	**AOI66 (Steam Plant APDO Storage Yard), SS008 (Building 112/Polychlorinated Biphenyl [PCB] Dump Area), SS033 (Coal Storage Area PCB Site), SS044 (Substation Electrical Power PCB Site), SS060 (STW-1300 Building 35/36 Area of Concern [AOC])**
Projected Closure Date	Indefinite
Performance Objective:	Status Quo
General Strategy:	LUC/IC Monitoring and FYR

Maintenance of SQ includes continuing current activities without optimization. For sites AOI66, SS008, SS033, SS044, and SS060 current activities include LUC/IC monitoring and reporting and FYR.

Site # 6, 7, and 8	**SD052-01 (Apron 2 Chlorinated Plume), SD052-04 (Landfill 06 Operable Unit [OU]), SD052-05 (Building 817 OU)**
Projected Closure Date:	SD052-01: 2036, SD052-04: 2038, SD052-05: 2040
Performance Objective:	Optimized Exit Strategy (OES)
General Strategy:	**SD052-01:** Completed pilot study in June 2017 to evaluate in-situ enhanced bioremediation (ISEB) with monitored natural attenuation (MNA) remedy. Conducted focused ISEB injections in locations where trichloroethene (TCE) is present above the Remedial Action Objective (RAO) of 5 micrograms per liter (µg/L); use Monitoring and Remediation Optimization Systems (MAROS) or Geostatistical Temporal-Spatial (GTS) Exp software to optimize groundwater monitoring; conduct LUC/IC monitoring and FYR. Prepare Explanation of Significant Differences (ESD), if necessary. Prepare Remedial Optimization Work Plan and OES Report. **SD052-04 and SD052-05:** Conduct focused ISEB injections in hot spot areas based upon most recent groundwater data; use MAROS or GTS software to optimize groundwater monitoring; conduct LUC/IC monitoring and FYR. Prepare Remedial Optimization Work Plan and OES Report.

Current Site Conditions

The Records of Decision (RODs) for SD052-01 (Apron 2 Chlorinated Plume), SD052-04 (Landfill 6 OU), and SD052-05 (Building 817 OU) were signed in March 2009. The ROD for SD052-01 specified the remedy of MNA including groundwater and surface water monitoring to verify that human health and the environment are protected. Soil vapor intrusion (SVI) is addressed in the technical approach for SD052-SVI. The RODs for both SD052-04 and SD052-05 selected enhanced bioremediation to remove chlorinated volatile organic compounds (CVOCs) from the groundwater. The RAOs specified in each of the RODs consist of achieving the cleanup goals for 1,2-dichloroethene (DCE); TCE; and vinyl chloride (VC) (5 µg/L, 5 µg/L, and 2 µg/L, respectively). **Site SD052-01:** The CVOC contamination at Apron 2 OU is present as a plume approximately 2,800 feet (ft) long and 500 ft wide and appears to originate in the area of the nosedock wash water system near Building 786. Data indicates that dechlorination is occurring at the site based on the decreasing trend in TCE and stable/increasing trends in cis-1,2-DCE and VC. Operating properly and successfully (OPS) for MNA was conferred in August 2013. The high hydraulic conductivity of gravel layers has produced an estimated average groundwater velocity of 106 ft/year. The total aquifer thickness ranges from 45 ft in the source areas to less than 20 ft in the downgradient areas. Aerobic degradation of VC is occurring near the leading edge of the plume;

however, VC in the southern plume has migrated eastward to well 782VMW-101 within 100 ft of Six Mile Creek.

Site SD052-04: The ROD requires that contaminated groundwater from the site be prevented from adversely impacting surface water (in Three Mile Creek), which is defined as surface water concentrations above performance indicators (NYSDEC Class GA Groundwater Quality Standards of 5 µg/L for DCE and 2 µg/L for VC). Surface water sample locations show only minor CVOC detections.

Site SD052-05: The ROD for the SD052-05 (Building 817 OU) includes contingency for an air sparge wall if surface water samples from the culvert section of Six Mile Creek contain elevated concentrations of DCE and/or VC that could be attributed to site groundwater. Similar to the ROD for SD052-04, the ROD requires that contaminated groundwater be prevented from adversely impacting the surface water in Six Mile Creek. The plume is stable to reducing, and CVOC concentrations are relatively low (maximum ~50 µg/L for each CVOC). No detections of chlorinated compounds above the NYSDEC groundwater standards have been detected in Six Mile Creek.

Comprehensive Technical Approach

The goal of the OES is to treat hot spots and to optimize performance monitoring requirements to reduce AF LCCs in the out-years until the RAOs are achieved. Performance monitoring will focus on ensuring protection of human health and the environment as well as providing useful information regarding the treatment system overall effectiveness. **In order to achieve the PPO of OES, the Bhate Team will:**

1) Prepare Required OES Documentation throughout Period of Performance (POP): We prepared the Remedial Optimization Work Plan to memorialize the OES outlined in this PMP and obtain approval of our performance model and metrics. We will prepare an OES Report prior to the end of the POP to evaluate the optimizations and present further optimization in post-POP years.

2) Implement Remedial Action to Achieve OES: A Work Plan was prepared to conduct hot spot treatments using ISEB. This Work Plan was implemented at Site SD052-01 and SD052-05 in June 2017.

Focused treatments using sodium lactate and/or emulsified vegetable oil (EVO), buffer (as needed), and nutrient injections were completed via direct push technology (DPT) points at identified hot spots, with the exception of existing injection wells that will be utilized at SD052-04. Reduction of the CVOCs at SD052-01 will provide secondary risk reduction to the AF by significantly advancing the SD052-SVI system towards shut-off and decommissioning.

At SD052-01, the injections focused around Nosedock 4 and Building 785, specifically at and around monitoring wells 782VMW-105B and 782VMW-81.

At SD052-04, the injections will bracket hot spot wells: LF6MW-12, -16, -17, and -20.

At SD052-05, the injections were placed down the middle of the plume, both north and south of the roadway.

Rationale: Optimization of the ongoing reductive dechlorination provides the AF with the most cost-effective and low risk approach to treat groundwater at SD052-01, SD052-04, and SD052-05. Remediation of "hot spots" within the source of the plume at SD052-01 will reduce the time required to achieve RAOs, as well as provide secondary benefits to SD052-SVI. At both SD052-04 and SD052-05, ISEB treatment of the hot spot in the core of the plume and parallel to the

axis of groundwater flow will have significant impacts on reducing concentrations in downgradient monitoring wells and reduce the time to achieve SC.

3) Revise Decision Document (DD) for SD052-01: An ESD will be prepared, if necessary, to revise the selected remedy from MNA to ISEB with MNA at SD052-01. Initial ISEB will be implemented as a pilot study at Site SD052-01.

Rationale: Due to the remedy selection of MNA at SD052-01, an ESD is required to document the revised remedy of ISEB to advance the site towards SC.

4) Conduct and Optimize Performance Monitoring: Continue required LUC/IC monitoring and FYRs. LTM sampling will be optimized during the POP, as remedies are implemented.

Groundwater Sampling Year 1: Long-term Management (LTM) at SD052-01 (Apron 2) will be performed annually for the first year at 13 monitoring wells and 3 surface water locations. LTM at SD052-04 (Landfill 6) will be performed annually for the first year at 13 monitoring wells/direct push locations and 1 surface water sampling location. LTM at SD052-05 (Building Weapons Storage Area [WSA]/817) will be performed annually for the first year at 12 monitoring wells, 3 surface water locations, and 3 man-hole locations.

Sampling frequency optimization will be implemented after confirmation that the additional treatments were successfully implemented. The monitoring wells will be analyzed for Volatile Organic Compounds (VOCs) and natural attenuation parameters (sulfate; dissolved oxygen concentration; and methane, ethane, and ethene). Results will be documented in an Annual Monitoring Report.

LTM optimization will be accomplished by reducing the number of samples collected at each site as follows:

- SD052-01: Reduce annual samples by at least 43%
- SD052-04: Reduce annual samples by at least 35%
- SD052-05: Reduce annual samples by at least 70%

We will use GTS and/or MAROS software (or equivalent) to determine the optimum number and location of existing monitoring wells, and the sampling frequency. We will develop nonlinear trends and trend maps. Future sampling data will be incorporated into GTS/MAROS, and inconsistent data will be flagged for further assessment. Monitoring wells eliminated from the LTM program will be properly decommissioned in accordance with (IAW) the NYSDEC Groundwater Monitoring Well Decommissioning Policy (Commissioner Policy-43) to eliminate AF liability.

A FYR will be completed to ensure ROD compliance and protection of human health and the environment.

Rationale: Proposed approach will minimize AF LCC and future liabilities, while maintaining compliance with the ROD.

Deliverables

Remedial Optimization and LTM Work Plans, Annual LTM Report (includes LUC/IC monitoring), ESD for SD052-01 (if necessary), Optimization Plan, OES Report, and FYR.

Why the Selected PPO is the Optimal Solution

This PPO is in the best interest of the AF because OES of the ROD-selected remedies provides the lowest possible LCC, while ensuring protection of human health and the environment. Given that the ROD RAOs are concentration-based, the cost to achieve RC or SC are essentially equivalent. Due to the plume size and mass, the cost to achieve RC or SC within the POP is at

least four times that of the LCC for implementing our OES. We propose to actively remediate impacted groundwater by enhancing reductive dechlorination to reduce the COCs over time by completing focused ISEB at SD052-01, -04, and -05. Focused ISEB at SD052-01 will also have a beneficial impact on the time to achieve SC at SD052-SVI.

Technical Approach Risks and Mitigations

The primary risk to the AF with ISEB is that microbes are present, but with a low population and/or they lack the VC reductase gene. Bhate's approach mitigates this by completing the microbial study followed by optimization of the design, which may include bioaugmentation. If necessary, Bhate will use zero valent iron (ZVI) as a contingent action in recalcitrant locations to abiotically reduce the CVOCs. A secondary risk is that the ESD at SD052-01 is required to be a ROD Amendment per the U.S. Environmental Protection Agency (USEPA). We will mitigate this risk with contingency time in the Integrated Master Schedule (IMS).

Achieving the PPO IAW Applicable Agreements and Schedule

Our approach will meet the existing agreements and schedule by continuing LUC/IC inspections, FYRs, and sampling. Bhate will also complete all CERCLA-required documentation to change the remedy to ISEB at SD052-01.

Business Case Analysis

SD052-01: Proposed approach results in 22% decrease in LCC versus SQ and a projected SC date of 12/2036.

Post-POP LCC activities include the following at a cost of $251K:

Fiscal Year (FY) 2021-FY2034: Annual LUC/IC maintenance and inspections, groundwater sampling of 13 wells for VOCs and 3 surface water locations and reporting. The annual cost of $14K or a total of $196K post-POP LCC.

FY2035: Rebound sampling at a cost of $20K

FY2036: Remedial Action Completion Report (RACR) and well/system abandonment at a cost of $35K

SD052-04: Proposed approach results in 19.5% decrease in LCC versus SQ (Indefinite, assumed FY50 for comparison) and a projected SC date of 12/2038.

Post-POP LCC activities include the following at a cost of $279K:

FY2021-FY2036: Annual LUC/IC maintenance/inspections, groundwater sampling of 13 wells and 1 surface water location for VOCs and reporting. The annual cost of $14K or a total of $224K post-POP LCC.

FY2037: Rebound sampling at a cost of $20K

FY2038: RACR and well/system abandonment at a cost of $35K

SD052-05: Proposed approach results in 46.6% decrease in LCC versus SQ and a projected SC date of 12/2040.

Post-POP LCC activities include the following at a cost of $307K:

FY2021-FY2038: Annual LUC/IC maintenance and inspections, groundwater sampling of 12 wells for VOCs, 3 surface water locations, 3 manholes, and reporting. The annual cost of $14K or a total of $252K post-POP LCC

FY2039: Rebound sampling at a cost of $20K

FY2040: RACR and well/system abandonment at a cost of $35K

Performance Model

The Final Remedial Optimization Work Plan On-Base Groundwater Areas of Concern, Former Griffiss Air Force Base (Bhate, March 2017) presents the approved performance models. The key performance metric of OES for each site is hot spot treatment and to optimize performance monitoring requirements to reduce AF LCCs in the out-years until the RAOs are achieved.

Site # 9	SD052-SVI (Soil Vapor Intrusion System)
Projected Closure Date:	2025
Performance Objective:	Optimized Exit Strategy
General Strategy:	Continue operations and maintenance (O&M) of SD052-02 Sub Slab Vapor Mitigation (SSVM) system; convert SD052-01 SSVM system to a passive system.

Current Site Conditions

Interim Remedial Action (IRA) SVI mitigation by horizontal sub-slab depressurization is underway at SD052-01 Apron 2 Chlorinated Plume Site (Buildings 785/786) and SD052-02 Building 775 Site (Buildings 774/776). The recommended action addresses the vapor intrusion (VI) potential associated with contaminated groundwater beneath these buildings. The Final DD for SD052-02 Building 775 Site (Buildings 774/776) and SD052-01 Apron 2 (Buildings 785/786) was signed in September 2016 and will aim to document OPS at the site.

Comprehensive Technical Approach

To achieve the PPO, the Team will:

1) **Prepare Required OES Documentation throughout POP:** Upon finalization of the ROD, the Bhate Team prepared the Optimization Plan to memorialize the OES and obtain approval of our performance model and metrics. An OES Report will be prepared prior to the end of the POP to evaluate the implemented optimizations and present further optimization in post-POP years.

Rationale: This OES documentation will ensure compliance with the Performance Work Statement (PWS) and ROD.

2) **Evaluate Sub-Slab and Influent Soil Vapor Concentrations:** Currently, the sub-slab is actively depressurized by imposing negative pressure under the slabs by mechanical (regenerative) blowers, and the extracted vapors are discharged to a vapor treatment system consisting of granular activated carbon (GAC) vessels. The latest sampling results from the IRA were compared to the baseline sampling results at SD-052-02 Building 775 Site (Buildings 774 and 776) and SD-052- 01 Apron 2 Chlorinated Plume Site (Buildings 785 and 786) SSVM systems and indicate a decreasing trend in sub-slab TCE vapors. With Regulator and AF concurrence, the SSVM systems will be shut down when it has been determined that the SVI RAO has been achieved or that continued operation of the system is not effective or needed. Examples of such conditions include: contamination is no longer being removed, sub-slab soil gas concentrations have been reduced to a level that would not impact indoor air at unacceptable levels, and/or there is no remaining groundwater contamination in the vicinity of the buildings at concentrations greater than groundwater applicable or relevant and appropriate requirements (ARARs) (New York State Ambient Water Quality Standards and Guidance Values, NYSDEC, June

1998) that could impact the SVI pathway into the buildings. Laboratory results for the SSVM system indicate the sub-slab soil gas concentrations are at or below the New York State Department of Health (NYSDOH) no further action (NFA) screening criteria (NYSDOH, October 2006 or updated criteria). NFA values in the NYSDOH guidance range from 5 to 50 micrograms per cubic meter ($\mu g/m^3$). Please note that New Ambient Air Guidelines for TCE were implemented in August 2015. NYSDOH lowered their guideline for TCE in ambient air from 5 $\mu g/m^3$ to 2 $\mu g/m^3$. A review of the Indoor Ambient Air results for 774/776 and 785/786 adjusted to the new regulatory standard indicates that the recent air analytical results are still below the regulatory threshold.

Rationale: This OES documentation will ensure compliance with the PWS and ROD.

3) Convert to Passive SSVM System: The proposed outcome includes a strategy for converting the active SSVM systems into passive SSVM systems. Under the passive SSVM system, the horizontal wells will be connected to vertical pipes with wind-powered exhaust turbines. The SSVM components of the active systems will remain in place once the systems are converted to passive systems. During the operation of the passive systems, the active systems will be inspected/tested on an annual basis. The following are optimization strategy provisions as detailed in the signed ROD for converting the SSVM systems into passive SVI mitigation systems:

- Groundwater Samples: The concentrations of VOCs in groundwater in the vicinity of the soil vapor extraction (SVE) systems will be evaluated to assess the SVI pathway into the buildings. Conversion of the active SSVM system to a passive SSVM system will be evaluated if the VOC concentrations do not meet groundwater ARARs (i.e., established groundwater quality standards). Therefore, conversion of the system will be evaluated using the SSVM influent and Sub-Slab Soil Vapor Rebound Sample Result indicators discussed in the next two bullets.
- SSVM Influent: As an indicator of remediation progress in the sub-slab environment, VOCs in the influent to the SSVM system prior to any carbon treatment will be sampled periodically for laboratory analysis. When influent air data reach a stable trend (i.e., they are no longer decreasing) or the laboratory results for the SSVM system influent indicate that the sub-slab soil gas concentrations are below the NYSDOH no further action screening criteria (NYSDOH, October 2006 or updated criteria) at http://www.health.ny.gov/environmental/investigations/soil_gas/svi_guidance/docs/svig_final2006_complete.pdf and/or USEPA industrial use Regional Screening Levels (RSLs) (http://www.epa.gov/region9/superfund/prg/) for contaminants of concern, the active SSVM systems will be converted into passive SSVM systems. Update: In August 2015, NYSDOH lowered their guideline for TCE in ambient air from 5 $\mu g/m^3$ to 2 $\mu g/m^3$ and developed a recommended immediate action level of 20 $\mu g/m^3$.
- Sub-Slab Soil Vapor Rebound Sample Results: Following the conversion of the systems, periodic (annual) performance monitoring will be conducted. If sub-slab soil gas concentrations are reported higher than the industrial use screening criteria cited for two consecutive sampling events, the active SSVM systems will be re-started.

The conversion of the SD052-01 SSVM to a passive system will be documented in a Construction Completion Report (CCR), or similar. The work plan will also detail continued operations and sampling of the SD052-02 SSVM system under OES. Indoor and outdoor air sampling, sub-slab vapor sampling, and influent sampling will be conducted annually.

Rationale: Physical removal of COC vapors to below NYSDOH NFA screening criteria (NYSDOH, October 2006 or updated criteria) and the applicable USEPA RSLs is the most effective and low risk approach (most protective of human health) to significantly reducing the time to achieve SC.

Deliverables

Optimization Plan, LTM Work Plan, O&M Reports, OES Report, and FYR

Why the Selected PPO is the Optimal Solution

Accelerated SC will be demonstrated by achievement of RC for the groundwater under Buildings 785 and 786 at Site SD052-01; and Buildings 774 and 776 at Site SD052-02 within the POP. However, demonstrating permanent shut down status of the SSVM systems, as described in the signed ROD (September 2016), will not be possible due to the rebound evaluation requirement for three heating season sampling events. This time requirement would extend beyond the POP. Therefore, SSVM Systems will continue operations until it has been determined that the SVI RAO has been achieved or that continued operation of the system is not effective or needed; i.e., contamination is no longer being removed, sub-slab soil gas concentrations have been reduced to a level that would not impact indoor air at unacceptable levels, and/or there is no remaining groundwater contamination in the vicinity of the buildings at concentrations greater than groundwater ARARs (New York State Ambient Water Quality Standards and Guidance Values, NYSDEC, June 1998) that could impact the SVI pathway into the buildings.

The SSVM systems will be advanced towards SC by converting to a passive system as required by Section 1.2 of the Site Specific PWS. This PPO is in the best interest of the AF because the PPO combines remediation of impacted groundwater at SD052-01 and SD052-02 with the conversion of active SSVM systems to passive systems. The selected remedy provides the AF with limited LCCs while advancing the systems towards achieving SC.

Technical Approach Risks and Mitigations

If sub-slab soil gas concentrations are reported higher than the industrial use screening criteria cited for two consecutive sampling events, the passive system will be reconnected to the active SSVM systems and the systems will be re-started. Following reactivation of the SSVM systems, Bhate will conduct an evaluation to determine the cause of the rebound and if necessary, install up to 12 air inlet wells around Building 785 and 786 (6 per building) to control the subsurface airflow and possibly overcome preferential pathways and dead zones that may be impeding the SSVM systems. The air inlet wells are passive and will be installed at the edge of the buildings so as not to induce flow of contamination from an adjacent site.

Achieving the PPO IAW Applicable Agreements and Schedule

Our approach will meet the existing agreements and schedule by continuing to optimize the selected remedies, complete LUC/IC inspections, FYRs, and sampling.

Business Case Analysis

Preferential pathways and dead zones appear to be impeding the SSVM system closure activities based on the sub-slab concentration data and mass removal rates to date. The proposed approach results in a 75% decrease in LCC versus SQ and a projected SC date of 12/2025.

Post-POP LCC activities include the following at a cost of $201K:

- FY2021-FY2023: O&M, Quarterly Reporting, Indoor and Outdoor Sampling. Annual cost of $10K to $43K (system dependent) or a total of $116K post-POP LCC.

- FY2024: Rebound sampling at a cost of $30K.
- FY2025: Closure Report and well/system abandonment at a cost of $55K.

Performance Model

The PWS stipulates two performance metrics for the OES at SD052-SVI: 1) accelerate SC from the SQ date of Fiscal Year 2035 and 2) convert the system to passive operation or shut it down. The Bhate Team's OES will accelerate SC by 10 years and convert the system to passive operation by removing preferential pathways and dead zones that are impeding the SSVM system closure. The *Final Optimization Plan for Soil Vapor Intrusion at SD052-01 Apron 2 Chlorinated Plume Site (Buildings 785 and 786) and SD052-02 Building 775 Site (Buildings 774 and 776) Former Griffiss Air Force Base* (Bhate, April 2017) presented the final performance model for SD052-SVI.

Site # 10	**SS054 (Building 781 Pumphouse)**
Projected Closure Date:	2027
Performance Objective:	Optimized Exit Strategy
General Strategy:	Optimize biosparge system and monitoring well network; complete surfactant pilot study around MW-13; continue O&M of existing biosparge system, groundwater sampling and reporting, annual LTM and LUC inspections/reporting; submit Corrective Action Plan (CAP), OES reports, and FYR.

Current Site Conditions

The spill number was assigned by the NYSDEC in June 1992; and Building 781 and the associated underground storage tanks (USTs) were removed in May 1995. The existing biosparge system was expanded in 2012 based upon a supplemental site investigation and a remedial optimization evaluation. Residual soil impacts and light non-aqueous phase liquid (LNAPL) are at or near the water table and free product is currently present in and near 781-MW-13. The southern end of the dissolved phase plume is being contained by the biosparge system. Measuring free product thickness in monitoring wells and removal of this free product is completed weekly in 5 wells. Chemicals of concern (COCs) in the groundwater include benzene, toluene, ethylbenzene, and xylenes (BTEX) and both 1,2,4- and 1,3,5-trimethylbenzene.

Comprehensive Technical Approach

The goal of the OES is primarily to reduce the COCs to levels that allow for SC by 2027. The secondary goal is to reduce LTM requirements and decrease LCCs until the RAOs are achieved. **In order to achieve our OES, the Bhate Team will:**

1) Continue O&M of existing systems, FYRs, and ongoing LTM program: O&M of the existing biosparge system will continue. All portions of the system will operate since free product is present (<1 ft in thickness). Quarterly groundwater monitoring will be completed to evaluate performance. Oxidation reduction potential (ORP) and dissolved oxygen (DO) will be measured concurrent with the quarterly groundwater monitoring. LTM/LUC inspections will be completed and included in the annual report.

Rationale: Our actions will ensure compliance with ongoing remedial actions and recommendations.

2) Optimize the biosparge system: Since the free product is primarily a sheen at SS054, the biosparge system should significantly reduce the plume mass. If free product does not continue to decrease, Bhate will evaluate surfactant for elimination of smear zone and saturated soil impacts contributing to the observance of free product in MW-13. The key to optimizing the biosparge system is distribution of sufficient oxygen to the plume. Therefore, we will evaluate iron concentrations to ensure that iron precipitation does not impact distribution. Increasing oxygen into the aquifer will be assessed both in the wells as bubbling and mounding and by reduction of COC concentrations. Together this additional data will be used to optimize the system.

Rationale: While additional sparge wells were installed, evaluation of their performance and further optimization has not been completed. The location and design of the wells appears to be appropriate for the aquifer plume. Biosparge techniques have been successfully used throughout the former Griffiss AFB to remediate the dissolved phase petroleum plumes and achieve SC.

3) Optimize the well network: Based on the most recent data, at least 8 wells do not currently exceed the cleanup standards. These wells are proposed for decommissioning throughout the POP. Our optimization of the biosparge system will reduce the plume by 50% and may result in elimination of additional monitoring wells within the POP.

Rationale: Removal of the existing monitoring wells will eliminate all future costs to the AF. Bhate will right-size the monitoring well network to advance the site towards SC.

Deliverables

LTM Work Plan, Annual LTM/O&M Reports, Optimization Plan, OES Report, and Non-CERCLA FYR

Why the Selected PPO is the Optimal Solution

The projected SC date in the PWS is FY18, which is not possible due to the persistence of free product. Given that free product has significantly reduced in thickness, the existing, optimized biosparge system should achieve SC within 5 years after the POP. Continuing to operate the existing systems at SS054 provides the AF with the lowest LCC versus aggressive, high-risk in-situ or ex-situ treatment that will not significantly reduce the time to achieve SC or RC and will result in a significantly higher LCC.

Technical Approach Risks and Mitigations

The primary risk to the AF is that COC reductions become asymptotic with the biosparge system. We will mitigate this by optimizing with blending nutrients (nitrogen and phosphorus) into the air stream to enhance the aerobic biodegradation process. A supplemental blower may be required to increase flow rates to the existing biosparge wells to optimize the distribution of oxygen and nutrients to groundwater. Pulsing of the system with variable on/off run times will also be evaluated and incorporated.

A secondary risk is that the NYSDEC and/or USEPA do not concur with reduction in sample locations. Bhate will mitigate this risk by requesting sampling optimization ahead of the proposed 2019 date to gain consensus with the Regulators on the data needed to support this request.

Achieving the PPO IAW Applicable Agreements and Schedule

Our approach will meet the existing agreements by ensuring that treatment reduces the plume size to prevent offsite migration and eliminate free product.

Business Case Analysis

While the existing system has been optimized, the COCs continue to exceed 100 milligrams per liter (mg/L) and there is measurable free product in 5 wells. Therefore, Site SS054 contamination will not reduce below the cleanup levels by the projected FY18 in PWS Enclosure 1B without a more aggressive remedial approach that is likely to cost 2 to 3 times that of OES of the existing biosparge system. Further, SC within the POP is a risk to the AF given the current plume mass, including the continued presence of free product, and would require a longer POP and greater LCC than OES during the POP with SC achieved by FY2027.

Performance Model

The *Final Performance Model is presented in Final Optimization Plan for SS054 Building 781 Pumphouse NYSDEC Spill Site 9202658 Former Griffiss AFB* (Bhate, December 2016). The key performance metric for LTM is to reduce sampling by 20% annually through elimination of upgradient wells and to reduce the plume VOCs by 50% of baseline by the end of the POP. This reduction of COCs will allow the site to achieve RC by 2025 and SC by 2027.

Site # 11	**SS062 (AOC 9 WSA Landfill Chlorinated Plume)**
Projected Closure Date:	2027
Performance Objective:	Optimized Exit Strategy
General Strategy:	Complete a follow-on in-situ chemical oxidation (ISCO) injection and optimize monitoring well network; continue groundwater and LUC/IC monitoring and reporting; submit Optimization Plan, OES report, and FYR.

Current Site Conditions

AOC 9 is the location of the former Griffiss AFB's first landfill used between 1943 and 1960. Most of the landfill material was removed from the area in the 1950s as the WSA was constructed. An Interim Remedial Action Completion Report (IRACR) was completed in 2010, which included excavation, dewatering, and backfilling with sodium persulfate oxidant and an iron chelate activator. The Final ROD was completed in July 2010 and selected excavation of contaminated soil, ISCO for groundwater, and LUCs. In November 2013, PermeOx® Plus was injected to enhance aerobic bioremediation of the groundwater plume and Remedy in Place (RIP) was achieved in 2015 based upon performance monitoring results.

The primary COCs exceeding groundwater standards are chlorobenzene; TCE; and cis-1,2 DCE. The plume is approximately 1,400 ft long but relatively narrow at approximately 150 ft wide. LUCs/ICs will remain in place until groundwater RAOs are achieved. The center of the contaminant mass appears to be migrating downgradient.

Comprehensive Technical Approach

The goal of the OES is primarily to reduce the COCs to levels that allow for achievement of RC by FY24 through MNA. The secondary goal is to reduce LTM requirements to decrease LCCs until the RAOs are achieved. **OES will be achieved through the following activities**.

1) Prepare Required OES Documentation throughout POP: the Bhate Team prepared the Optimization Plan to memorialize the OES outlined in the proposal and obtain approval of our performance model/metrics. We will prepare an OES Report prior to the end of the POP to

evaluate the optimizations and present further optimization in post-POP years.

Rationale: Our OES will be documented to ensure compliance with the PWS.

2) Continue Annual LTM: Bhate also prepared a Work Plan for the annual groundwater sampling and LUC/IC inspection and maintenance.

Rationale: Our activities will ensure compliance with the ROD.

3) Optimize Groundwater and Surface Water sampling: Continue to optimize LTM by reducing the number of samples collected. To ensure protection of human and ecological health, as well as regulatory compliance, surface water sampling will remain SQ. We will use GTS and/or MAROS software (or equivalent) to determine the optimum number, placement of wells, and sampling frequency in the network. We will develop nonlinear trends and trend maps. Future sampling data will be incorporated into GTS/MAROS and inconsistent data flagged for further assessment. Monitoring wells eliminated from the LTM program will be properly decommissioned to eliminate AF liability.

Rationale: The plumes are stable and/or decreasing. Sampling is primarily done to verify that COCs are not migrating offsite or into the stream environment. MAROS analysis supports biennial sampling for a majority of the wells and COCs. However, additional data is needed to support request for all wells to move to biennial sampling, as presented in the 2014 Annual LTM Report.

4) Optimizing ISCO with Additional Injections: PermeOx® Plus injection reduced COCs in MW-14 by 10 fold, immediately downgradient of the injections. Bhate will prepare a work plan for the full scale design and implementation of additional ISCO injections using Oxygen BioChem (OBC®), which is a formulated mixture of sodium persulfate and calcium peroxide. Injections are planned to focus on MW-15 where the COCs have remained stable for the past 2 years and MW-17 where TCE and chlorobenzene are present above the RAOs upgradient of Six Mile Creek. Annual LTM Reports will document the results of ISCO.

Rationale: The IRACR (excavation and persulfate injections), performed in 2010, reduced the COCs by 10-fold compared to the baseline conditions. However, the chlorobenzene and TCE plumes have stabilized and may be starting to demonstrate a slight backdifussion based upon a comparison of the 2013, 2014, 2015, and 2016 data.

5) Complete FYR: to ensure ROD compliance and protection of human health and the environment.

Rationale: The goal of the OES is primarily to reduce the COCs to levels that allow for natural degradation over time. The secondary goal is reduction of the LTM requirements to reduce LCCs until the RAOs are achieved. LTM will focus on ensuring the RAOs are achieved by ensuring COCs are not migrating offsite or into the stream environment.

Deliverables

Remedial Optimization and LTM Work Plans, Annual LTM Reports (includes ISCO injection information), Optimization Plan, OES Report, and FYR

Why the Selected PPO is the Optimal Solution

Given the plume length and constituent concentrations, OES within the 5-year POP provides the AF with the lowest LCC. ISCO has performed well at the site but the COCs appear to have reached asymptotic levels in the past 2 years. Modeling in 2013 indicated that RAOs would be achieved in 11 years, but that didn't account for the currently observed asymptotic levels. Achieving RC or SC is a high risk to the AF given chlorobenzene concentrations exceeding 100 µg/L over 50%

of the plume with a RAO of 5 µg/L. Also, given that the site is known to have been used as a landfill, it is uncertain that SC can be achieved as residual landfill material is likely present.

Technical Approach Risks and Mitigations

The primary risk is that the COCs do not decrease as modeled such that the goal of reducing the COCs to less than 10 µg/L cannot be achieved within the POP. Since ISCO is known to reduce these COCs, the primary cause would be uneven distribution of the oxidant. We will mitigate this risk by completing a pilot test to assess and optimize oxidant delivery and distribution. A secondary risk is that the NYSDEC and/or USEPA do not concur with reduction in sample locations. Bhate will mitigate this risk by requesting sampling optimization ahead of the proposed 2019 date to gain consensus with the Regulators on the data needed to support this request.

Achieving the PPO IAW Applicable Agreements and Schedule

Our approach will meet existing agreements by completing the FYRs and completing LUC/IC inspections. Our optimization will allow the AF to meet the goal of RC in FY24, as projected, despite the recently observed asymptotic concentrations of the COCs within the plume.

Business Case Analysis

Our optimization will result in limited groundwater sampling, FYR, and Annual LUC/IC maintenance to ensure compliance with the ROD. The LCC post-POP includes the FYR, additional monitoring well abandonment, and LUC/IC inspections and reports for 5 years beyond the POP, which includes one year of rebound sampling to demonstrate closure. The cost per year is $10K plus well decommissioning for a total of $60K post-POP LCC.

Performance Model

The key performance metric for LTM is to reduce sampling by 20% annually through elimination of upgradient wells. The *Final Optimization Plan for SS062 AOC 9 Weapons Storage Area Landfill Chlorinated Plume, Former Griffiss AFB* (Bhate, November 2016) presents the performance model. Our plan will also reduce the primary COC, chlorobenzene to 10 µg/L or less by the end of the POP. This COC level will allow the site to achieve RC by 2024, as previously projected, and SC the following year.

Site # 12	**SS067 (Building 789 Type II Fuel System)**
Projected Closure Date:	2027
Performance Objective:	Optimized Exit Strategy
General Strategy:	Prepare CAP to delineate free product and then revise the CAP to eliminate free product; after free product elimination, optimize LTM; continue O&M of systems, soil vapor/air/groundwater monitoring/reporting, LUC/IC inspection; submit Optimization work plan, OES report, and FYR.

Current Site Conditions

Soil was removed to approximately 25 ft bgs in 2001 to prevent further migration of petroleum contamination from the site. While sidewall samples indicated that soil cleanup objectives were

met in all but 3 locations, the samples were collected approximately 8 ft above the smear zone. Free product was observed to be leaching into the excavation from the smear zone. While the excavation removed unsaturated soil contamination and a large portion of the smear zone contamination, free product recovery is currently ongoing using the existing skimmer system. In addition, a dissolved phase plume is present and defined by existing LTM wells. A horizontal biosparge well is effectively preventing migration of the dissolved phase VOCs into Six Mile Creek.

Comprehensive Technical Approach

OES will be achieved through elimination of free product followed by optimization of LTM. **In order to achieve our OES, the Bhate Team will:**

1) Prepare Required OES Documentation throughout POP: The Bhate Team will prepare the Optimization Plan to memorialize the OES outlined in the proposal and obtain approval of our performance model and metrics. An OES Report will be prepared prior to the end of the POP to evaluate the implemented optimizations and present further optimization in post-POP years.

Rationale: The OES documentation will be prepared to ensure compliance with the PWS.

2) Continue O&M of existing systems and ongoing monitoring program, including groundwater sampling and LUC/IC inspections and FYRs: The free produce recovery system will continue to be optimized. Monitoring groundwater and free product recovery wells for offsite laboratory analysis will continue on a quarterly basis. However, reporting will be completed annual instead of quarterly. ORP and DO will be measured monthly in addition to the quarterly groundwater monitoring.

Rationale: Our proposed activities will ensure compliance with ongoing remedial actions and recommendations.

3) Delineate and then Optimize Free Product Recovery: A CAP in Uniform Federal Policy (UFP)-Quality Assurance Project Plan (QAPP) format will be prepared to complete test pits to evaluate potential continuing release of free product from the abandoned fuel lines because the amount of free product being measured has not changed significantly over the past 10 years. We proposed to evaluate residual impacts from the pipe as well as assess the soils where free product is known to be present based upon onsite free product recovery and groundwater monitoring wells. The work plan will be amended to also include the OES for optimizing free product recovery. Once LNAPL has been eliminated and is not present for 1 year, the extraction and injection wells installed along with the VES system will be decommissioned per New York Codes, Rules, and Regulations (NYCRR), Chapter V, Part 555. Contingent actions (e.g., expansion of the excavation, recovery trench, or similar) will also be presented in the work plan to eliminate future work plans and mitigate the risk of failing to eliminate free product within the POP.

Rationale: Further assessment and delineation is warranted before optimizing the free product recovery. The assessment will allow the optimization to be right-sized and appropriate to ensuring that free product is eliminated within the POP.

4) Optimize LTM: Following the elimination of free product, the continuing source will be removed and groundwater sampling frequency can be reduced from quarterly to semi-annually within 1 year of the free product elimination. Annual sampling will be proposed by 2020 to allow for significant reduction in LCCs.

Rationale: Optimized LTM will reduce LCCs while still supporting achievement of SC.

Deliverables

CAP, CCR, Annual Performance Monitoring Reports, Optimization Plan, OES Report, and non-CERCLA FYR

Why the Selected PPO is the Optimal Solution

Bhate's OES uses site evaluation to determine the optimal approach and provide the lowest LCC. The existing biosparge system will continue to ensure protection of human health and the environment by minimizing the potential for the fuel contamination to migrate to Six Mile Creek. The cost to achieve RC versus SC is essentially the same because remediation for groundwater to the cleanup levels has to be achieved for both. The cost to achieve groundwater cleanup standards in the 5 year POP is 2 to 3 times more than our proposed OES, which will use the biosparge system and MNA to achieve SC post-POP.

Technical Approach Risks and Mitigations

The primary risk is that the optimization of the existing system does not result in elimination of free product at the site. This will be mitigated through additional site evaluation that will allow for further assessment of the optimization prior to full-scale implementation. Bhate will be evaluating a surfactant technology at Site SS054 that could be applied at Site SS067 if results from the testing indicate successful mobilization and recovery of free product.

Achieving the PPO IAW Applicable Agreements & Schedule

Our approach will meet the existing agreements and schedule by operating the biosparge system, completing LUC/IC inspections and FYRs, and continuing sampling.

Business Case Analysis

Given the continued presence of free product at SS067, SC is not technically feasible or cost effective by FY18 as presented in Attachment 1B of the PWS. The proposed SC date in Exhibit 1 is 12/2027. Post-POP LCC activities will include the following, at a cost of $270K:

- FY2021-FY2025: Annual LUC/IC maintenance and inspections, O&M of air sparge system and GW sampling of 12 wells for VOCs at an annual cost of $35K for a total of $175K
- FY2026: Rebound sampling at a cost of $50K
- FY2027: Spill Closure Report and well/system decommissioning at a cost of $45K

Performance Model

Bhate will eliminate the free product by 2020. LTM OES will reduce sampling from quarterly to annual by 2021.

Site # 13, 14, 15, 16, and 17	**LF001 (Landfill 1), LF002 (Landfill 2 & 3), LF003 (Landfill 7), LF007 (Landfill 5), and LF009 (Landfill 6)**
Projected Closure Date	Indefinite
Performance Objective:	Response Complete followed by Optimized Exit Strategy
General Strategy:	Document that RAOs have been achieved to document RC, optimize groundwater monitoring/reporting, optimize landfill gas monitoring, cap inspections, and conduct LUC/IC monitoring and FYR

Current Site Conditions

The ROD, signed in June 2000 by the USEPA, for LF001, LF002, LF003, and LF007, was developed with presumptive remedies that require: 1) installation and maintenance of an impermeable cover per the current NYCRR, Part 360 landfill closure regulations; 2) LTM for groundwater, surface water, and sediment per the NYCRR Part 360 landfill post-closure regulations; 3) evaluation of LTM data to confirm the effectiveness of the presumptive remedy; 4) implementation of ICs in the form of deed restrictions; and 5) joint FYRs. The RAO in the ROD does require monitoring groundwater and a stream environment assessment downgradient of the site to evaluate the effectiveness of the presumptive remedy. The ROD for LF009 was signed by the USEPA in June 2001. Per the FFA, the landfills will continue LTM until 2040. These five CERCLA sites are all capped landfills with ongoing post-closure activities that include the performance of routine, preventive, predictive, scheduled, and unscheduled inspections. Groundwater and surface water sample results are compared to NYSDEC Class GA Groundwater Standards and NYSDEC Class C Surface Water Standards. Site activities are conducted under the supervision and recommendations of the USEPA, Region 2 and NYSDEC.

Comprehensive Technical Approach

The goal of RC is to obtain formalized documentation for the AF that each landfill is considered to have achieved the RAOs presented in the approved RODs. OES is primarily to reduce LTM requirements to decrease LCCs in an effective manner through 2040. LTM will focus on ensuring protection of human health and the environment.

To achieve the PPOs of RC followed by OES for LTM, the Bhate Team has and will:

1) Achieved RC in 2017: On 17 March 2010, the USEPA Region 2 issued a letter indicating that LF001 had achieved closure and can begin LTM as required by the ROD and ROD amendment. This letter was issued in response to the "Report on Implementation of Remedial Action at Landfill 1" and response to USEPA's comments dated January 2010. This letter supports RC at LF001. The Bhate Team prepared a Technical Memorandum to document that RC has been achieved at all five of the landfills based upon similar documentation available for each of the sites. This technical memorandum demonstrated that the sites have achieved closure and that the sites are considered to be in LTM (post-RC) as required by the ROD. Bhate summarized the basis and background of the RODs for these four landfill sites (including relevant information regarding presumptive remedies) and the existing site conditions (e.g., COCs, secured by fencing). The submittal of the final technical memorandum to the Regulators served as the basis of having achieved RC per the PWS for LF001, LF002, LF003, LF007, and LF009.

Rationale: Documenting that RC is achieved minimizes AF risk and allows for continued optimization of the LTM.

2) Continue LTM per Final O&M Plan, FYRs, and ICs for Landfills: The Bhate team will implement the approved O&M Plan, FYR, and ICs for these landfills.

Rationale: Our actions will ensure compliance with the ROD and established O&M Plan.

3) Prepare Required OES Documentation throughout the POP: Upon award, the Bhate Team prepared the Optimization Plan to memorialize the OES outlined in the PMP and obtain approval of our performance model and metrics. An OES Report will be prepared prior to the end of the POP to evaluate the implemented optimizations and present further recommended optimization in post-POP years.

4) Implement OES for LTM: Systematic reduction of LTM built upon the ongoing OES, by others. The table below presents the pre-contract award comprehensive sampling activities followed by

the OES in process.

Site ID	2015 LTM Activities	OES during POP
LF001	• Semi-annual landfill gas (LFG) monitoring at 18 gas monitoring probes/31 gas vents. • Annual groundwater monitoring at 12 monitoring wells. • Surface water monitoring at 3 locations. • Semi-annual cap inspections.	• Reduce LFG monitoring by 50% through reduction of gas vents monitored and to annual from semi-annual within POP. • Reduce groundwater monitoring locations by 25% based upon continued non-exceedance of landfill leachate indicators or VOCs and all sampling to biennial. • Annual cap inspections.
LF002	• Semi-annual LFG monitoring at 9 gas monitoring probes/14 gas vents. • Biennial groundwater monitoring at 6 monitoring wells and biennial surface water monitoring at 3 locations. • Semi-annual cap inspections.	• Reduce LFG monitoring by 40% and to annual within POP. • Sampling every 5 years with the next sampling event to coincide with the FYR in 2020. • Eliminate sampling from 2 groundwater monitoring wells. • Annual cap inspections.
LF003	• Annual groundwater monitoring at 8 monitoring wells and biennial surface water monitoring at 2 locations. • Semi-annual cap inspections.	• Reduce sample locations by 25% and sampling every 5 years with the next sampling event to coincide with the FYR in 2020. • Annual cap inspections.
LF007	• No LFG monitoring. • Biennial groundwater monitoring at 5 monitoring wells and biennial surface water monitoring at 3 locations. • Semi-annual cap inspections.	• Sampling every 5 years with the next sampling event to coincide with the FYR in 2020. • Annual cap inspections.
LF009	• Semi-annual LFG monitoring at 13 gas monitoring probes/16 gas vents. • Annual groundwater monitoring at 19 monitoring wells, 2 leachate locations, 1 wetland location, and 3 surface water monitoring locations. • Semi-annual cap inspections.	• Reduce LFG monitoring by 50% and to annual within POP. • Reduce groundwater monitoring to 10 locations. • Sampling every 5 years with the next sampling event to coincide with the FYR in 2020. • Annual cap inspections.

We will use GTS and/or MAROS software, developed for the Air Force Civil Engineer Center (AFCEC), (or equivalent) to determine the optimum number, placement of wells, and sampling frequency in each landfill network. We will develop non-linear trends and trend maps. Future sampling data will be incorporated into GTS/MAROS and inconsistent data flagged for further assessment. Monitoring wells and LFG probes and vents eliminated from the LTM program will be properly decommissioned IAW NYSDEC Groundwater Monitoring Well Decommissioning Policy (Commissioner Policy-43) to eliminate AF liability.

Rationale: Per 6 NYCRR Part 360, site conditions must be evaluated at least once every 5 years. The plumes are stable and/or decreasing. Sampling is primarily done to verify that COCs are not migrating offsite or into the stream environment and ensuring human and ecological health, thus, maintaining regulatory compliance. NYSDEC Sub Part 360 for landfills does not require LFG monitoring such that continued reduction of this LTM activity is reasonable. Per the O&M Manual, Bhate will petition the NYSDEC to modify the inspection requirements based upon the fully established cap and no visual signs of deterioration of the cap within the previous years. Per the

Landfill Optimization Plan, Bhate plans to conduct emergency inspections after large scale (5 year) storm events. Per the O&M Manuals for the landfills, the 5-year, 24-hour storm event is approximately 3.3 inches of rainfall for Rome, New York.

The Bhate Team will support FYRs to ensure ROD compliance and protection of human health and the environment. The landfills will be surveyed during these FYRs to evaluate settlement.

The ROD and State-regulations provide some flexibility for optimization of the O&M over time. While continued LTM will be required for over 20 years, cost reductions through OES are achievable both within the POP and post-POP. Sampling data supports that the plumes are stable. LTM will focus on ensuring the RAOs are achieved by demonstrating that COCs are not migrating offsite or into the stream environment.

Deliverables

LTM Work Plan, Annual LTM Reports, Optimization Plan and OES Reports, FYR, Report on Implementation of Remedial Action, and RC Memorandum.

Why the Selected PPO is the Optimal Solution

This PPO is in the best interest of the AF because the landfills are at RC under the Defense Environmental Restoration Program (DERP). RC is based upon 1) the RAOs in the ROD have been achieved and 2) the only on-going activities are LTM. OES of the ROD-selected remedies provides the AF with the lowest LCC, while ensuring protection of human health and the environment. The Post-Closure care groundwater monitoring period will extend until the year 2040 per the FFA.

Technical Approach Risks and Mitigations

The primary risk at the landfills is COC detections in groundwater or surface water indicating an increasing trend. This risk is considered to be low given the known stability of the groundwater plumes based upon LTM implementation beginning over 10 years ago for all but LF009 (LTM began in June 2006). Sampling will increase if any increasing trends are identified to mitigate this risk. Another risk is damage to the landfill cap from a burrowing animal, large rainfall event, or similar. Mitigation will be IAW the landfill O&M Manual.

Achieving the PPO IAW Applicable Agreements and Schedule

Our approach will meet the existing agreements and schedule by maintaining the landfill cap, inspecting LUC/IC, optimizing water and gas sampling, and completing FYRs.

Business Case Analysis

Our proposed approach results in an approximately 50% decrease in LCC versus SQ through reduction of LTM costs. Post-POP LCC activities include:

- **FY 2021-FY2040**: FYRs, annual LUC/IC maintenance and inspections, no LFG monitoring, and groundwater and surface water sampling every 5 years coinciding with the FYR (except LF001 and LF009 which will remain biennial).

Every 5 years, the 5 landfills cost $40K for a total of $200K post-POP LCC.

Performance Model

The key performance metric for O&M is to reduce LTM.

Site # 18	**SD052-02 (Building 775 OU)**
Projected Closure Date:	2022
Performance Objective:	Response Complete

General Strategy:	Prepare Remedial Optimization Work Plan to evaluate alternative remedies including completion of an ISCO pilot study, and prepare Focused Feasibility Study, Proposed Plan, and ROD; use MAROS or GTS software to optimize groundwater monitoring; conduct LUC/IC monitoring and reporting and FYR.

Current Site Conditions

The ROD for the SD052-02 (Building 775 OU) was signed in March 2009, implementing installation of recovery wells to extract the groundwater from the Building 775 plume and discharge it to a sanitary sewer for off-site treatment at a wastewater treatment facility or for treatment on site and discharged to Three Mile Creek. The RAOs specified in the ROD consist of achieving the cleanup goal for TCE of 5 µg/L. SVI at this site will be addressed in the SD052-01 and SD052-02 SVI ROD, which was finalized in September 2016. OPS was conferred on April 2009. Pump and treat at SD052-02 is expected to reduce the levels of CVOC contamination in groundwater to levels below NYSDEC Groundwater Standards and achieve SC by FY25 (government projection).

The average depth to groundwater is about 60 ft. The water table exhibits a very low hydraulic gradient (0.005 ft/ft) across the site, with an even lower gradient (0.001 ft/ft) to the northeast between the Nosedock area and the northeast edge of Strategic Air Command (SAC) Hill. The contaminated aquifer is comprised of silty sands with an average thickness extending from 60 ft below ground surface (bgs) to 120 ft bgs where shale bedrock is encountered. Due to a relatively flat gradient, average groundwater velocities at this site are slow and have been estimated at approximately 10 ft/year. Higher velocities may exist in discontinuous seams of coarse sand and gravel. Contamination is not found in the bedrock.

Comprehensive Technical Approach

We will achieve RC within the POP by evaluating and implementing alternative remedies to reduce the CVOC contamination below the RAOs. Performance monitoring will focus on ensuring protection of human health and the environment and providing useful information regarding the treatment system overall effectiveness. **In order to achieve the PPO of RC, the Bhate Team will:**

1) **Complete Pilot Study followed by Focused Feasibility Study:** Biotraps® were installed in the shallow portion of the plume to evaluate enhanced reductive dechlorination (ERD) treatment within that highly aerobic aquifer in 2017. Soil samples were also collected for laboratory analysis to assess the natural oxidant demand in the more shallow aquifer to evaluate ISCO treatment in that aquifer zone. Based upon this data, a pilot study has been designed and will be implemented in Fall 2017. The data indicates that either ERD or ISCO would result in successful treatment of the TCE. However, ISCO using permanganate was selected due to low oxidant demand of the soils. The aquifer at Site SD052-02 is highly oxygenated such that creating and sustaining an anaerobic environment for ERD could prove costly and difficult increasing the Air Force risk of achieving RC within the POP. Following the Pilot Study, the results will be presented in a Focused Feasibility Study..

Rationale: The current remedy has achieved asymptotic conditions. In situ treatment of the plume is more appropriate to achieve the RAOs within the POP.

2) **Prepare Proposed Plan and Decision Document with Selected Remedy:** Prepare a Proposed Plan for public review of the revised remedy selection. The ROD will then be amended or an

ESD will be prepared as necessary.

3) **Implement the selected remedy:** The selected remedy will be documented in a Remedial Action Work Plan and then implemented. The implementation will be documented in a Remedial Action Implementation Report.
4) **Conduct Performance Monitoring to Evaluate Remedy Optimization and Achieve RC:**

- Annual LUC/IC inspections will continue throughout the POP. The confirmation of the LUC/ICs protectiveness will be achieved through on-site inspections and LUC/IC confirmation forms signed by the owner/occupant of the property.
- Quarterly performance monitoring sampling will be performed to evaluate the remedy. The quarterly data will be presented in an annual report
- RC will be achieved when the levels of CVOC contamination in groundwater are below NYSDEC Groundwater Standards as documented in the appropriate Annual LTM Report.
- The FYR will be completed to ensure ROD compliance and protection of human health and the environment.

Rationale: Bhate will monitor implementation of the remedy while maintaining compliance with CERLCA requirements of LUCs and FYR.

Deliverables

LTM and Remedial Optimization Work Plans, Focused Feasibility Study, Proposed Plan, ROD Amendment/ESD, RACR, Remedial Action Implementation Report (RAIR), Annual LTM Report, and FYR

Why the Selected PPO is the Optimal Solution

A cost benefit analysis indicates that full remediation of the VOC plume at SDF052-02 would reduce the current AF LCCs by 28%. Projected site closure status is estimated at FY31 under SQ based on trend analysis at MW 775VMW-5. Implementation of our RC strategy will reduce the site closure status from FY31 to FY22. The selected remedy provides the AF with a limited LCC towards achieving SC by reducing the out year operations by 9 years. Proposing SC is a risk to the AF given the short POP, required planning document, notice to proceed date in April 2016, and need for 18 months to complete a rebound analysis, system and well decommissioning, and reporting to achieve SC that results in less than 3 years to treat the groundwater.

Technical Approach Risks and Mitigations

The potential risk with achieving RC is that rebounding may occur with any remedial alternative selected. Bhate will mitigate this by incorporating hot spot treatment via DPT injections as a contingent action at recalcitrant locations.

Achieving the PPO IAW Applicable Agreements & Schedule

Our approach will meet the existing agreements and schedule by continuing LUC/IC inspections, FYRs, and modification of CERCLA documents, as appropriate and required.

Business Case Analysis

RC will be achieved within the POP and significantly advance the site towards achieving SC in 2022. Proposed approach results in 28% decrease in LCCs versus SQ and a projected SC date of 12/2022. Post-POP LCC activities include the following at a cost of $68K:
FY2021-FY2022: Annual LUC/IC maintenance and inspections for a total of $13K post-POP LCC.
FY2021: Rebound sampling at a cost of $20K
FY2022: RACR and well/system abandonment at a cost of $35K

Performance Model

RC will be achieved within the POP so a performance model is not required. Our PPO exceeds the mass removal performance metric stipulated in the PWS.

Site # 19	ST006 (Building 101)
Projected Closure Date:	2020
Performance Objective:	Site Closeout
General Strategy:	Perform SVE treatment system O&M, soil vapor/air/groundwater monitoring, LUC/IC monitoring and FYRs until TCE is remediated; then evaluate rebound and revise risk assessment; prepare ESD to remove ROD restrictions; prepare RACR and then remove/abandon SVE system and monitoring wells. Achieve SC through SC Report.

Current Site Conditions

The 2012-approved ROD RAOs restrict exposure to contamination and selected LUC/ICs in the form of limiting future use to restricted land use and re-evaluation for SVI if new construction is proposed in the designated restricted area. Based upon the 2013 Site Closure Evaluation, potential for unacceptable risk due to TCE exists for indoor air. To remediate this unacceptable risk, an SVE system was installed in October 2013. The sub-slab vapor screening level is 60 µg/m^3. Sub-slab TCE concentrations continue to exceed the screening level. A rebound evaluation was done in early 2017 that concluded a source may be present. The system has continued to operate and will be further evaluated via a second rebound study in Fall 2017.

Comprehensive Technical Approach

SC will be achieved by optimizing existing systems to reduce the COCs to unrestricted use. **To achieve the PPO of SC, the Bhate Team will:**

1) Continue Annual LUC/IC Inspections, Quarterly SVE O&M, Monitoring and Confirmation Sampling, and FYRs: We will continue to perform the required inspections until deed modification removes groundwater use and non-residential use restrictions. O&M of the existing SVE system and monitoring will be continued as established.

Rationale: Our proposed actions ensure compliance with the ROD and O&M Plan.

2) Continue O&M of System followed by Rebound Analysis: The Bhate Team will continue O&M of the system until TCE is below the screening level for 2 quarters. Rebound will then be evaluated once sampling results show that TCE concentrations are below residential sub-slab screening levels, understanding that the evaluation period could be as long as three heating seasons. Site closure will be requested if TCE concentrations remain below the residential sub-slab screening levels during the rebound evaluation.

Rationale: The purpose of the system is to eliminate the potential SVI risks and to achieve site closure with unrestricted use at the site.

3) Revise Risk Assessment: If necessary, soil samples will be collected to confirm that soil vapor removal has achieved an acceptable risk for residential reuse. Sufficient soil samples will be collected and analyzed for VOCs, Semi-volatile Organic Compounds (SVOCs), and Target Analyte List (TAL) metals to complete a risk assessment compliant with the USEPA Risk Assessment

Guidance for Superfund (RAGS) guidance. The data quality objectives (DQOs), including number of soil samples, locations, and depths, will be established during scoping sessions with the BCT. Validated data will be used to complete a revised risk assessment based upon residential reuse. The risk assessment will be presented in the Annual LUC/IC Report under "New Information of Significance" with the recommendation to issue an ESD or Note to File under CERCLA to remove the LUC/IC restriction for the site.

Rationale: The previous risk assessment and current ROD are based on restricted reuse and requires updating to document that the site meets the criteria for unrestricted land use.

4) Achieve DD: The ESD will document the new soil sample results and the revised risk assessment that supports unrestricted reuse.

Rationale: The ESD will formalize the decision of unrestricted use and NFA.

5) Achieve SC: A formal RACR will be prepared to document the SVI activities, confirmation sampling, and risk assessment. The RACR will request removal of the restrictions IAW the ROD. Upon approval of the RACR, the existing treatment system and any monitoring wells will be properly decommissioned per the NYSDEC Groundwater Monitoring Well Decommissioning Policy (Commissioner Policy-43). An SC Report will be prepared to achieve SC.

Rationale: The existing SVE system coupled with the revised risk assessment will remediate the site to achieve SC upon decommissioning of the wells and system.

Deliverables

LTM Work Plan, Annual LTM Report, Risk Assessment Work Plan, ESD, FYR, RACR, and SC/Well and System Decommissioning Report

Why the Selected PPO is the Optimal Solution

Building 101 is currently an aircraft hangar that conducts commercial jet aircraft maintenance and repair, with hazardous waste storage and POL/fuels aboveground storage tanks (ASTs). An aqueous film-forming foam (AFFF) system is operational and in use. Given the current tenants use of multiple similar chemicals, achieving SC for the known site operated by the AF will eliminate future liability for potential comingled releases by the current tenants. Existing remedial actions will allow for SC early on in the POP at low cost to the AF.

Technical Approach Risks and Mitigations

The primary risk to achieving SC within the POP is that additional active remediation is necessary. Mitigation of this risk will be accomplished by partnering with the AF, NYSDEC, and USEPA early on to determine the DQOs for documenting SC and re-assessing the site for unrestricted reuse. Based upon the analytical data from the air sampling, Bhate notified the Contracting Officer of a possible change in condition. Bhate is working with the AF to address this site using the most economical and appropriate path forward following additional rebound analysis in Fall 2017. The DQOs will be achieved as soon as possible after award so that additional active remediation can be coordinated with the existing tenant and implemented in sufficient time to achieve SC. A secondary risk is that an ESD is not acceptable and a ROD Amendment is required. Our IMS mitigates this risk by including contingency time, should this occur.

Achieving the PPO IAW Applicable Agreements and Schedule

Our approach will meet the existing agreements and schedule by continuing to operate the SVE system, completing LUC/IC inspections and FYRs, and continued sampling.

Business Case Analysis

If rebound does not occur, SC will be achieved by FY18 as projected in Attachment 1b of the PWS.

However, our schedule conservatively provides for additional time.

Performance Model

We will achieve SC within the POP such that a performance model is not required.

Site # 20, 21, and 22	SS017 (Lot 69 Former Hazardous Waste Storage Area), DP022 (Building 222), SS025 (T-9 Storage Area)
Projected Closure Date:	2019
Performance Objective:	Site Closeout
General Strategy:	Collect current site data to document that the sites meet the criteria for unrestricted land use; prepare ESD to remove ROD restrictions; continue LUC monitoring (and FYR if necessary) until NFA determination is achieved; abandon monitoring wells. Achieve SC through SC Reports.

Current Site Conditions

Site SS017: A ROD was signed on March 17, 2005, based on restricted future usage. Based on metals detections in groundwater being associated with suspended solids and consistent with background levels, the groundwater restriction under the ROD was removed in 2013. Based on the Remedial Investigation (RI) data, only one sample location represents a "hot spot" that may require remediation. The risk assessment didn't assess unrestricted reuse for the Polycyclic Aromatic Hydrocarbon (PAH) and PCB detections.

Site DP022: A ROD was signed on September 27, 2001, based on restricted future usage. The groundwater restriction under the ROD was removed in 2013. The risk assessment performed as part of the RI used the maximum detected concentration because less than 10 soil samples were collected. The risk assessment was completed prior to the removal action and didn't consider unrestricted reuse.

Site SS025: A ROD was signed on September 27, 2001, based on restricted future usage. The groundwater restriction under the ROD was removed in 2013. A removal action was completed in 1998 based upon public comment on the Proposed Plan (PP). The risk assessment performed as part of the RI was completed prior to the removal action and didn't consider unrestricted reuse.

All sites: Groundwater usage is no longer restricted and soil levels are likely consistent with residential reuse, but requires a revised risk assessment to confirm. Based upon additional and current soil data, restrictions due to soil contamination at SS017 and SS025 and encapsulation of contamination for DP022 can be removed through ROD amendments.

Comprehensive Technical Approach

We will achieve SC by collecting and assessing more recent site data to document that the site meets unrestricted use criteria. **To achieve SC, the Bhate Team will:**

1) **Continue LUC/IC Inspections and FYRs at Site DP022-Building 22 per the ROD:** Annual LUC/IC inspections will be completed and presented in an Annual Report. If SC is not yet approved, the next FYR will include a review of this site.

Rationale: Our proposed actions will ensure compliance with the ROD, FFA, and CERCLA.

2) **Collect soil samples to evaluate the sites for residential reuse.** A Work Plan in UFP-QAPP

format was prepared to collect soil data (last sampling completed in 1994) to evaluate current detections of containments identified from historical data. The DQOs, including number of soil sample locations and depths, were established during scoping sessions with the BCT. Bhate is planning to complete a hand auger boring at Site DP022, within the building, to collect soil below the slab per the UFP-QAPP. Sufficient soil samples were collected from Site SS017 and SS025 in June 2017 as confirmed by the New York State Regulators (NYSDEC and NYSDOH) during the BCT call on 8 September 2017. Validated data will be used to complete a revised risk assessment or exposure assessment for Sites SS025, DP022, and SS017 based upon residential reuse. The risk assessment or exposure assessment will be presented in the Annual LUC/IC Report under "New Information of Significance" with the recommendation to issue an ESD or Note to File under CERCLA to remove the LUC/IC restriction for the site.

Rationale: Previous soil data indicates that a revised risk assessment will achieve unrestricted reuse.

3) Achieve DD and SC: The ESD will document the new soil samples and the revised risk assessment or exposure assessment that supports unrestricted reuse. Completion for the ESD or Note to File will also achieve SC for these sites.

Rationale: The ESD formalizes the decision of unrestricted use.

Deliverables

Exposure Assessment Work Plan, Annual LTM Reports, ESD, FYR, and SC Report (if necessary)

Why the Selected PPO is the Optimal Solution

This PPO is in the best interest of the AF because it eliminates future liability at the same cost as continuing annual LUC/IC inspections and FYRs. Previous data indicates that a revised exposure assessment will demonstrate unrestricted reuse of the site is protective of human health and the environment.

Technical Approach Risks and Mitigations

The primary risk to achieving SC is that the additional soil sampling detects PAHs, metals, and/or PCBs at concentrations that create an unacceptable risk to potential future residents. Our mitigation is inclusion of contingency time in the schedule to implement a removal action to excavate the contaminated soil and achieve SC within the POP. A secondary risk is that the ESD is not acceptable to the USEPA and a ROD Amendment must be prepared. Our IMS mitigates this risk by inclusion of contingency time to complete a ROD Amendment.

Achieving the PPO IAW Applicable Agreements and Schedule

Our approach will comply with the existing ROD by continuing LUCs/ICs and FYR until approval to remove the restrictions is obtained. We will exceed the existing agreements and schedule by achieving SC in the POP.

Business Case Analysis

SC will be achieved within the POP such that no post-POP LCC activities or costs are required.

Performance Model

No performance model is required with the proposed approach.

Site # 23	CSS681 (Apron 1 Area LCP-E9)

Projected Closure Date:	2020
Performance Objective:	Site Closeout
General Strategy:	Submit CAP to install monitoring wells, amend CAP to complete in-situ treatment of the plume; perform monthly O&M and quarterly performance monitoring/reporting, perform rebound analysis, submit spill closure report, decommission monitoring wells, submit SC Report.

Current Site Conditions

In 2014, the vertical and horizontal extent of soil impacts around the former lateral control pit (LCP) was delineated. However, the extent of the associated groundwater plume has not been delineated.

Comprehensive Technical Approach

The goal of SC is to reduce source material using ISCO. **In order to achieve the PPO of SC, the Bhate Team will:**

1) Monitor Residual Groundwater Plume: Five monitoring wells will be installed to delineate and assess residual groundwater contamination and flow. Monitoring wells will be placed downgradient, upgradient, and in the center of the known contamination. A CAP was prepared to identify the well locations and present the sampling plan.

Rationale: Groundwater data to date is based upon grab samples that are not representative of the COCs.

2) Implement Remedial Action to Treat Petroleum Contaminated Groundwater and Smear Zone Soils: The CAP was amended to present the in-situ remedy selected to treat groundwater and the smear zone soils.. Contingent actions include:

- **Complete ISCO injections:** If the amount of residual soil or groundwater impacts is limited, then ISCO injections will be completed to treat the remaining contamination.

Rationale: The use of ISCO will allow for remediation of the groundwater and/or soil contamination to reduce the presence of the source material. Excavation of the soils is expensive due to the required depth and lateral extent of the excavation because the contamination is in the saturated soils only and is present under 2 feet of re-enforced concrete for Apron 1.

3) Treat the dissolved phase plume: Performance groundwater monitoring will be completed quarterly to monitor contaminant reduction. The treatment may be optimized based upon this monitoring.

Rationale: Performance monitoring will allow for early identification of rebounding or changes in concentration that require further treatment or optimization of the remedy.

4) Achieve SC:

- **Complete Rebound Analysis:** After the cleanup levels have been achieved, groundwater sampling will be completed quarterly for a minimum of 1 year (4 sampling events) to verify that contaminants do not rebound.

Rationale: Sufficient data is required to support NFA.

- **Prepare Spill Closure Report:** This report will document the rebound sampling to support NFA at the spill site.

Rationale: Report will provide sufficient documentation for the NYSDEC to grant closure of the spill.

- **Properly decommission existing monitoring wells:** IAW NYSDEC Groundwater Monitoring Well Decommissioning Policy (Commissioner Policy-43) and prepare a SC Report to achieve SC.

Rationale: Removal of the existing monitoring wells will eliminate future costs to the AF.

Deliverables

CAP, CCR, Annual Performance Monitoring Reports, Spill Closure Report, SC Report, Well and System Decommissioning Report, and non-CERCLA FYR (if necessary).

Why the Selected PPO is the Optimal Solution

The performance objective of SC eliminates AF future liabilities and ultimately provides the lowest LCC versus LTM, O&M, and LUCs/ICs for an indefinite time frame.

Technical Approach Risks and Mitigations

The primary risk is that the ISCO remedy does not oxidize the source materials in the saturated soils and groundwater sufficiently as to reduce the total mass.

Achieving the PPO IAW Applicable Agreements and Schedule

Our approach will meet the existing agreements by achieving SC per the NYSDEC Corrective Action Program requirements.

Business Case Analysis

SC will be achieved by FY20, which is IAW Attachment 1B of the PWS.

Performance Model

No performance model is required as SC will be achieved within the POP.

Site # 24	CSS682 (Building 785 Pipeline)
Projected Closure Date:	2020
Performance Objective:	Site Closeout
General Strategy:	Complete additional in-situ treatment, if necessary; continue performance monitoring until cleanup goals are achieved; monitor for another year to verify no rebound; prepare/submit a spill closure report, decommission monitoring wells, prepare SC Report to achieve SC.

Current Site Conditions

Contaminated soil was excavated to the extent possible, but some residual petroleum-related (VOC/SVOC) contamination was left due to existing utilities. Klozur® CR was injected in 2015, but the results from the injection are unknown. However, the maximum extent of potential contamination is known. Groundwater grab samples also have VOCs that exceed the NYSDEC groundwater standards.

Comprehensive Technical Approach

The goal of SC is to reduce the residual contamination to below the groundwater standards in 6 NYCRR Part 703. **In order to achieve the PPO of SC, the Bhate Team will:**

1) Implement a follow-on ISCO injection, if necessary: Based upon the performance monitoring to be completed in the fall of 2016 and 2017, additional injections may be required to achieve SC. If polishing is needed, sulfate injections may be used to allow biodegradation. If reduction in the COCs is less than 50% of the baseline results, then evaluation of the initial injections will be completed, which may include a pilot study and/or additional soil/groundwater sampling prior to follow-on injections.

Rationale: The Bhate Team will build off of the lessons learned and successes of the initial ISCO injections to optimize treatment and achieve SC.

2) Conduct Monitoring to Achieve SC: Based upon input from the NYSDEC-Spills, soil samples will be collected to confirm that the remediation successfully achieved source reduction. The results will be presented in the Spill Closure Report. Upon approval of the Spill Closure Report, the monitoring wells will be properly decommissioned per the NYSDEC Groundwater Monitoring Well Decommissioning Policy (Commissioner Policy-43). A SC Report will be prepared to achieve SC.

Rationale: Sufficient data is required to support NFA. Removal of the existing monitoring wells will eliminate all future costs to the AF.

Deliverables

CAP Amendment (if required), Annual Performance Monitoring Report(s), Spill Closure Report, SC/Well Decommissioning Report, and Non-CERCLA FYR

Why the Selected PPO is the Optimal Solution

Given that active remediation commenced in FY15, any additional active remediation would be low cost such that SC within the POP provides the lowest LCC.

Technical Approach Risks and Mitigations

The primary risk to achieving SC is that ISCO is not effective at treating the residual contamination in the unsaturated soil. To mitigate this risk, Bhate will complete a bench scale test, additional sampling, and a pilot test, if necessary to optimize the injection. A secondary risk is the requirement for additional well placement and/or soil sampling to support closure due to existing utilities. We will partner with the NYSDEC to select representative locations if additional samples are required considering existing utility locations.

Achieving the PPO IAW Applicable Agreements & Schedule

Our approach will meet the existing agreements by achieving site closeout per the NYSDEC Corrective Action Program regulations.

Business Case Analysis

SC will be achieved within the POP such that no business case is required.

Performance Model

No performance model is required as SC will be achieved within the POP.

APPENDIX C
PERFORMANCE AND PAYMENT MILESTONES

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Appendix C
Performance and Payment Milestones

Milestone Number	CLINs	Outcome	Task Name	Total %	Milestone Completion Date
			Environmental Services for Eastern Region Base Realignment and Closure (BRAC) Bases - Griffiss AFB		**Fri 7/2/21**
			Project Management Plan (PMP)		**Tue 10/27/20**
GPMP.001	2000	Planning	AF Approval of Final PMP-2016	28%	9/9/2016
GPMP.007	2000	Planning	AF Approval of Final Annual Well Inventory/Maintenance Report- 2016	42%	3/17/2017
GPMP.002	2001	Planning	AF Approval of Final PMP-2017	54%	9/21/2017
GPMP.008	2001	Planning	AF Approval of Final Annual Well Inventory/Maintenance Report- 2017	59%	2/27/2018
GPMP.003	2002	Planning	AF Approval of Final PMP-2018	63%	10/3/2018
GPMP.009	2002	Planning	AF Approval of Final Annual Well Inventory/Maintenance Report- 2018	67%	2/12/2019
GPMP.004	2003	Planning	AF Approval of Final PMP-2019	71%	10/15/2019
GPMP.010	2003	Planning	AF Approval of Final Annual Well Inventory/Maintenance Report- 2019	75%	2/27/2020
GPMP.005	2004	Planning	AF Approval of Final PMP-2020	88%	10/26/2020
GPMP.011	2004	Planning	AF Approval of Final Annual Well Inventory/Maintenance Report- 2020	100%	2/25/2021
			Landfill RC: LF001		**Wed 2/17/21**
GLF001.001	2015	RC	AF Approval of Draft LTM Work Plan	6%	9/1/2016
GLF001.008	2015	RC	AF Approval of Draft Optimization Plan	17%	9/12/2016
GLF001.012	2015	RC	AF Approval of RC Memorandum - Achieve RC	37%	11/10/2016
GLF001.009	2015	RC	AF Approval of Final Optimization Plan	40%	11/14/2016
GLF001.002	2015	RC	Regulator Approval of Final LTM Work Plan	46%	12/6/2016
GLF001.003	2015	RC	AF Approval of Final Annual LTM Report at Landfills for 2016	55%	12/19/2016
GLF001.004	2016	RC	AF Approval of Final Annual LTM Report at Landfills for 2017	64%	12/25/2017
GLF001.005	2017	RC	AF Approval of Final Annual LTM Report at Landfills for 2018	73%	10/18/2018
GLF001.006	2018	RC	AF Approval of Final Annual LTM Report at Landfills for 2019	82%	12/30/2019
GLF001.007	2019	RC	AF Approval of Final Annual LTM Report at Landfills for 2020	90%	8/17/2020
GLF001.010	2019	RC	AF Approval of Final OES Report; Distribute Report to Regulators-Achieve OES	100%	12/11/2020
			Landfill RC: LF002		**Wed 2/17/21**
GLF002.001	2015	RC	AF Approval of Draft LTM Work Plan	6%	9/1/2016
GLF002.008	2015	RC	AF Approval of Draft Optimization Plan	18%	9/12/2016
GLF002.012	2015	RC	AF Approval of RC Memorandum- Achieve RC	38%	11/10/2016
GLF002.009	2015	RC	AF Approval of Final Optimization Plan	40%	11/14/2016
GLF002.002	2015	RC	Regulator Approval of Final LTM Work Plan	42%	12/6/2016
GLF002.003	2015	RC	AF Approval of Final Annual LTM Report at Landfills for 2016	44%	12/19/2016
GLF002.004	2016	RC	AF Approval of Final Annual LTM Report at Landfills for 2017	59%	12/25/2017
GLF002.005	2017	RC	AF Approval of Final Annual LTM Report at Landfills for 2018	74%	10/18/2018
GLF002.006	2018	RC	AF Approval of Final Annual LTM Report at Landfills for 2019	80%	12/30/2019
GLF002.007	2019	RC	AF Approval of Final Annual LTM Report at Landfills for 2020	87%	8/17/2020
GLF002.010	2019	RC	AF Approval of Final OES Report; Distribute Report to Regulators-Achieve OES	100%	12/11/2020
			Landfill RC: LF003		**Wed 2/17/21**
GLF003.001	2015	RC	AF Approval of Draft LTM Work Plan	16%	9/1/2016
GLF003.008	2015	RC	AF Approval of Draft Optimization Plan	30%	9/12/2016
GLF003.012	2015	RC	AF Approval of RC Memorandum - Achieve RC	50%	11/10/2016
GLF003.009	2015	RC	AF Approval of Final Optimization Plan	53%	11/14/2016

Milestone Number	CLINs	Outcome	Task Name	Total %	Milestone Completion Date
GLF003.002	2015	RC	Regulator Approval of Final LTM Work Plan	57%	12/6/2016
GLF003.006	2018	RC	AF Approval of Final Annual LTM Report at Landfills for 2019	72%	12/30/2019
GLF003.010	2019	RC	AF Approval of Final OES Report; Distribute Report to Regulators-Achieve OES	100%	12/11/2020
			Landfill RC: LF007		**Wed 2/17/21**
GLF007.001	2015	RC	AF Approval of Draft LTM Work Plan	8%	9/1/2016
GLF007.008	2015	RC	AF Approval of Draft Optimization Plan	16%	9/12/2016
GLF007.012	2015	RC	AF Approval of RC Memorandum - Achieve RC	36%	11/10/2016
GLF007.009	2015	RC	AF Approval of Final Optimization Plan	38%	11/14/2016
GLF007.002	2015	RC	Regulator Approval of Final LTM Work Plan	40%	12/6/2016
GLF007.006	2018	RC	AF Approval of Final Annual LTM Report at Landfills for 2019	80%	12/30/2019
GLF007.010	2019	RC	AF Approval of Final OES Report; Distribute Report to Regulators-Achieve OES	100%	12/11/2020
			Landfill RC: LF009		**Wed 2/17/21**
GLF009.001	2015	RC	AF Approval of Draft LTM Work Plan	10%	9/1/2016
GLF009.008	2015	RC	AF Approval of Draft Optimization Plan	19%	9/12/2016
GLF009.012	2015	RC	AF Approval of RC Memorandum- Achieve RC	39%	11/10/2016
GLF009.009	2015	RC	AF Approval of Final Optimization Plan	42%	11/14/2016
GLF009.002	2015	RC	Regulator Approval of Final LTM Work Plan	44%	12/6/2016
GLF009.003	2015	RC	AF Approval of Final Annual LTM Report at Landfills for 2016	51%	12/19/2016
GLF009.004	2016	RC	AF Approval of Final Annual LTM Report at Landfills for 2017	60%	12/25/2017
GLF009.005	2017	RC	AF Approval of Final Annual LTM Report at Landfills for 2018	70%	10/18/2018
GLF009.006	2018	RC	AF Approval of Final Annual LTM Report at Landfills for 2019	80%	12/30/2019
GLF009.007	2019	RC	AF Approval of Final Annual LTM Report at Landfills for 2020	90%	8/17/2020
GLF009.010	2019	RC	AF Approval of Final OES Report; Distribute Report to Regulators-Achieve OES	100%	12/11/2020
			SC Site: ST006: Building 101		**Tue 6/15/21**
GST006.001	2020	SC	AF Approval of Draft 2016 LTM Work Plan Update	16%	1/10/2017
GST006.003	2020	SC	AF Approval of Final Annual 2016 LTM Report	26%	3/1/2017
GST006.002	2020	SC	AF and Regulator Approval of Final 2016 LTM Work Plan Update	30%	6/9/2017
GST006.005	2022	SC	AF Approval of Draft RA Work Plan	60%	10/29/2018
GST006.006	2022	SC	Regulator Approval of Final RA Work Plan	68%	1/30/2019
GST006.007	2023	SC	AF Approval of Draft ESD	73%	3/17/2020
GST006.008	2024	SC	Regulator Approval of Final ESD	74%	10/12/2020
GST006.009	2024	SC	AF Approval of Draft RACR	79%	12/16/2020
GST006.010	2024	SC	AF and Regulator Approval of Final RACR;AF Approval of ERPIMS Upload	80%	3/19/2021
GST006.011	2024	SC	AF Approval of Final Site Closeout and Well & System Decommissioning Report; Distribute Report to Regulators - Achieve SC	100%	6/14/2021
			SQ Site: SS008		**Wed 10/14/20**
GSS008.001	2005	SQ	AF Approval of Final 2016 Annual LTM Report	2%	12/20/2016
GSS008.002	2006	SQ	AF Approval of Final 2017 Annual LTM Report	26%	12/6/2017
GSS008.003	2007	SQ	AF Approval of Final 2018 Annual LTM Report	51%	12/6/2018
GSS008.004	2008	SQ	AF Approval of Final 2019 Annual LTM Report	75%	12/6/2019
GSS008.005	2009	SQ	AF Approval of Final 2020 Annual LTM Report; Distribute Report to Regulators-Achieve SQ	100%	10/8/2020
			SQ Site: SS033		**Wed 10/14/20**
GSS033.001	2005	SQ	AF Approval of Final 2016 Annual LTM Report	0%	12/20/2016
GSS033.002	2006	SQ	AF Approval of Final 2017 Annual LTM Report	25%	12/6/2017
GSS033.003	2007	SQ	AF Approval of Final 2018 Annual LTM Report	50%	12/6/2018

Milestone Number	CLINs	Outcome	Task Name	Total %	Milestone Completion Date
GSS033.004	2008	SQ	AF Approval of Final 2019 Annual LTM Report	75%	12/6/2019
GSS033.005	2009	SQ	AF Approval of Final 2020 Annual LTM Report; Distribute Report to Regulators-Achieve SQ	100%	10/8/2020
			SQ Site: SS044		**Wed 10/14/20**
GSS044.001	2005	SQ	AF Approval of Final 2016 Annual LTM Report	20%	12/20/2016
GSS044.002	2006	SQ	AF Approval of Final 2017 Annual LTM Report	40%	12/6/2017
GSS044.003	2007	SQ	AF Approval of Final 2018 Annual LTM Report	60%	12/6/2018
GSS044.004	2008	SQ	AF Approval of Final 2019 Annual LTM Report	80%	12/6/2019
GSS044.005	2009	SQ	AF Approval of Final 2020 Annual LTM Report; Distribute Report to Regulators-Achieve SQ	100%	10/8/2020
			SQ Site: SS060		**Wed 10/14/20**
GSS060.001	2005	SQ	AF Approval of Final 2016 Annual LTM Report	20%	12/20/2016
GSS060.002	2006	SQ	AF Approval of Final 2017 Annual LTM Report	40%	12/6/2017
GSS060.003	2007	SQ	AF Approval of Final 2018 Annual LTM Report	60%	12/6/2018
GSS060.004	2008	SQ	AF Approval of Final 2019 Annual LTM Report	80%	12/6/2019
GSS060.005	2009	SQ	AF Approval of Final 2020 Annual LTM Report; Distribute Report to Regulators-Achieve SQ	100%	10/8/2020
			SQ Site: AOI66		**Wed 10/14/20**
GAOI66.001	2005	SQ	AF Approval of Final 2016 Annual LTM Report	20%	12/20/2016
GAOI66.002	2006	SQ	AF Approval of Final 2017 Annual LTM Report	40%	12/6/2017
GAOI66.003	2007	SQ	AF Approval of Final 2018 Annual LTM Report	60%	12/6/2018
GAOI66.004	2008	SQ	AF Approval of Final 2019 Annual LTM Report	80%	12/6/2019
GAOI66.005	2009	SQ	AF Approval of Final 2020 Annual LTM Report; Distribute Report to Regulators-Achieve SQ	100%	10/8/2020
			SC Site SS017		**Thu 1/16/20**
GSS017.001	2020	SC	AF Approval of Draft SI Work Plan	19%	11/24/2016
GSS017.002	2020	SC	Regulator Approval of Final SI Work Plan	23%	2/27/2017
GSS017.003	2021	SC	AF Approval of Final Annual LUC Report-2016	38%	11/7/2017
GSS017.004	2021	SC	AF Approval of Final Annual LUC Report-2017	54%	12/6/2017
GSS017.005	2022	SC	AF Approval of Final Annual LUC Report-2018	69%	12/12/2018
GSS017.008	2023	SC	AF Approval of Draft SI Report	78%	8/27/2019
GSS017.009	2023	SC	Regulator Approval of Final SI Report	80%	11/28/2019
GSS017.007	2023	SC	Regulator Approval of Final ESD - Achieve SC	100%	6/26/2020
			SC Site DP022		**Thu 1/16/20**
GDP022.001	2020	SC	AF Approval of Draft SI Work Plan	21%	11/24/2016
GDP022.002	2020	SC	Regulator Approval of Final SI Work Plan	26%	2/27/2017
GDP022.003	2021	SC	AF Approval of Final Annual LUC Report-2016	41%	11/7/2017
GDP022.004	2021	SC	AF Approval of Final Annual LUC Report-2017	56%	12/6/2017
GDP022.005	2022	SC	AF Approval of Final Annual LUC Report-2018	66%	12/12/2018
GDP022.008	2023	SC	AF Approval of Draft SI Report	77%	8/27/2019
GDP022.009	2023	SC	Regulator Approval of Final SI Report	80%	11/28/2019
GDP022.007	2023	SC	Regulator Approval of Final ESD- Achieve SC	100%	6/26/2020
			SC Site SS025		**Thu 1/16/20**
GSS025.001	2020	SC	AF Approval of Draft SI Work Plan	19%	11/24/2016
GSS025.002	2020	SC	Regulator Approval of Final SI Work Plan	24%	2/27/2017
GSS025.003	2021	SC	AF Approval of Final Annual LUC Report-2016	39%	11/7/2017
GSS025.004	2021	SC	AF Approval of Final Annual LUC Report-2017	54%	12/6/2017
GSS025.005	2022	SC	AF Approval of Final Annual LUC Report-2018	69%	12/12/2018
GSS025.008	2023	SC	AF Approval of Draft SI Report	78%	8/27/2019
GSS025.009	2023	SC	Regulator Approval of Final SI Report	80%	11/28/2019
GSS025.007	2023	SC	Regulator Approval of Final ESD-Achieve SC	100%	6/26/2020
			OES Site SD052-01: Apron 2 Chlorinated Plume		**Fri 7/2/21**
GSD052-01.001	2010	OES	AF Approval of Draft Remedial Optimization Work Plan	16%	11/14/2016
GSD052-01.003	2010	OES	AF Approval of Draft LTM Work Plan	32%	10/3/2016
GSD052-01.004	2010	OES	Regulator Approval of Final LTM Work Plan	36%	12/5/2016
GSD052-01.002	2010	OES	Regulator Approval of Final Remedial Optimization Work Plan	40%	2/15/2017
GSD052-01.005	2010	OES	AF Approval of Final Annual LTM Report-2016	46%	4/12/2017
GSD052-01.006	2011	OES	AF Approval of Final Annual LTM Report-2017	64%	4/2/2018

Milestone Number	CLINs	Outcome	Task Name	Total %	Milestone Completion Date
GSD052-01.007	2012	OES	AF Approval of Final Annual LTM Report-2018	68%	3/21/2019
GSD052-01.012	2012	OES	AF Approval of Draft ESD	74%	4/18/2019
GSD052-01.013	2013	OES	Regulator Approval of Final ESD	76%	7/8/2019
GSD052-01.008	2013	OES	AF Approval of Final Annual LTM Report-2019	78%	3/10/2020
GSD052-01.009	2014	OES	AF Approval of Final Annual Report-2020	80%	2/26/2021
GSD052-01.010	2014	OES	AF Approval of Final OES Report; Distribute Report to Regulators-Achieve OES	100%	4/23/2021
			RC Site SD052-02: Bldg. 775, Pump house 3 - Chlorinated Plume		**Tue 3/9/21**
GSD052-02.016	2015	RC	AF Approval of Draft LTM Work Plan	3%	10/3/2016
GSD052-02.001	2015	RC	AF Approval of Draft Remedial Optimization Work Plan	17%	11/14/2016
GSD052-02.017	2015	RC	Regulator Approval of Final LTM Work Plan	17%	12/5/2016
GSD052-02.002	2015	RC	Regulator Approval of Final Remedial Optimization Work Plan	21%	1/19/2017
GSD052-02.011	2015	RC	AF Approval of Final Annual LTM Report-2016	26%	4/12/2017
GSD052-02.007	2015	RC	AF Approval of Final O&M Report for Q1 2017 and ERPIMS Upload	28%	5/18/2017
GSD052-02.008	2016	RC	AF Approval of Final O&M Report for Q2 2017 and ERPIMS Upload	33%	8/17/2017
GSD052-02.018	2016	RC	AF Approval of Final O&M Report for Q3 2017 and ERPIMS Upload	38%	11/16/2017
GSD052-02.003	2016	RC	AF Approval of Draft FFS	55%	3/14/2018
GSD052-02.012	2016	RC	AF Approval of Draft Final LTM Report-2017	57%	4/2/2018
GSD052-02.004	2016	RC	Regulator Approval of Final FFS	61%	6/5/2018
GSD052-02.005	2017	RC	AF Approval of Draft Proposed Plan	64%	8/30/2018
GSD052-02.013	2017	RC	AF Approval of Final Annual LTM Report-2018	69%	2/28/2019
GSD052-02.006	2017	RC	Regulator Approval of Final Proposed Plan	70%	3/25/2019
GSD052-02.009	2017	RC	AF Approval of Draft ESD	72%	5/31/2019
GSD052-02.010	2018	RC	Regulator Approval of Final ESD	74%	7/29/2019
GSD052-02.014	2018	RC	AF Approval of Final Annual LTM Report-2019	79%	3/10/2020
GSD052-02.015	2019	RC	AF Approval of Final Annual LTM Report-Achieve RC	100%	2/19/2021
			OES Site SD052-04: Landfill 6 Chlorinated Plume		**Thu 4/22/21**
GSD052-04.003	2010	OES	AF Approval of Draft LTM Work Plan	13%	10/3/2016
GSD052-04.001	2010	OES	AF Approval of Draft Remedial Optimization Work Plan	26%	11/14/2016
GSD052-04.004	2010	OES	Regulator Approval of Final LTM Work Plan	29%	12/7/2016
GSD052-04.002	2010	OES	Regulator Approval of Final Remedial Optimization Work Plan	32%	1/18/2017
GSD052-04.005	2010	OES	AF Approval of Final Annual LTM Report-2016	40%	4/14/2017
GSD052-04.007	2011	OES	AF Approval of Final Annual LTM Report-2017	55%	4/4/2018
GSD052-04.008	2012	OES	AF Approval of Final Annual LTM Report-2018	70%	3/25/2019
GSD052-04.009	2013	OES	AF Approval of Final Annual LTM Report-2019	78%	3/12/2020
GSD052-04.010	2014	OES	AF Approval of Final Annual Report-2020	80%	1/5/2021
GSD052-04.011	2014	OES	AF Approval of Final OES Report; Distribute Report to Regulators-Achieve OES	100%	3/8/2021
			OES Site SD052-05: Bldg. 817 Chlorinated Plume		**Tue 4/6/21**
GSD052-05.003	2010	OES	AF Approval of Draft LTM Work Plan	10%	10/3/2016
GSD052-05.001	2010	OES	AF Approval of Draft Remedial Optimization Work Plan	26%	11/14/2016
GSD052-05.004	2010	OES	Regulator Approval of Final LTM Work Plan	28%	12/7/2016
GSD052-05.002	2010	OES	Regulator Approval of Final Remedial Optimization Work Plan	32%	1/18/2017
GSD052-05.005	2010	OES	AF Approval of Final Annual LTM Report	44%	4/14/2017
GSD052-05.006	2011	OES	AF Approval of Final Annual LTM Report	58%	4/4/2018
GSD052-05.007	2012	OES	AF Approval of Final Annual LTM Report	69%	3/25/2019
GSD052-05.008	2013	OES	AF Approval of Final Annual LTM Report	76%	3/12/2020
GSD052-05.009	2014	OES	AF Approval of Final Annual Report	80%	12/8/2020
GSD052-05.010	2014	OES	AF Approval of Final OES Report; Distribute Report to Regulators-Achieve OES	100%	2/4/2021
			OES Site SD052-SVI		**Tue 12/1/20**
GSD052SVI.001	2010	OES	AF Approval of Draft Optimization Plan	11%	12/16/2016

Milestone Number	CLINs	Outcome	Task Name	Total %	Milestone Completion Date
GSD052SVI.002	2010	OES	AF Approval of Final Optimization Plan	14%	12/23/2016
GSD052SVI.003	2010	OES	AF Approval of Draft Construction Completion Report	27%	3/16/2017
GSD052SVI.004	2010	OES	Regulator Approval of Final Construction Completion Report	30%	5/11/2017
GSD052SVI.005	2010	OES	AF Approval of Draft LTM Work Plan	46%	9/8/2016
GSD052SVI.006	2010	OES	Regulator Approval of Final LTM Work Plan	50%	11/14/2016
GSD052SVI.007	2010	OES	AF Approval of Final O&M Report	60%	3/16/2017
GSD052SVI.008	2011		AF Approval of Final O&M Report	70%	7/13/2017
GSD052SVI.009	2011	OES	AF Approval of Final O&M Report	80%	2/5/2018
GSD052SVI.010	2011		AF Approval of Final OES Report; Distribute Report to Regulators-Achieve OES	100%	5/2/2018
			OES: Site SS054 Bldg. 781. Pump house-Free Product on Groundwater (NYDEC Spill #9202658)		**Tue 5/4/21**
GSS054.001	2010	OES	AF Approval of Draft LTM Work Plan	16%	9/1/2016
GSS054.008	2010	OES	AF Approval of Draft Optimization Plan	32%	9/26/2016
GSS054.009	2010	OES	AF Approval of Final Optimization Plan	36%	10/3/2016
GSS054.002	2010	OES	Regulator Approval of Final LTM Work Plan	40%	11/7/2016
GSS054.003	2010	OES	AF Approval of Final 2016 Annual LTM and O&M Report	42%	3/15/2017
GSS054.004	2011	OES	AF Approval of Final 2017 Annual LTM and O&M Report	56%	3/20/2018
GSS054.005	2012	OES	AF Approval of Final 2018 Annual LTM and O&M Report	64%	3/13/2019
GSS054.006	2013	OES	AF Approval of Final 2019 Annual LTM and O&M Report	72%	3/19/2020
GSS054.007	2014	OES	AF Approval of Final 2020 Annual LTM and O&M Report	80%	1/26/2021
GSS054.010	2014	OES	AF Approval of Final OES Report; Distribute Report to Regulators-Achieve OES	100%	2/23/2021
			OES Site SS062: AOC 9 Weapons Storage Area Landfill Chlorinated Plume		**Wed 4/28/21**
GSS062.001	2010	OES	AF Approval of Draft Remedial Optimization Work Plan	13%	9/12/2016
GSS062.005	2010	OES	AF Approval of Draft LTM Work Plan	26%	9/1/2016
GSS062.006	2010	OES	Regulator Approval of Final LTM Work Plan	29%	11/7/2016
GSS062.002	2010	OES	Regulator Approval of Final Remedial Optimization Work Plan	32%	11/16/2016
GSS062.007	2010	OES	AF Approval of Final 2016 Annual LTM Report	42%	3/15/2017
GSS062.008	2011	OES	AF Approval of Final Annual 2017 LTM Report	57%	3/5/2018
GSS062.009	2012	OES	AF Approval of Final 2018 Annual LTM Report	72%	2/21/2019
GSS062.010	2013	OES	AF Approval of Final 2019 Annual LTM Report	76%	2/11/2020
GSS062.003	2014	OES	AF Approval of Final OES Report; Distribute Report to Regulators-Achieve OES	96%	3/12/2021
GSS062.011	2014	OES	AF Approval of Final 2020 Annual LTM Report	100%	1/15/2021
			SC: CSS681: Apron 1 Area LCP-E9 (NYSDEC Spill #1501553)		**Mon 4/5/21**
GCSS681.001	2020	SC	AF Approval of Draft Corrective Action Plan	18%	9/12/2016
GCSS681.002	2020	SC	Regulator Approval of Final CAP	27%	1/3/2017
GCSS681.003	2021	SC	AF Approval of Draft CCR	55%	12/4/2017
GCSS681.004	2021	SC	Regulator Approval of Final CCR	62%	3/27/2018
GCSS681.005	2022	SC	AF Approval of Final 2017 Annual Performance Monitoring Report	68%	6/17/2019
GCSS681.006	2023	SC	AF Approval of Draft Spill Closure Report	78%	5/7/2020
GCSS681.007	2024	SC	AF and Regulator Approval of Final Spill Closure Report; AF Approval of ERPIMS Upload	81%	8/28/2020
GCSS681.008	2024	SC	AF Approval of Final Site Closeout and Well & System Decommissioning Report; Distribute Report to Regulators-Achieve SC	100%	12/21/2020
			OES: SS067: Building 789 Type II Fuel system (NYSDEC Spill #9810713)		**Tue 12/1/20**
GSS067.001	2010	OES	AF Approval of Draft Corrective Action Plan	7%	9/12/2016
GSS067.002	2010	OES	Regulator Approval of Final CAP	22%	11/16/2016
GSS067.005	2010	OES	AF Approval of Final 2016 Annual Performance Monitoring Report	29%	1/24/2017
GSS067.003	2010	OES	AF Approval of Draft CCR	29%	6/22/2017

Appendix C
Performance and Payment Milestones

Milestone Number	CLINs	Outcome	Task Name	Total %	Milestone Completion Date
GSS067.004	2011	OES	Regulator Approval of Final CCR	36%	9/13/2017
GSS067.010	2011	OES	AF Approval of Draft Optimization Plan	44%	12/12/2017
GSS067.011	2011	OES	AF Approval of Final Optimization Plan	51%	2/15/2018
GSS067.006	2011	OES	AF Approval o Final 2017 Annual Performance Monitoring Report	58%	2/6/2018
GSS067.007	2012	OES	AF Approval of Final 2018 Annual Performance Monitoring Report	65%	2/13/2019
GSS067.008	2013	OES	AF Approval of Final 2019 Annual Performance Monitoring Report	73%	2/13/2020
GSS067.009	2014	OES	AF Approval of Final 2020 Annual Performance Monitoring Report	80%	8/18/2020
GSS067.012	2014	OES	AF Approval of Final OES Report; Distribute Report to Regulators-Achieve OES	100%	10/1/2020
			SC: CSS682: Building 785 Pipeline (NYSDEC Spill #1408594)		**Wed 11/25/20**
GCSS682.001	2020	SC	AF Approval of Draft Corrective Action Plan Amendment (if required)	21%	2/9/2017
GCSS682.002	2020	SC	Regulator Approval of Final Corrective Action Plan Amendment (if required)	27%	6/2/2017
GCSS682.003	2021	SC	AF Approval of Final 2017 Annual Performance Monitoring Report	40%	4/16/2018
GCSS682.004	2022	SC	AF Approval of Final 2018 Annual Performance Monitoring Report	53%	4/19/2019
GCSS682.005	2023	SC	AF Approval of Draft Spill Closure	75%	4/8/2020
GCSS682.006	2024	SC	AF and Regulator Approval of Final Spill Closure; AF Approval of ERPIMS Upload	80%	7/30/2020
GCSS682.007	2024	SC	AF Approval of Final Site Closeout and Well Decommissioning Report; Distribute Report to Regulators-Achieve SC	100%	11/17/2020

APPENDIX D
CONTACT INFORMATION

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APPENDIX E
PROJECT SCHEDULE

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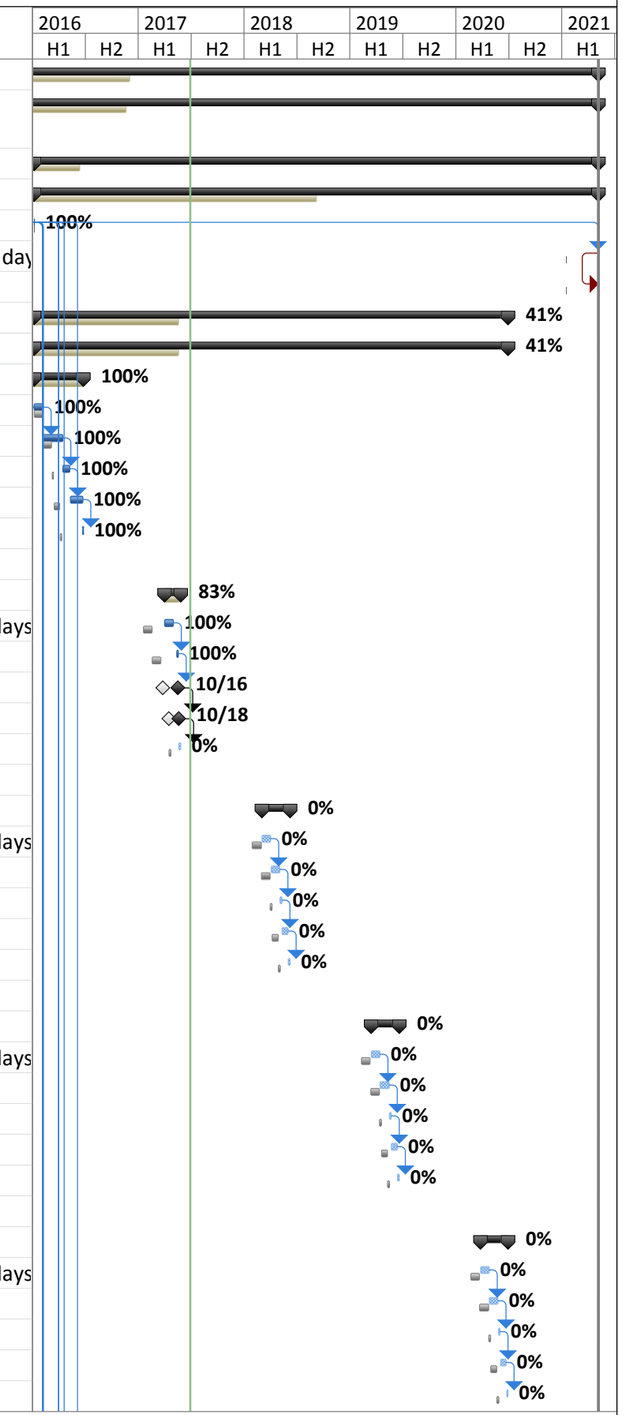
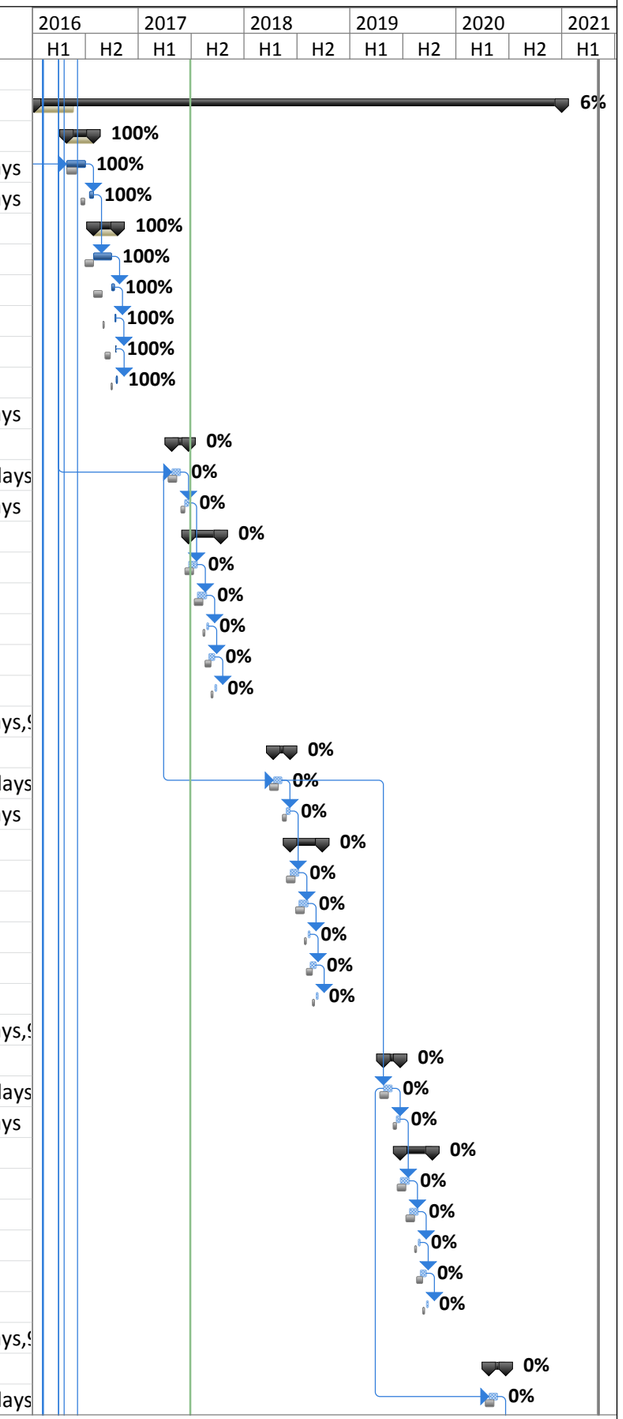
ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
1		**BRAC Project**	**1615 days**	**21%**	**Wed 7/29/15**	**Tue 10/5/21**	**Tue 6/15/21**	
903		**Environmental Services for Eastern Region Base Realignment and Closure (BRAC) Bases - Griffiss AFB**	**1615 days**	**30%**	**Wed 7/29/15**	**Tue 10/5/21**	**Tue 6/15/21**	
904	**2000**	**Contract Management**	**1391 days**	**10%**	**Tue 6/7/16**	**Tue 10/5/21**	**Tue 6/15/21**	
905	**2000**	**Period of Performance (POP)**	**1391 days**	**33%**	**Tue 6/7/16**	**Tue 10/5/21**	**Tue 6/15/21**	
906	2000	Notice to Proceed	1 day	100%	Tue 6/7/16	Tue 6/7/16	Tue 6/7/16	5SS
907	2000	Project Work Complete	1 day	0%	Tue 10/5/21	Tue 10/5/21	Tue 6/15/21	906FS+1308 day
908	2000	Contractual End Date : 15 June 2021	1 day	0%	Tue 10/5/21	Tue 10/5/21	Tue 6/15/21	907SS
909	**2000**	**Project Management Plan (PMP)**	**1169 days**	**41%**	**Tue 6/7/16**	**Fri 11/27/20**	**Mon 10/26/20**	
910	**2000**	**Project Management Plan (PMP)**	**1169 days**	**41%**	**Tue 6/7/16**	**Fri 11/27/20**	**Mon 10/26/20**	
911	**2000**	**Opening Phase of PMP -2016**	**122 days**	**100%**	**Tue 6/7/16**	**ed 11/23/16**	**Fri 9/9/16**	
912	2000	Prepare Working Copy of PMP	23 days	100%	Tue 6/7/16	Thu 7/7/16	Wed 7/6/16	906SS
913	2000	Air Force Review of Working Copy	49 days	100%	Thu 7/7/16	Tue 9/13/16	Fri 8/5/16	912
914	2000	Resolve AF Comments on Working Copy AF	18 days	100%	Wed 9/14/16	Fri 10/7/16	Fri 8/12/16	913
915	2000	AF Review and Approval of RTCs	31 days	100%	Mon 10/10/16	on 11/21/16	Fri 9/2/16	914
916	2000	Prepare Final PMP	2 days	100%	Tue 11/22/16	ed 11/23/16	Fri 9/9/16	915
917	2000	AF Approval of Final PMP-2016	0 days	100%	Wed 11/23/16	ed 11/23/16	Fri 9/9/16	916
918	**2001**	**2017 Update to PMP**	**40 days**	**83%**	**Thu 8/31/17**	**ed 10/25/17**	**Thu 9/21/17**	
919	2001	Review and Update PMP - 2017	22 days	100%	Thu 8/31/17	Fri 9/29/17	Tue 7/18/17	917FS+200 days
920	2001	AF Review of Updated PMP - 2017	3 days	100%	Thu 10/12/17	on 10/16/17	Thu 8/17/17	919
921	2001	Resolve AF Comments on Working Copy AF	0 days	100%	Mon 10/16/17	on 10/16/17	Thu 8/24/17	920
922	2001	AF Review and Approval of RTCs	0 days	100%	Wed 10/18/17	ed 10/18/17	Thu 9/14/17	921
923	2001	Prepare Final PMP	5 days	0%	Thu 10/19/17	ed 10/25/17	Thu 9/21/17	922
924	2001	AF Approval of Final PMP-2017	0 days	0%	Wed 10/25/17	ed 10/25/17	Thu 9/21/17	923
925	**2002**	**2018 Update to PMP**	**69 days**	**0%**	**Thu 8/2/18**	**Tue 11/6/18**	**Wed 10/3/18**	
926	2002	Review and Update PMP - 2018	22 days	0%	Thu 8/2/18	Fri 8/31/18	Mon 7/30/18	924FS+200 days
927	2002	AF Review of Updated PMP -2018	22 days	0%	Mon 9/3/18	Tue 10/2/18	Wed 8/29/18	926
928	2002	Resolve AF Comments on Working Copy AF	5 days	0%	Wed 10/3/18	Tue 10/9/18	Wed 9/5/18	927
929	2002	AF Review and Approval of RTCs	15 days	0%	Wed 10/10/18	ue 10/30/18	Wed 9/26/18	928
930	2002	Prepare Final PMP	5 days	0%	Wed 10/31/18	Tue 11/6/18	Wed 10/3/18	929
931	2002	AF Approval of Final PMP-2018	0 days	0%	Tue 11/6/18	Tue 11/6/18	Wed 10/3/18	930
932	**2003**	**2019 Update to PMP**	**69 days**	**0%**	**Wed 8/14/19**	**on 11/18/19**	**Tue 10/15/19**	
933	2003	Review and Update PMP - Year 2019	22 days	0%	Wed 8/14/19	Thu 9/12/19	Fri 8/9/19	931FS+200 days
934	2003	AF Review of Updated PMP - Year 2019	22 days	0%	Fri 9/13/19	on 10/14/19	Tue 9/10/19	933
935	2003	Resolve AF Comments on Working Copy AF	5 days	0%	Tue 10/15/19	on 10/21/19	Tue 9/17/19	934
936	2003	AF Review and Approval of RTCs	15 days	0%	Tue 10/22/19	on 11/11/19	Tue 10/8/19	935
937	2003	Prepare Final PMP	5 days	0%	Tue 11/12/19	on 11/18/19	Tue 10/15/19	936
938	2003	AF Approval of Final PMP-2019	0 days	0%	Mon 11/18/19	on 11/18/19	Tue 10/15/19	937
939	**2004**	**2020 Update to PMP**	**69 days**	**0%**	**Tue 8/25/20**	**Fri 11/27/20**	**Mon 10/26/20**	
940	2004	Review and Update PMP - Year 2020	22 days	0%	Tue 8/25/20	Ved 9/23/20	Thu 8/20/20	938FS+200 days
941	2004	AF Review of Updated PMP - Year 2020	22 days	0%	Thu 9/24/20	Fri 10/23/20	Mon 9/21/20	940
942	2004	Resolve AF Comments on Working Copy AF	5 days	0%	Mon 10/26/20	Fri 10/30/20	Mon 9/28/20	941
943	2004	AF Review and Approval of RTCs	15 days	0%	Mon 11/2/20	Fri 11/20/20	Mon 10/19/20	942
944	2004	Prepare Final PMP	5 days	0%	Mon 11/23/20	Fri 11/27/20	Mon 10/26/20	943

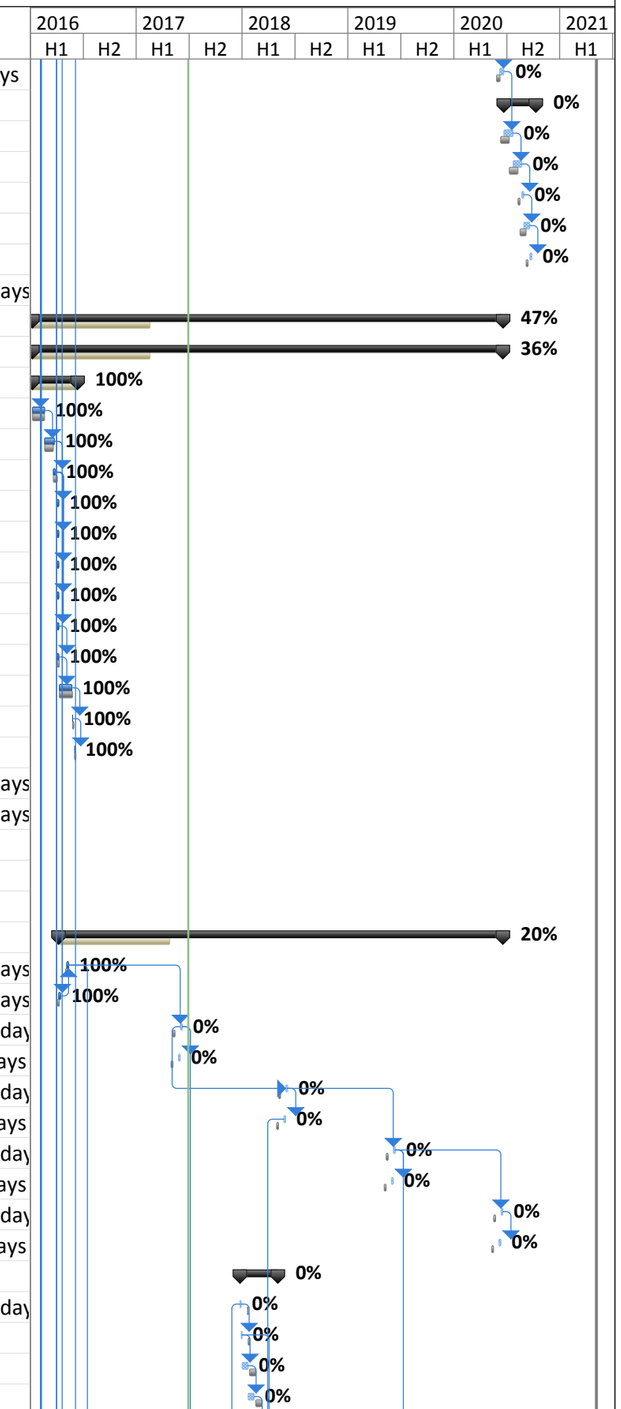


ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
945	2004	AF Approval of Final PMP-2020	0 days	0%	Fri 11/27/20	Fri 11/27/20	Mon 10/26/20	944
957	**2000**	**Well Maintenance and Inspections**	**1300 days**	**6%**	**Tue 6/7/16**	**Mon 5/31/21**	**Mon 5/31/21**	
958	**2000**	**Annual Well Inspection/Maintenance**	**67 days**	**100%**	**Tue 9/27/16**	**ed 12/28/16**	**Mon 11/28/16**	
959	2000	Annual Field Inspection and Inventory of Existing Wells	47 days	100%	Tue 9/27/16	ed 11/30/16	Mon 10/31/16	906SS+80 days
960	2000	Maintenance of Wells, as needed	10 days	100%	Thu 12/15/16	ed 12/28/16	Mon 11/28/16	959FS+10 days
961	**2000**	**Annual Well Inventory /Maintenance Report-2016**	**59 days**	**100%**	**Thu 12/29/16**	**Tue 3/21/17**	**Fri 3/17/17**	
962	2000	Prepare Working Copy of Report	44 days	100%	Thu 12/29/16	Tue 2/28/17	Wed 12/28/16	960
963	2000	Air Force Review of Working Copy	8 days	100%	Wed 3/1/17	Fri 3/10/17	Fri 1/27/17	962
964	2000	Resolve AF Comments on Working Copy AF	3 days	100%	Mon 3/13/17	Wed 3/15/17	Fri 2/3/17	963
965	2000	AF Review and Approval of RTCs	1 day	100%	Thu 3/16/17	Thu 3/16/17	Fri 2/24/17	964
966	2000	Prepare Final Annual Well Inventory/Maintenance Report	2 days	100%	Fri 3/17/17	Mon 3/20/17	Fri 3/3/17	965
967	2000	AF Approval of Final Annual Well Inventory/Maintenance Report- 2016	0 days	100%	Tue 3/21/17	Tue 3/21/17	Fri 3/17/17	966FS+10 days
968	**2001**	**Annual Well Inspection/Maintenance**	**42 days**	**0%**	**Mon 9/25/17**	**ue 11/21/17**	**Wed 11/8/17**	
969	2001	Annual Field Inspection and Inventory of Existing Wells	22 days	0%	Mon 9/25/17	ue 10/24/17	Wed 10/11/17	959SS+250 days
970	2001	Maintenance of Wells, as needed	10 days	0%	Wed 11/8/17	ue 11/21/17	Wed 11/8/17	969FS+10 days
971	**2001**	**Annual Well Inventory /Maintenance Report-2017**	**79 days**	**0%**	**Wed 11/22/17**	**Mon 3/12/18**	**Tue 2/27/18**	
972	2001	Prepare Working Copy of Report	22 days	0%	Wed 11/22/17	hu 12/21/17	Fri 12/8/17	970
973	2001	Air Force Review of Working Copy	22 days	0%	Fri 12/22/17	Mon 1/22/18	Tue 1/9/18	972
974	2001	Resolve AF Comments on Working Copy AF	5 days	0%	Tue 1/23/18	Mon 1/29/18	Tue 1/16/18	973
975	2001	AF Review and Approval of RTCs	15 days	0%	Tue 1/30/18	Mon 2/19/18	Tue 2/6/18	974
976	2001	Prepare Final Annual Well Inventory/Maintenance Report	5 days	0%	Tue 2/20/18	Mon 2/26/18	Tue 2/13/18	975
977	2001	AF Approval of Final Annual Well Inventory/Maintenance Report- 2017	0 days	0%	Mon 3/12/18	Mon 3/12/18	Tue 2/27/18	976FS+10 days,
978	**2002**	**Annual Well Inspection/Maintenance**	**42 days**	**0%**	**Mon 9/10/18**	**Tue 11/6/18**	**Wed 10/24/18**	
979	2002	Annual Field Inspection and Inventory of Existing Wells	22 days	0%	Mon 9/10/18	Tue 10/9/18	Wed 9/26/18	969SS+250 days
980	2002	Maintenance of Wells, as needed	10 days	0%	Wed 10/24/18	Tue 11/6/18	Wed 10/24/18	979FS+10 days
981	**2002**	**Annual Well Inventory /Maintenance Report-2018**	**79 days**	**0%**	**Wed 11/7/18**	**Mon 2/25/19**	**Tue 2/12/19**	
982	2002	Prepare Working Copy of Report	22 days	0%	Wed 11/7/18	Thu 12/6/18	Fri 11/23/18	980
983	2002	Air Force Review of Working Copy	22 days	0%	Fri 12/7/18	Mon 1/7/19	Tue 12/25/18	982
984	2002	Resolve AF Comments on Working Copy AF	5 days	0%	Tue 1/8/19	Mon 1/14/19	Tue 1/1/19	983
985	2002	AF Review and Approval of RTCs	15 days	0%	Tue 1/15/19	Mon 2/4/19	Tue 1/22/19	984
986	2002	Prepare Final Annual Well Inventory/Maintenance Report	5 days	0%	Tue 2/5/19	Mon 2/11/19	Tue 1/29/19	985
987	2002	AF Approval of Final Annual Well Inventory/Maintenance Report- 2018	0 days	0%	Mon 2/25/19	Mon 2/25/19	Tue 2/12/19	986FS+10 days,
988	**2003**	**Annual Well Inspection/Maintenance**	**42 days**	**0%**	**Wed 9/25/19**	**hu 11/21/19**	**Fri 11/8/19**	
989	2003	Annual Field Inspection and Inventory of Existing Wells	22 days	0%	Wed 9/25/19	hu 10/24/19	Fri 10/11/19	979FS+250 days
990	2003	Maintenance of Wells, as needed	10 days	0%	Fri 11/8/19	hu 11/21/19	Fri 11/8/19	989FS+10 days
991	**2003**	**Annual Well Inventory /Maintenance Report-2019**	**79 days**	**0%**	**Fri 11/22/19**	**Wed 3/11/20**	**Thu 2/27/20**	
992	2003	Prepare Working Copy of Report	22 days	0%	Fri 11/22/19	on 12/23/19	Tue 12/10/19	990
993	2003	Air Force Review of Working Copy	22 days	0%	Tue 12/24/19	Wed 1/22/20	Thu 1/9/20	992
994	2003	Resolve AF Comments on Working Copy AF	5 days	0%	Thu 1/23/20	Wed 1/29/20	Thu 1/16/20	993
995	2003	AF Review and Approval of RTCs	15 days	0%	Thu 1/30/20	Wed 2/19/20	Thu 2/6/20	994
996	2003	Prepare Final Annual Well Inventory/Maintenance Report	5 days	0%	Thu 2/20/20	Wed 2/26/20	Thu 2/13/20	995
997	2003	AF Approval of Final Annual Well Inventory/Maintenance Report- 2019	0 days	0%	Wed 3/11/20	Wed 3/11/20	Thu 2/27/20	996FS+10 days,
998	**2004**	**Annual Well Inspection/Maintenance**	**42 days**	**0%**	**Wed 9/23/20**	**hu 11/19/20**	**Fri 11/6/20**	
999	2004	Annual Field Inspection and Inventory of Existing Wells	22 days	0%	Wed 9/23/20	hu 10/22/20	Fri 10/9/20	989SS+260 days

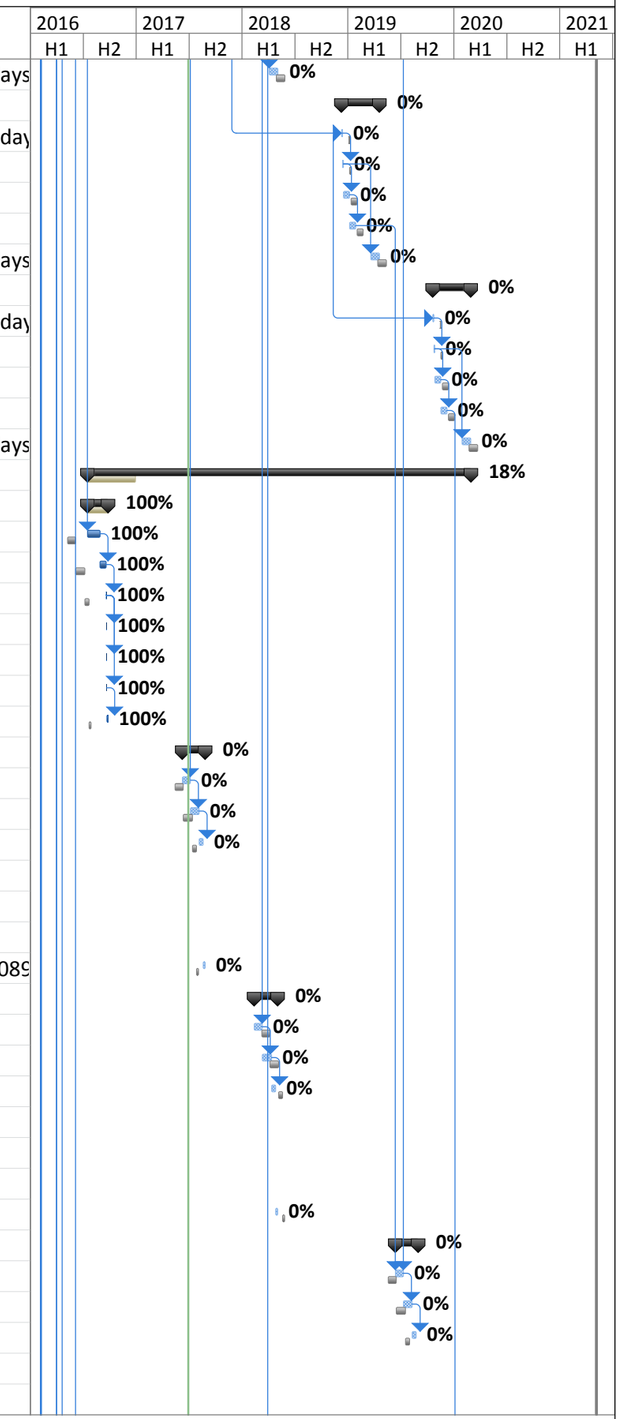


Appendix E. Project Schedule

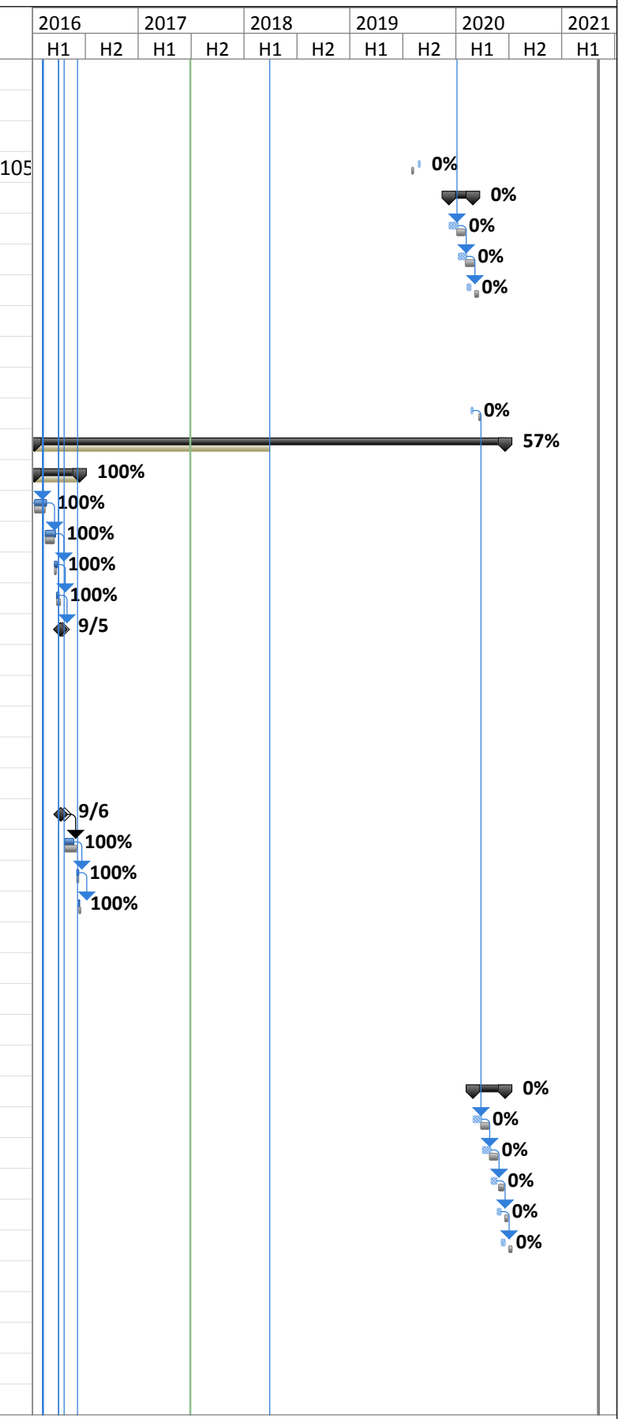
ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
1000	2004	Maintenance of Wells, as needed	10 days	0%	Fri 11/6/20	hu 11/19/20	Fri 11/6/20	999FS+10 days
1001	**2004**	**Annual Well Inventory /Maintenance Report-2020**	**79 days**	**0%**	**Fri 11/20/20**	**Ved 3/10/21**	**Thu 2/25/21**	
1002	2004	Prepare Working Copy of Report	22 days	0%	Fri 11/20/20	on 12/21/20	Tue 12/8/20	1000
1003	2004	Air Force Review of Working Copy	22 days	0%	Tue 12/22/20	Ved 1/20/21	Thu 1/7/21	1002
1004	2004	Resolve AF Comments on Working Copy AF	5 days	0%	Thu 1/21/21	Ved 1/27/21	Thu 1/14/21	1003
1005	2004	AF Review and Approval of RTCs	15 days	0%	Thu 1/28/21	Ved 2/17/21	Thu 2/4/21	1004
1006	2004	Prepare Final Annual Well Inventory/Maintenance Report	5 days	0%	Thu 2/18/21	Ved 2/24/21	Thu 2/11/21	1005
1007	2004	AF Approval of Final Annual Well Inventory/Maintenance Report- 2020	0 days	0%	Wed 3/10/21	Ved 3/10/21	Thu 2/25/21	1006FS+10 days
1026		**Landfills RC: LF001, LF002, LF003, LF007 and LF009-Achieve RC**	**1160 days**	**47%**	**Wed 6/8/16**	**ue 11/17/20**	**Fri 12/11/20**	
1027		**Long-term Management (LTM)**	**1159 days**	**36%**	**Wed 6/8/16**	**on 11/16/20**	**Thu 10/22/20**	
1028		**LTM Work Plan**	**112 days**	**100%**	**Wed 6/8/16**	**hu 11/10/16**	**Tue 12/6/16**	
1029	2015	Prepare Working Copy of LTM Work Plan	30 days	100%	Wed 6/8/16	Tue 7/19/16	Tue 7/19/16	906
1030	2015	AF Review of Working Copy of LTM Work Plan	24 days	100%	Wed 7/20/16	Mon 8/22/16	Thu 8/18/16	1029
1031	2015	Resolve AF Comments on Working Copy of LTM Work Plan	5 days	100%	Fri 8/19/16	Thu 8/25/16	Thu 9/1/16	1030
1032	2015	AF Approval of Draft LTM Work Plan	4 days	100%	Wed 8/31/16	Tue 9/6/16	Thu 9/1/16	1031
1033	2015	AF Approval of Draft LTM Work Plan	3 days	100%	Thu 9/1/16	Tue 9/6/16	Thu 9/1/16	1031
1034	2015	AF Approval of Draft LTM Work Plan	3 days	100%	Thu 9/1/16	Tue 9/6/16	Thu 9/1/16	1031
1035	2015	AF Approval of Draft LTM Work Plan	3 days	100%	Thu 9/1/16	Tue 9/6/16	Thu 9/1/16	1031
1036	2015	AF Approval of Draft LTM Work Plan	3 days	100%	Thu 9/1/16	Tue 9/6/16	Thu 9/1/16	1031
1037	2015	Submit Draft LTM Work Plan to Regulators	3 days	100%	Fri 9/2/16	Tue 9/6/16	Thu 9/8/16	1036
1038	2015	Regulator Review of Draft LTM Work Plan	31 days	100%	Thu 9/8/16	Fri 10/21/16	Sun 10/23/16	1037
1039	2015	RTC Regulator Comments on Draft LTM Work Plan	1 day	100%	Mon 10/24/16	on 10/24/16	Fri 10/28/16	1038
1040	2015	Prepare Final LTM Work Plan	1 day	100%	Mon 10/31/16	on 10/31/16	Fri 11/4/16	1039
1041	2015	Regulator Approval of Final LTM Work Plan	0 days	100%	Thu 11/10/16	hu 11/10/16	Tue 12/6/16	1040FS+22 days
1042	2015	Regulator Approval of Final LTM Work Plan	0 days	100%	Thu 11/10/16	hu 11/10/16	Tue 12/6/16	1040FS+22 days
1043	2015	Regulator Approval of Final LTM Work Plan	0 days	100%	Thu 11/10/16	hu 11/10/16	Tue 12/6/16	1041SS
1044	2015	Regulator Approval of Final LTM Work Plan	0 days	100%	Thu 11/10/16	hu 11/10/16	Tue 12/6/16	1042SS
1045	2015	Regulator Approval of Final LTM Work Plan	0 days	100%	Thu 11/10/16	hu 11/10/16	Tue 12/6/16	1043SS
1046		**LUC Inspections, Mowing and Landfill Gas Inspections**	**1095 days**	**20%**	**Tue 9/6/16**	**on 11/16/20**	**Thu 10/22/20**	
1047	2015	LUC Inspections/Landfill Gas Monitoring Year 2016 - Annual	5 days	100%	Tue 10/4/16	on 10/10/16	Thu 10/6/16	1048FS+15 days
1048	2015	Annual Mowing	5 days	100%	Tue 9/6/16	Mon 9/12/16	Thu 9/8/16	1030FS+10 days
1049	2016	LUC Inspections/Landfill Gas Monitoring Year 2017: Annual	5 days	0%	Tue 10/31/17	Mon 11/6/17	Thu 10/12/17	1047FS+260 day
1050	2016	Annual Mowing	5 days	0%	Tue 10/24/17	on 10/30/17	Thu 10/5/17	1049FS-10 days
1051	2017	LUC Inspections/Landfill Gas Monitoring Year 2018: Annual	5 days	0%	Tue 10/30/18	Mon 11/5/18	Thu 10/11/18	1049SS+260 day
1052	2017	Annual Mowing	5 days	0%	Tue 10/23/18	on 10/29/18	Thu 10/4/18	1051FS-10 days
1053	2018	LUC Inspections Year 2019 : Annual	5 days	0%	Tue 11/5/19	on 11/11/19	Thu 10/17/19	1051FS+260 day
1054	2018	Annual Mowing	5 days	0%	Tue 10/29/19	Mon 11/4/19	Thu 10/10/19	1053FS-10 days
1055	2019	LUC Inspections Year 2020: Annual	5 days	0%	Tue 11/10/20	on 11/16/20	Thu 10/22/20	1053FS+260 day
1056	2019	Annual Mowing	5 days	0%	Tue 11/3/20	Mon 11/9/20	Thu 10/15/20	1055FS-10 days
1057		**Annual Groundwater Sampling and Well Inspections at LF001 - 2018**	**93 days**	**0%**	**Fri 5/25/18**	**Tue 10/2/18**	**Fri 10/26/18**	
1058	2017	Groundwater gaging and Well inspection	2 days	0%	Fri 5/25/18	Mon 5/28/18	Thu 6/21/18	1045FS+400 day
1059	2017	Collect groundwater samples	3 days	0%	Tue 5/29/18	Thu 5/31/18	Tue 6/26/18	1058
1060	2017	Offsite Analysis of Groundwater Samples	15 days	0%	Fri 6/1/18	Thu 6/21/18	Tue 7/17/18	1059
1061	2017	Data Validation	15 days	0%	Fri 6/22/18	Thu 7/12/18	Tue 8/7/18	1060



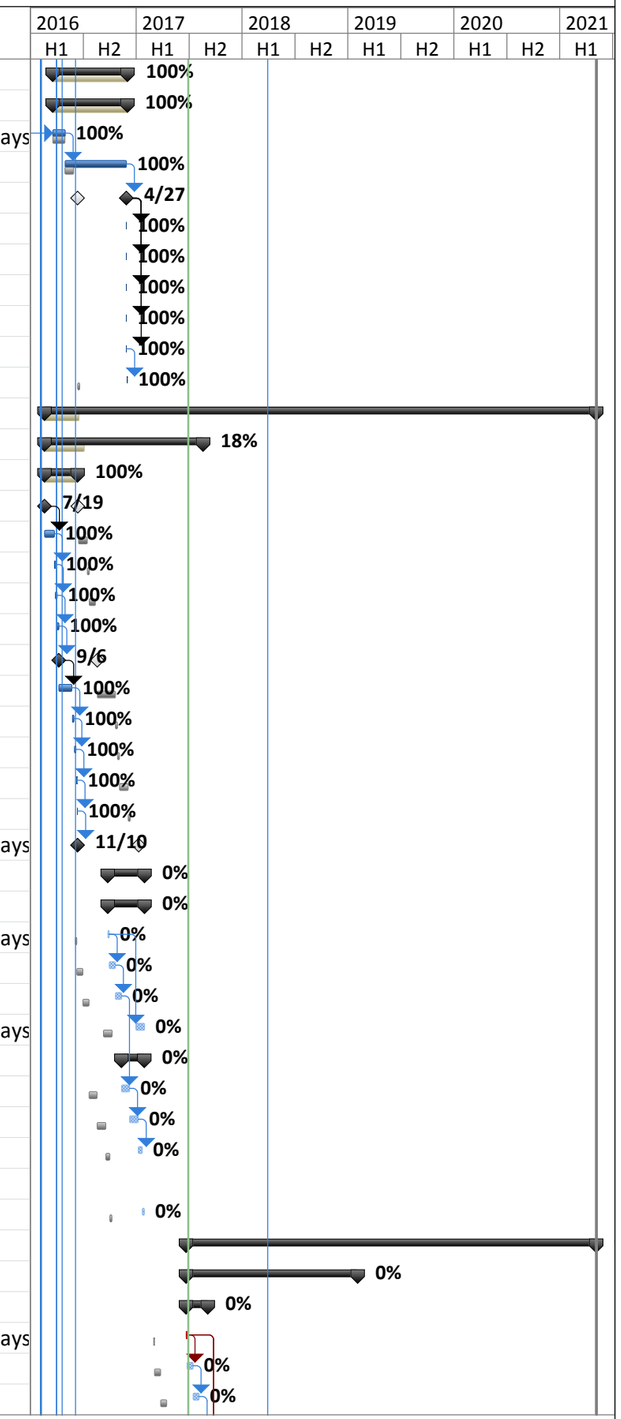
ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
1062	2017	ERPIMS Submittal	22 days	0%	Mon 9/3/18	Tue 10/2/18	Fri 10/26/18	1059FS+66 days
1063		**Annual Groundwater Sampling and Well Inspections -2019 (all except LF001)**	**93 days**	**0%**	**Fri 5/10/19**	**Tue 9/17/19**	**Fri 10/11/19**	
1064	2018	Groundwater gaging and Well inspection	2 days	0%	Fri 5/10/19	Mon 5/13/19	Thu 6/6/19	1058SS+250 day
1065	2018	Collect groundwater samples	3 days	0%	Tue 5/14/19	Thu 5/16/19	Tue 6/11/19	1064
1066	2018	Offsite Analysis of Groundwater Samples	15 days	0%	Fri 5/17/19	Thu 6/6/19	Tue 7/2/19	1065
1067	2018	Data Validation	15 days	0%	Fri 6/7/19	Thu 6/27/19	Tue 7/23/19	1066
1068	2018	ERPIMS Submittal	22 days	0%	Mon 8/19/19	Tue 9/17/19	Fri 10/11/19	1065FS+66 days
1069		**Annual Groundwater Sampling and Well Inspections at LF001 in 2020**	**93 days**	**0%**	**Fri 3/20/20**	**Tue 7/28/20**	**Fri 8/21/20**	
1070	2019	Groundwater gaging and Well inspection	2 days	0%	Fri 3/20/20	Mon 3/23/20	Thu 4/16/20	1064SS+225 day
1071	2019	Collect groundwater samples	3 days	0%	Tue 3/24/20	Thu 3/26/20	Tue 4/21/20	1070
1072	2019	Offsite Analysis of Groundwater Samples	15 days	0%	Fri 3/27/20	Thu 4/16/20	Tue 5/12/20	1071
1073	2019	Data Validation	15 days	0%	Fri 4/17/20	Thu 5/7/20	Tue 6/2/20	1072
1074	2019	ERPIMS Submittal	22 days	0%	Mon 6/29/20	Tue 7/28/20	Fri 8/21/20	1071FS+66 days
1075		**LTM Reporting**	**945 days**	**18%**	**Thu 12/15/16**	**Wed 7/29/20**	**Mon 8/24/20**	
1076		**Annual Report - 2016**	**51 days**	**100%**	**Thu 12/15/16**	**Thu 2/23/17**	**Mon 12/26/16**	
1077	2015	Prepare Working Copy of Annual Report	31 days	100%	Thu 12/15/16	Thu 1/26/17	Thu 11/3/16	1047
1078	2015	AF Review of Working Copy of Annual Report	15 days	100%	Fri 1/27/17	Thu 2/16/17	Mon 12/5/16	1077
1079	2015	Resolve AF Comments on Working Copy of Annual Report	1 day	100%	Fri 2/17/17	Fri 2/17/17	Mon 12/19/16	1078
1080	2015	AF Approval of Final Annual LTM Report at Landfills for 2016	0 days	100%	Fri 2/17/17	Sat 2/18/17	Mon 12/19/16	1079
1081	2015	AF Approval of Final Annual LTM Report at Landfills for 2016	0 days	100%	Fri 2/17/17	Sat 2/18/17	Mon 12/19/16	1079
1082	2015	AF Approval of Final Annual LTM Report at Landfills for 2016	0 days	100%	Fri 2/17/17	Sat 2/18/17	Mon 12/19/16	1079
1083	2015	Submit Final Annual Report to Regulators	4 days	100%	Mon 2/20/17	Thu 2/23/17	Mon 12/26/16	1082
1084		**Annual Report - 2017**	**57 days**	**0%**	**Tue 11/7/17**	**Wed 1/24/18**	**Mon 1/1/18**	
1085	2016	Prepare Working Copy of Annual Report	20 days	0%	Tue 11/7/17	Mon 12/4/17	Thu 11/9/17	1049
1086	2016	AF Review of Working Copy of Annual Report	22 days	0%	Tue 12/5/17	Wed 1/3/18	Mon 12/11/17	1085
1087	2016	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Thu 1/4/18	Wed 1/17/18	Mon 12/25/17	1086
1088	2016	AF Approval of Final Annual LTM Report at Landfills for 2017	0 days	0%	Wed 1/17/18	Wed 1/17/18	Mon 12/25/17	1087
1089	2016	AF Approval of Final Annual LTM Report at Landfills for 2017	0 days	0%	Wed 1/17/18	Wed 1/17/18	Mon 12/25/17	1087
1090	2016	AF Approval of Final Annual LTM Report at Landfills for 2017	0 days	0%	Wed 1/17/18	Wed 1/17/18	Mon 12/25/17	1087
1091	2016	Submit Final Annual Report to Regulators	5 days	0%	Thu 1/18/18	Wed 1/24/18	Mon 1/1/18	1090,1088,1089
1092		**Annual Report - 2018**	**57 days**	**0%**	**Fri 7/13/18**	**Mon 10/1/18**	**Thu 10/25/18**	
1093	2017	Prepare Working Copy of Annual Report	20 days	0%	Fri 7/13/18	Thu 8/9/18	Tue 9/4/18	1061
1094	2017	AF Review of Working Copy of Annual Report	22 days	0%	Fri 8/10/18	Mon 9/10/18	Thu 10/4/18	1093
1095	2017	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Tue 9/11/18	Mon 9/24/18	Thu 10/18/18	1094
1096	2017	AF Approval of Final Annual LTM Report at Landfills for 2018	0 days	0%	Mon 9/24/18	Mon 9/24/18	Thu 10/18/18	1095
1097	2017	AF Approval of Final Annual LTM Report at Landfills for 2018	0 days	0%	Mon 9/24/18	Mon 9/24/18	Thu 10/18/18	1095
1098	2017	AF Approval of Final Annual LTM Report at Landfills for 2018	0 days	0%	Mon 9/24/18	Mon 9/24/18	Thu 10/18/18	1095
1099	2017	Submit Final Annual Report to Regulators; AF Approval of ERPIMS	5 days	0%	Tue 9/25/18	Mon 10/1/18	Thu 10/25/18	1098
1100		**Annual Report - 2019**	**57 days**	**0%**	**Tue 11/12/19**	**Wed 1/29/20**	**Mon 1/6/20**	
1101	2018	Prepare Working Copy of Annual Report	20 days	0%	Tue 11/12/19	Mon 12/9/19	Thu 11/14/19	1053,1067
1102	2018	AF Review of Working Copy of Annual Report	22 days	0%	Tue 12/10/19	Wed 1/8/20	Mon 12/16/19	1101
1103	2018	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Thu 1/9/20	Wed 1/22/20	Mon 12/30/19	1102
1104	2018	AF Approval of Final Annual LTM Report at Landfills for 2019	0 days	0%	Wed 1/22/20	Wed 1/22/20	Mon 12/30/19	1103
1105	2018	AF Approval of Final Annual LTM Report at Landfills for 2019	0 days	0%	Wed 1/22/20	Wed 1/22/20	Mon 12/30/19	1103



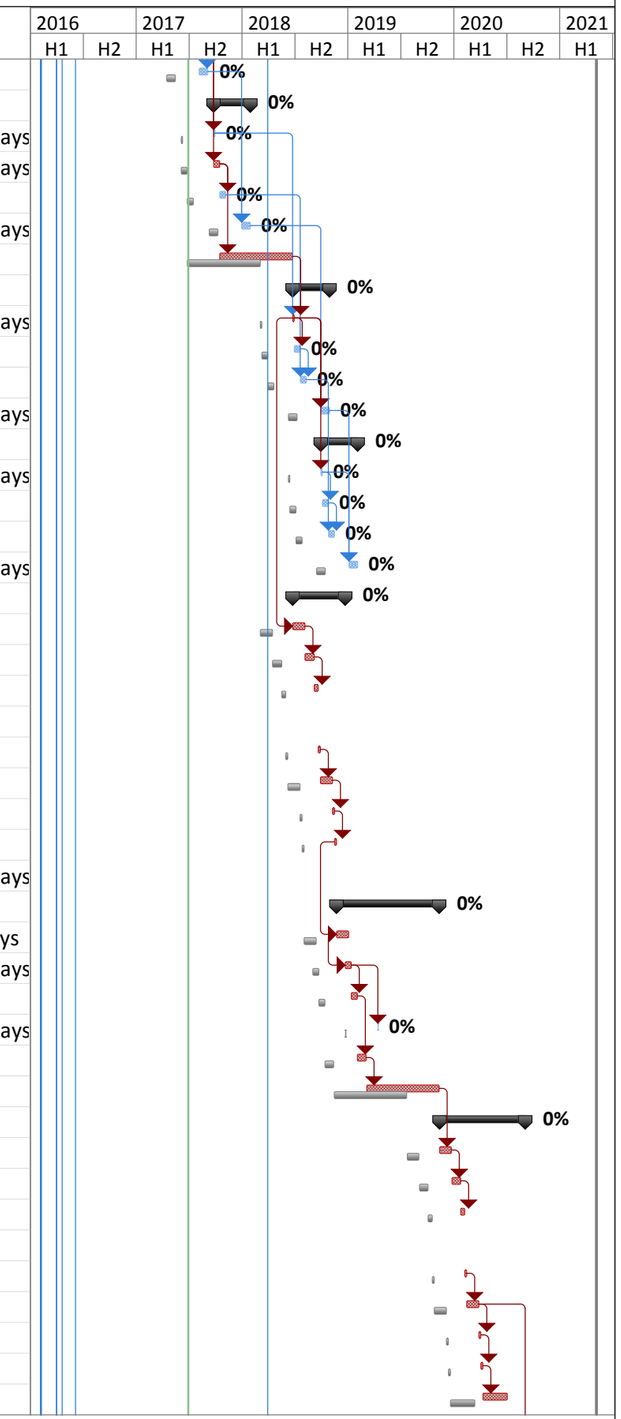
ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
1106	2018	AF Approval of Final Annual LTM Report at Landfills for 2019	0 days	0%	Wed 1/22/20	Wed 1/22/20	Mon 12/30/19	1103
1107	2018	AF Approval of Final Annual LTM Report at Landfills for 2019	0 days	0%	Wed 1/22/20	Wed 1/22/20	Mon 12/30/19	1103
1108	2018	AF Approval of Final Annual LTM Report at Landfills for 2019	0 days	0%	Wed 1/22/20	Wed 1/22/20	Mon 12/30/19	1103
1109	2018	Submit Final Annual Report to Regulators; AF Approval of ERPIMS	5 days	0%	Thu 1/23/20	Wed 1/29/20	Mon 1/6/20	1108,1104,1105
1110		**Annual Report - 2020**	**59 days**	**0%**	**Fri 5/8/20**	**Wed 7/29/20**	**Mon 8/24/20**	
1111	2019	Prepare Working Copy of Annual Report 2020	22 days	0%	Fri 5/8/20	Mon 6/8/20	Thu 7/2/20	1073
1112	2019	AF Review of Working Copy of Annual Report	22 days	0%	Tue 6/9/20	Wed 7/8/20	Mon 8/3/20	1111
1113	2019	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Thu 7/9/20	Wed 7/22/20	Mon 8/17/20	1112
1114	2019	AF Approval of Final Annual LTM Report at Landfills for 2020	0 days	0%	Wed 7/22/20	Wed 7/22/20	Mon 8/17/20	1113
1115	2019	AF Approval of Final Annual LTM Report at Landfills for 2020	0 days	0%	Wed 7/22/20	Wed 7/22/20	Mon 8/17/20	1113
1116	2019	AF Approval of Final Annual LTM Report at Landfills for 2020	0 days	0%	Wed 7/22/20	Wed 7/22/20	Mon 8/17/20	1113
1117	2019	Submit Final Annual Report to Regulators; AF Approval of ERPIMS	5 days	0%	Thu 7/23/20	Wed 7/29/20	Mon 8/24/20	1116
1118		**Optimization**	**1160 days**	**57%**	**Wed 6/8/16**	**ue 11/17/20**	**Fri 12/11/20**	
1119		**Optimization Plan**	**112 days**	**100%**	**Wed 6/8/16**	**hu 11/10/16**	**Mon 11/14/16**	
1120	2015	Prepare Working Copy of Optimization Plan	30 days	100%	Wed 6/8/16	Tue 7/19/16	Thu 7/14/16	906
1121	2015	Air Force Review of Working Copy	26 days	100%	Fri 7/15/16	Sat 8/20/16	Mon 8/15/16	1120
1122	2015	Resolve AF Comments on Working Copy AF	8 days	100%	Tue 8/16/16	Thu 8/25/16	Mon 8/22/16	1121
1123	2015	AF Review and Approval of RTCs	7 days	100%	Tue 8/23/16	Wed 8/31/16	Mon 9/5/16	1122
1124	2015	Prepare Draft Optimization Plan	0 days	100%	Mon 9/5/16	Mon 9/5/16	Mon 9/12/16	1123
1125	2015	AF Approval of Draft Optimization Plan	0 days	100%	Tue 9/6/16	Tue 9/6/16	Mon 9/12/16	1124
1126	2015	AF Approval of Draft Optimization Plan	0 days	100%	Tue 9/6/16	Tue 9/6/16	Mon 9/12/16	1124
1127	2015	AF Approval of Draft Optimization Plan	0 days	100%	Tue 9/6/16	Tue 9/6/16	Mon 9/12/16	1124
1128	2015	AF Approval of Draft Optimization Plan	0 days	100%	Tue 9/6/16	Tue 9/6/16	Mon 9/12/16	1124
1129	2015	AF Approval of Draft Optimization Plan	0 days	100%	Tue 9/6/16	Tue 9/6/16	Mon 9/12/16	1124
1130	2015	Submit Draft Optimization Plan to Regulators	0 days	100%	Tue 9/6/16	Tue 9/6/16	Mon 9/19/16	1129
1131	2015	Regulator Review of Draft Optimization Plan	24 days	100%	Tue 9/20/16	Fri 10/21/16	Mon 10/31/16	1130
1132	2015	Resolve Regulator Comments on Draft Optimization Plan	5 days	100%	Tue 11/1/16	Mon 11/7/16	Mon 11/7/16	1131
1133	2015	Prepare Final Optimization Plan	3 days	100%	Tue 11/8/16	hu 11/10/16	Mon 11/14/16	1132
1134	2015	AF Approval of Final Optimization Plan	0 days	100%	Thu 11/10/16	hu 11/10/16	Mon 11/14/16	1133
1135	2015	AF Approval of Final Optimization Plan	0 days	100%	Thu 11/10/16	hu 11/10/16	Mon 11/14/16	1133
1136	2015	AF Approval of Final Optimization Plan	0 days	100%	Thu 11/10/16	hu 11/10/16	Mon 11/14/16	1133
1137	2015	AF Approval of Final Optimization Plan	0 days	100%	Thu 11/10/16	hu 11/10/16	Mon 11/14/16	1133
1138	2015	AF Approval of Final Optimization Plan	0 days	100%	Thu 11/10/16	hu 11/10/16	Mon 11/14/16	1133
1139		**OES Report**	**79 days**	**0%**	**Thu 7/30/20**	**ue 11/17/20**	**Fri 12/11/20**	
1140	2019	Prepare Working Copy of OES Report	22 days	0%	Thu 7/30/20	Fri 8/28/20	Wed 9/23/20	1117
1141	2019	Air Force Review of Working Copy	22 days	0%	Mon 8/31/20	Tue 9/29/20	Fri 10/23/20	1140
1142	2019	Resolve AF Comments on Working Copy AF	15 days	0%	Wed 9/30/20	ue 10/20/20	Fri 11/13/20	1141
1143	2019	AF Review and Approval of RTCs	10 days	0%	Wed 10/21/20	Tue 11/3/20	Fri 11/27/20	1142
1144	2019	Prepare Draft OES Report	10 days	0%	Wed 11/4/20	ue 11/17/20	Fri 12/11/20	1143
1145	2019	AF Approval of Final OES Report; Distribute Report to Regulators-Achieve OES	0 days	0%	Tue 11/17/20	ue 11/17/20	Fri 12/11/20	1144
1146	2019	AF Approval of Final OES Report; Distribute Report to Regulators-Achieve OES	0 days	0%	Tue 11/17/20	ue 11/17/20	Fri 12/11/20	1144
1147	2019	AF Approval of Final OES Report; Distribute Report to Regulators-Achieve OES	0 days	0%	Tue 11/17/20	ue 11/17/20	Fri 12/11/20	1144
1148	2019	AF Approval of Final OES Report; Distribute Report to Regulators-Achieve OES	0 days	0%	Tue 11/17/20	ue 11/17/20	Fri 12/11/20	1144
1149	2019	AF Approval of Final OES Report; Distribute Report to Regulators-Achieve OES	0 days	0%	Tue 11/17/20	ue 11/17/20	Fri 12/11/20	1144



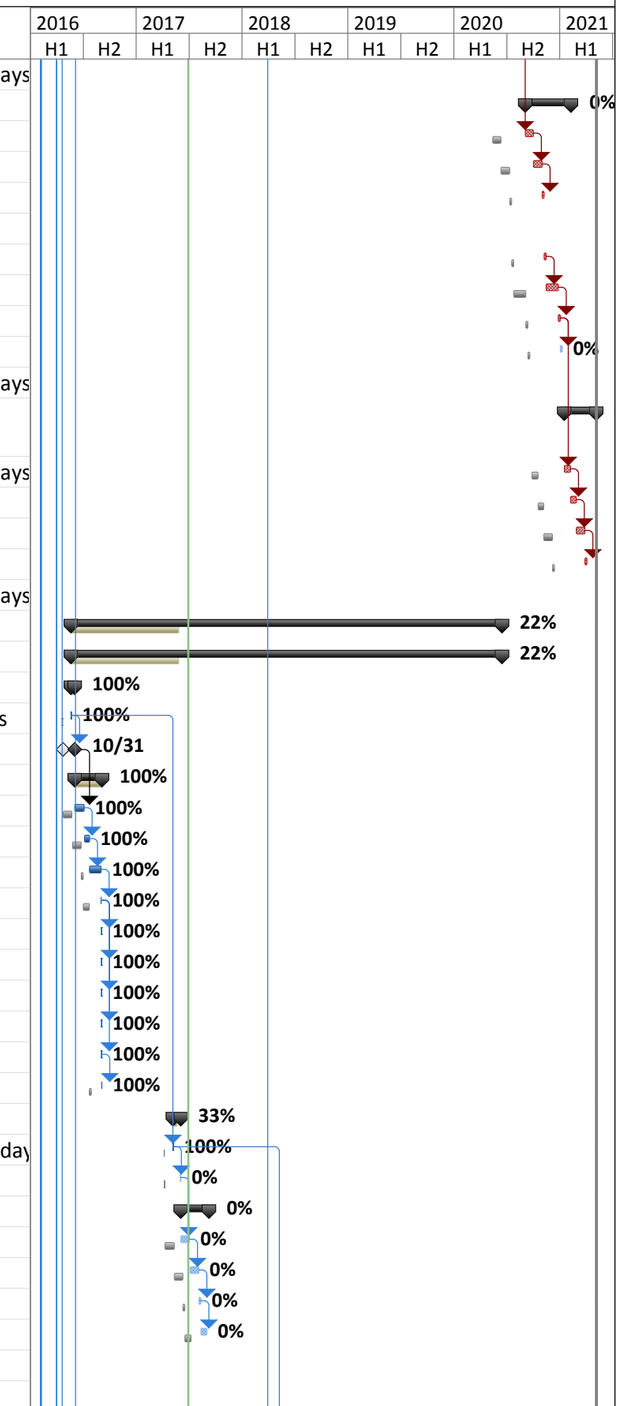
ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
1150		**Response Complete (RC)**	**184 days**	**100%**	**Wed 8/17/16**	**Mon 5/1/17**	**Thu 11/17/16**	
1151		**RC Technical Memorandum**	**184 days**	**100%**	**Wed 8/17/16**	**Mon 5/1/17**	**Thu 11/17/16**	
1152	2015	Prepare Working Copy of Report	31 days	100%	Wed 8/17/16	Wed 9/28/16	Tue 9/27/16	1120SS+50 days
1153	2015	AF Review of Working Copy of Report	151 days	100%	Wed 9/28/16	Thu 4/27/17	Thu 10/27/16	1152
1154	2015	Resolve AF Comments on Working Copy of Report	0 days	100%	Thu 4/27/17	Thu 4/27/17	Thu 11/10/16	1153
1155	2015	AF Approval of RC Memorandum- Achieve RC	1 day	100%	Fri 4/28/17	Fri 4/28/17	Thu 11/10/16	1154
1156	2015	AF Approval of RC Memorandum - Achieve RC	1 day	100%	Thu 4/27/17	Fri 4/28/17	Thu 11/10/16	1154
1157	2015	AF Approval of RC Memorandum - Achieve RC	1 day	100%	Thu 4/27/17	Fri 4/28/17	Thu 11/10/16	1154
1158	2015	AF Approval of RC Memorandum - Achieve RC	1 day	100%	Thu 4/27/17	Fri 4/28/17	Thu 11/10/16	1154
1159	2015	AF Approval of RC Memorandum- Achieve RC	1 day	100%	Thu 4/27/17	Fri 4/28/17	Thu 11/10/16	1154
1160	2015	Submit RC Memorandum to Regulators	1 day	100%	Mon 5/1/17	Mon 5/1/17	Thu 11/17/16	1159
1161		**SC Site: ST006: Building 101**	**1359 days**	**5%**	**Tue 7/19/16**	**Mon 10/4/21**	**Mon 6/14/21**	
1162		**LTM**	**391 days**	**18%**	**Tue 7/19/16**	**Wed 1/17/18**	**Wed 9/27/17**	
1167	**2020**	**LTM Work Plan (Update to 2014 UFP-QAPP)**	**82 days**	**100%**	**Tue 7/19/16**	**Thu 11/10/16**	**Fri 6/9/17**	
1168	2020	Prepare Working Copy	0 days	100%	Tue 7/19/16	Tue 7/19/16	Fri 11/11/16	1165SS
1169	2020	Air Force Review of Working Copy	24 days	100%	Wed 7/20/16	Mon 8/22/16	Tue 12/13/16	1168
1170	2020	Resolve AF Comments on Working Copy AF	3 days	100%	Tue 8/23/16	Thu 8/25/16	Tue 12/20/16	1169
1171	2020	AF Review and Approval of RTCs	4 days	100%	Fri 8/26/16	Wed 8/31/16	Tue 1/10/17	1170
1172	2020	AF Approval of Draft 2016 LTM Work Plan Update	4 days	100%	Wed 8/31/16	Tue 9/6/16	Tue 1/10/17	1171
1173	2020	Submit Draft to Regulators	0 days	100%	Tue 9/6/16	Tue 9/6/16	Tue 1/17/17	1172
1174	2020	Regulator Review of Draft	33 days	100%	Wed 9/7/16	Fri 10/21/16	Mon 3/20/17	1173
1175	2020	RTC Regulator Comments on Draft	5 days	100%	Mon 10/24/16	Fri 10/28/16	Mon 3/27/17	1174
1176	2020	AF Review and Approval of RTCs	5 days	100%	Mon 10/31/16	Fri 11/4/16	Mon 4/3/17	1175
1177	2020	Regulator Approval of RTCs and Final	2 days	100%	Mon 11/7/16	Tue 11/8/16	Wed 5/3/17	1176
1178	2020	Prepare Final Report	1 day	100%	Thu 11/10/16	Thu 11/10/16	Wed 5/10/17	1177
1179	2020	AF and Regulator Approval of Final 2016 LTM Work Plan Update	0 days	100%	Thu 11/10/16	Thu 11/10/16	Fri 6/9/17	1178FS+22 days
1180		**Annual Soil Vapor Monitoring**	**91 days**	**0%**	**Thu 2/23/17**	**Thu 6/29/17**	**Thu 3/9/17**	
1181		**Q4 Soil Vapor Monitoring**	**91 days**	**0%**	**Thu 2/23/17**	**Thu 6/29/17**	**Thu 3/9/17**	
1182	2020	Sampling	3 days	0%	Thu 2/23/17	Mon 2/27/17	Mon 11/7/16	1164FS+15 days
1183	2020	Offsite Analysis of Groundwater Samples	15 days	0%	Tue 2/28/17	Mon 3/20/17	Mon 11/28/16	1182
1184	2020	Data Validation	15 days	0%	Tue 3/21/17	Mon 4/10/17	Mon 12/19/16	1183
1185	2020	ERPIMS Submittal	22 days	0%	Wed 5/31/17	Thu 6/29/17	Thu 3/9/17	1182FS+66 days
1186	**2020**	**Annual Report - 2016**	**57 days**	**0%**	**Tue 4/11/17**	**Wed 6/28/17**	**Wed 3/8/17**	
1187	2020	Prepare Working Copy of 2016 LTM Report	20 days	0%	Tue 4/11/17	Mon 5/8/17	Mon 1/16/17	1184
1188	2020	AF Review of Working Copy of Annual Report	22 days	0%	Tue 5/9/17	Wed 6/7/17	Wed 2/15/17	1187
1189	2020	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Thu 6/8/17	Wed 6/21/17	Wed 3/1/17	1188
1190	2020	AF Approval of Final Annual 2016 LTM Report	0 days	0%	Wed 6/21/17	Wed 6/21/17	Wed 3/1/17	1189
1191	2020	Submit Final Annual Report to Regulators	5 days	0%	Thu 6/22/17	Wed 6/28/17	Wed 3/8/17	1190
1192		**Site Closeout**	**1011 days**	**0%**	**Mon 11/20/17**	**Mon 10/4/21**	**Mon 6/14/21**	
1193		**Rebound Sampling**	**424 days**	**0%**	**Mon 11/20/17**	**Thu 7/4/19**	**Thu 3/14/19**	
1194		**Q1 Soil Vapor Monitoring**	**55 days**	**0%**	**Mon 11/20/17**	**Fri 2/2/18**	**Fri 10/13/17**	
1195	2021	Sampling	3 days	0%	Mon 11/20/17	Wed 11/22/17	Wed 8/2/17	1166FS+22 days
1196	2021	Offsite Analysis of Groundwater Samples	15 days	0%	Thu 11/23/17	Wed 12/13/17	Wed 8/23/17	1195
1197	2021	Data Validation	15 days	0%	Thu 12/14/17	Wed 1/3/18	Wed 9/13/17	1196



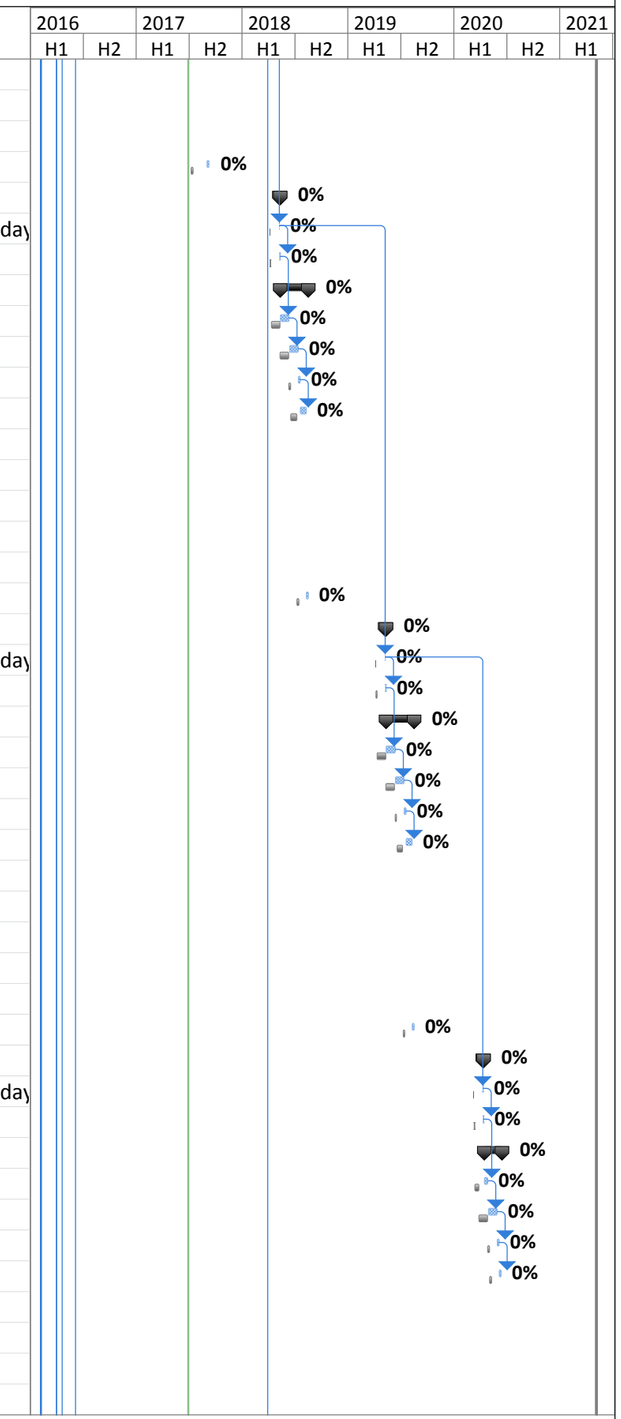
ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
1198	2021	ERPIMS Submittal	22 days	0%	Thu 1/4/18	Fri 2/2/18	Fri 10/13/17	1197
1199	**2021**	**Q2 Soil Vapor Monitoring**	**91 days**	**0%**	**Fri 2/23/18**	**Fri 6/29/18**	**Fri 3/9/18**	
1200	2021	Sampling	3 days	0%	Fri 2/23/18	Tue 2/27/18	Tue 11/7/17	1195FS+66 days
1201	2021	Offsite Analysis of Groundwater Samples	15 days	0%	Fri 2/23/18	Thu 3/15/18	Thu 11/23/17	1195FS+66 days
1202	2021	Data Validation	15 days	0%	Fri 3/16/18	Thu 4/5/18	Thu 12/14/17	1201
1203	2021	ERPIMS Submittal	22 days	0%	Thu 5/31/18	Fri 6/29/18	Fri 3/9/18	1200FS+66 days
1204	2021	Contingent action	180 days	0%	Fri 3/16/18	hu 11/22/18	Thu 8/2/18	1201
1205		**Q3 Soil Vapor Monitoring**	**91 days**	**0%**	**Fri 11/23/18**	**Fri 3/29/19**	**Fri 12/7/18**	
1206	2022	Sampling	3 days	0%	Fri 11/23/18	ue 11/27/18	Tue 8/7/18	1200FS+60 days
1207	2022	Offsite Analysis of Groundwater Samples	15 days	0%	Wed 11/28/18	ue 12/18/18	Tue 8/28/18	1206
1208	2022	Data Validation	15 days	0%	Wed 12/19/18	Tue 1/8/19	Tue 9/18/18	1207,1202
1209	2022	ERPIMS Submittal	22 days	0%	Thu 2/28/19	Fri 3/29/19	Fri 12/7/18	1206FS+66 days
1210	**2022**	**Q4 Soil Vapor Monitoring**	**91 days**	**0%**	**Thu 2/28/19**	**Thu 7/4/19**	**Thu 3/14/19**	
1211	2022	Sampling	3 days	0%	Thu 2/28/19	Mon 3/4/19	Mon 11/12/18	1206FS+66 days
1212	2022	Offsite Analysis of Groundwater Samples	15 days	0%	Tue 3/5/19	Mon 3/25/19	Mon 12/3/18	1211
1213	2022	Data Validation	15 days	0%	Tue 3/26/19	Mon 4/15/19	Mon 12/24/18	1212,1208
1214	2022	ERPIMS Submittal	22 days	0%	Wed 6/5/19	Thu 7/4/19	Thu 3/14/19	1211FS+66 days
1215		**Risk Assessment (RA) Work Plan (in UFP-QAPP format)**	**129 days**	**0%**	**Fri 11/23/18**	**Wed 5/22/19**	**Wed 1/30/19**	
1216	2022	Prepare Working Copy of RA Work Plan	30 days	0%	Fri 11/23/18	Thu 1/3/19	Thu 9/13/18	1206SS
1217	2022	AF Review of Working Copy of RA Work Plan	22 days	0%	Fri 1/4/19	Mon 2/4/19	Mon 10/15/18	1216
1218	2022	Resolve AF Comments on Working Copy of RA Work Plan	10 days	0%	Tue 2/5/19	Mon 2/18/19	Mon 10/29/18	1217
1219	2022	AF Approval of Draft RA Work Plan	0 days	0%	Mon 2/18/19	Mon 2/18/19	Mon 10/29/18	1218
1220	2022	Submit Draft RA Work Plan to Regulators	5 days	0%	Tue 2/19/19	Mon 2/25/19	Mon 11/5/18	1219
1221	2022	Regulator Review of Draft RA Work Plan	30 days	0%	Tue 2/26/19	Mon 4/8/19	Mon 12/17/18	1220
1222	2022	RTC Regulator Comments on Draft RA Work Plan	5 days	0%	Tue 4/9/19	Mon 4/15/19	Mon 12/24/18	1221
1223	2022	Prepare Final RA Work Plan	5 days	0%	Tue 4/16/19	Mon 4/22/19	Mon 12/31/18	1222
1224	2022	Regulator Approval of Final RA Work Plan	0 days	0%	Wed 5/22/19	Wed 5/22/19	Wed 1/30/19	1223FS+22 days
1225	**2022**	**Complete Soil Sampling and Risk Assessment**	**254 days**	**0%**	**Tue 4/23/19**	**Fri 4/10/20**	**Fri 12/20/19**	
1226	2022	Mobilization, Dig Permit and Sampling	30 days	0%	Tue 4/23/19	Mon 6/3/19	Mon 2/11/19	1223SS+5 days
1227	2022	Laboratory Analysis	15 days	0%	Thu 5/23/19	Wed 6/12/19	Wed 2/20/19	1226SS+22 days
1228	2022	Data Validation	15 days	0%	Thu 6/13/19	Wed 7/3/19	Wed 3/13/19	1227
1229	2022	ERPIMS Submittal	1 day	0%	Fri 9/13/19	Fri 9/13/19	Fri 5/24/19	1227FS+66 days
1230	2022	Prepare Risk Assessment	22 days	0%	Thu 7/4/19	Fri 8/2/19	Fri 4/12/19	1228
1231	2022	Implement Contingent Action	180 days	0%	Mon 8/5/19	Fri 4/10/20	Fri 12/20/19	1230
1232		**Explanation of Significant Difference (ESD)**	**211 days**	**0%**	**Mon 4/13/20**	**Mon 2/1/21**	**Mon 10/12/20**	
1233	2023	Prepare Working Copy of ESD	30 days	0%	Mon 4/13/20	Fri 5/22/20	Fri 1/31/20	1231
1234	2023	AF Review of Working Copy of ESD	22 days	0%	Mon 5/25/20	Tue 6/23/20	Tue 3/3/20	1233
1235	2023	Resolve AF Comments on Working Copy of ESD	10 days	0%	Wed 6/24/20	Tue 7/7/20	Tue 3/17/20	1234
1236	2023	AF Approval of Draft ESD	0 days	0%	Tue 7/7/20	Tue 7/7/20	Tue 3/17/20	1235
1237	2023	Submit Draft Annual Report to ESD	5 days	0%	Wed 7/8/20	Tue 7/14/20	Tue 3/24/20	1236
1238	2023	Regulator Review of Draft ESD	30 days	0%	Wed 7/15/20	Tue 8/25/20	Tue 5/5/20	1237
1239	2023	RTC Regulator Comments on Draft ESD	5 days	0%	Wed 8/26/20	Tue 9/1/20	Tue 5/12/20	1238
1240	2023	Prepare Final ESD	5 days	0%	Wed 9/2/20	Tue 9/8/20	Tue 5/19/20	1239
1241	2023	Contingency Time	60 days	0%	Wed 9/9/20	Tue 12/1/20	Tue 8/11/20	1240



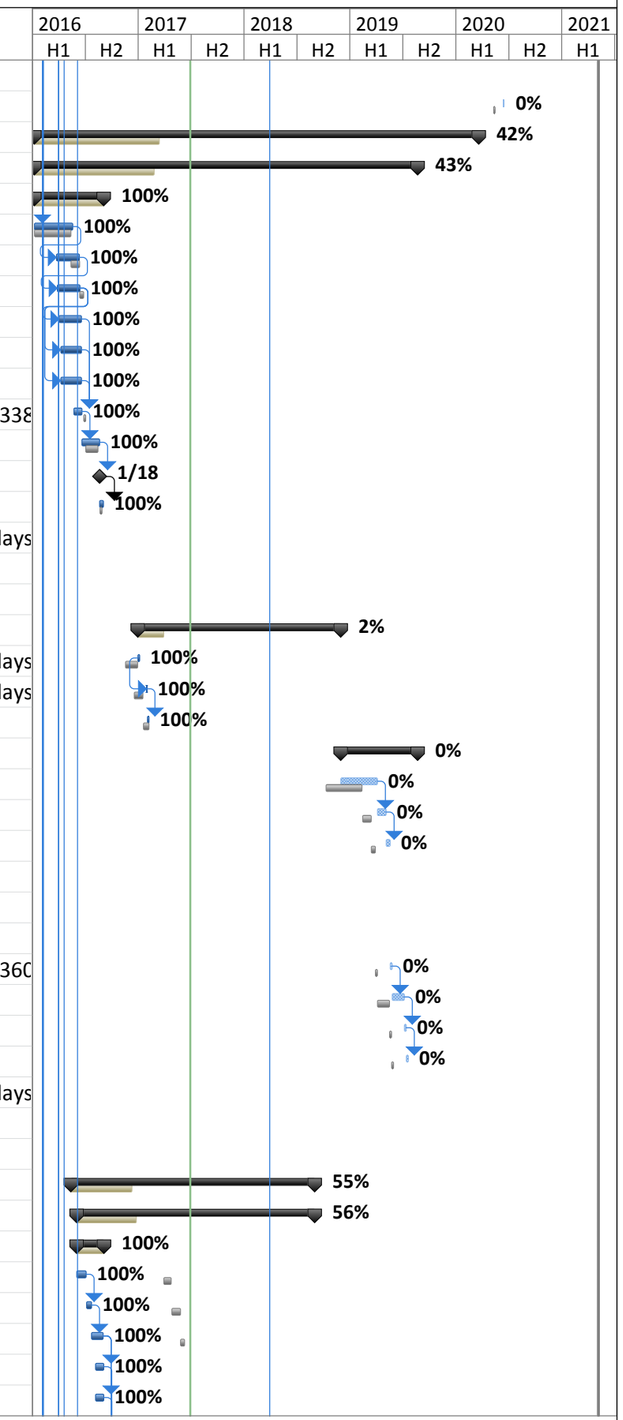
ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
1242	2023	Regulator Approval of Final ESD	0 days	0%	Mon 2/1/21	Mon 2/1/21	Mon 10/12/20	1241FS+44 days
1243		**Remedial Action Completion Report (RACR)**	**114 days**	**0%**	**Tue 2/2/21**	**Fri 7/9/21**	**Fri 3/19/21**	
1244	2024	Prepare Working Copy of RACR	20 days	0%	Tue 2/2/21	Mon 3/1/21	Mon 11/9/20	1238,1242
1245	2024	AF Review of Working Copy of RACR	22 days	0%	Tue 3/2/21	Wed 3/31/21	Wed 12/9/20	1244
1246	2024	Resolve AF Comments on Working Copy of RACR	5 days	0%	Thu 4/1/21	Wed 4/7/21	Wed 12/16/20	1245
1247	2024	AF Approval of Draft RACR	0 days	0%	Wed 4/7/21	Wed 4/7/21	Wed 12/16/20	1246
1248	2024	Submit Draft RACR to Regulators	5 days	0%	Thu 4/8/21	Wed 4/14/21	Wed 12/23/20	1247
1249	2024	Regulator Review of Draft RACR	30 days	0%	Thu 4/15/21	Wed 5/26/21	Wed 2/3/21	1248
1250	2024	RTC Regulator Comments on Draft RACR	5 days	0%	Thu 5/27/21	Wed 6/2/21	Wed 2/10/21	1249
1251	2024	Prepare Final RACR	5 days	0%	Thu 6/3/21	Wed 6/9/21	Wed 2/17/21	1250
1252	2024	AF and Regulator Approval of Final RACR;AF Approval of ERPIMS Upload	0 days	0%	Fri 7/9/21	Fri 7/9/21	Fri 3/19/21	1251FS+22 days
1253		**Site Closeout and Well Decommissioning and Well and System Decommissioning Report**	**78 days**	**0%**	**Thu 6/17/21**	**Mon 10/4/21**	**Mon 6/14/21**	
1254	2024	Decommission Wells and System	15 days	0%	Thu 6/17/21	Wed 7/7/21	Wed 3/17/21	1250FS+10 days
1255	2024	Prepare Working Copy of Site Closeout and Well & System Decommissioning F	14 days	0%	Thu 7/8/21	Tue 7/27/21	Tue 4/6/21	1254
1256	2024	AF Review of Working Copy of Site Closeout and Well & System Decommissior	22 days	0%	Wed 7/28/21	Thu 8/26/21	Thu 5/6/21	1255
1257	2024	Resolve AF Comments on Working Copy of Site Closeout and Well & System D	5 days	0%	Fri 8/27/21	Thu 9/2/21	Thu 5/13/21	1256
1258	2024	AF Approval of Final Site Closeout and Well & System Decommissioning Repor	0 days	0%	Mon 10/4/21	Mon 10/4/21	Mon 6/14/21	1257FS+22 days
1259	**2005**	**SQ Sites: SS008, SS033, SS044, SS060, AOI66**	**1063 days**	**22%**	**Tue 10/18/16**	**Fri 11/13/20**	**Tue 10/13/20**	
1260	**2005**	**Long-term Management (LTM)**	**1063 days**	**22%**	**Tue 10/18/16**	**Fri 11/13/20**	**Tue 10/13/20**	
1261	**2005**	**2016 Annual LUC/IC Inspection**	**9 days**	**100%**	**Tue 10/18/16**	**on 10/31/16**	**Wed 9/21/16**	
1262	2005	Regulatory and AF Notice of Inspections	2 days	100%	Tue 10/18/16	hu 10/20/16	Mon 9/19/16	917FS+5 days
1263	2005	Site Inspection and Deed Notice Verification	0 days	100%	Mon 10/31/16	on 10/31/16	Wed 9/21/16	1262
1264	**2005**	**2016 Annual LTM Report**	**68 days**	**100%**	**Tue 11/1/16**	**Thu 2/2/17**	**Tue 12/27/16**	
1265	2005	Prepare Working Copy	24 days	100%	Tue 11/1/16	Fri 12/2/16	Fri 10/21/16	1263
1266	2005	Air Force Review of Working Copy	13 days	100%	Mon 12/5/16	ed 12/21/16	Tue 11/22/16	1265
1267	2005	Resolve AF Comments on Working Copy AF	28 days	100%	Thu 12/22/16	Mon 1/30/17	Tue 11/29/16	1266
1268	2005	AF Review and Approval of RTCs	1 day	100%	Tue 1/31/17	Tue 1/31/17	Tue 12/20/16	1267
1269	2005	AF Approval of Final 2016 Annual LTM Report	1 day	100%	Tue 1/31/17	Wed 2/1/17	Tue 12/20/16	1268
1270	2005	AF Approval of Final 2016 Annual LTM Report	1 day	100%	Tue 1/31/17	Wed 2/1/17	Tue 12/20/16	1268
1271	2005	AF Approval of Final 2016 Annual LTM Report	1 day	100%	Tue 1/31/17	Wed 2/1/17	Tue 12/20/16	1268
1272	2005	AF Approval of Final 2016 Annual LTM Report	1 day	100%	Tue 1/31/17	Wed 2/1/17	Tue 12/20/16	1268
1273	2005	AF Approval of Final 2016 Annual LTM Report	1 day	100%	Tue 1/31/17	Wed 2/1/17	Tue 12/20/16	1268
1274	2005	Submit Final to Regulators	1 day	100%	Thu 2/2/17	Thu 2/2/17	Tue 12/27/16	1273
1275	**2006**	**2017 Annual LUC/IC Inspection**	**19 days**	**33%**	**Fri 10/6/17**	**Wed 11/1/17**	**Thu 9/7/17**	
1276	2006	Regulatory and AF Notice of Inspections	1 day	100%	Fri 10/6/17	Fri 10/6/17	Tue 9/5/17	1262FS+250 day
1277	2006	Site Inspection and Deed Notice Verification	2 days	0%	Tue 10/31/17	Wed 11/1/17	Thu 9/7/17	1276
1278	**2006**	**2017 Annual LTM Report**	**69 days**	**0%**	**Thu 11/2/17**	**Tue 2/6/18**	**Wed 12/13/17**	
1279	2006	Prepare Working Copy	22 days	0%	Thu 11/2/17	Fri 12/1/17	Mon 10/9/17	1277
1280	2006	Air Force Review of Working Copy	22 days	0%	Mon 12/4/17	Tue 1/2/18	Wed 11/8/17	1279
1281	2006	Resolve AF Comments on Working Copy AF	5 days	0%	Wed 1/3/18	Tue 1/9/18	Wed 11/15/17	1280
1282	2006	AF Review and Approval of RTCs	15 days	0%	Wed 1/10/18	Tue 1/30/18	Wed 12/6/17	1281
1283	2006	AF Approval of Final 2017 Annual LTM Report	0 days	0%	Tue 1/30/18	Tue 1/30/18	Wed 12/6/17	1282
1284	2006	AF Approval of Final 2017 Annual LTM Report	0 days	0%	Tue 1/30/18	Tue 1/30/18	Wed 12/6/17	1282



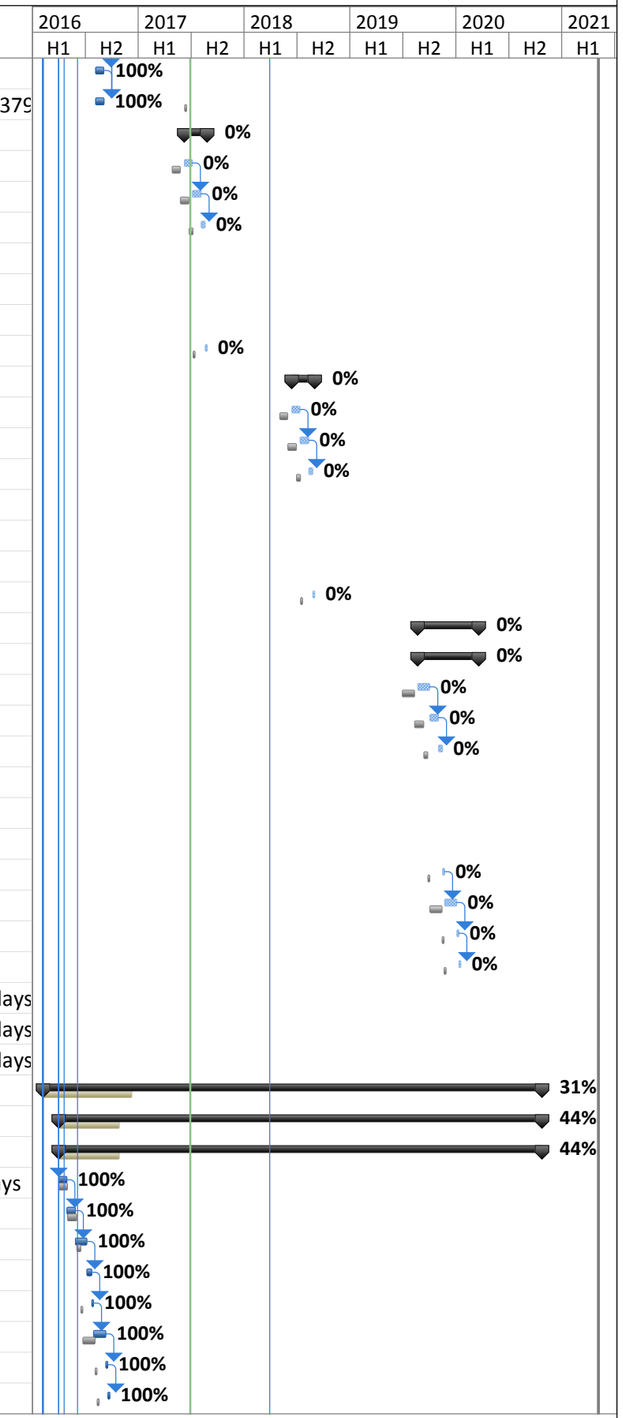
ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
1285	2006	AF Approval of Final 2017 Annual LTM Report	0 days	0%	Tue 1/30/18	Tue 1/30/18	Wed 12/6/17	1282
1286	2006	AF Approval of Final 2017 Annual LTM Report	0 days	0%	Tue 1/30/18	Tue 1/30/18	Wed 12/6/17	1282
1287	2006	AF Approval of Final 2017 Annual LTM Report	0 days	0%	Tue 1/30/18	Tue 1/30/18	Wed 12/6/17	1282
1288	2006	Submit Final to Regulators	5 days	0%	Wed 1/31/18	Tue 2/6/18	Wed 12/13/17	1287
1289	**2007**	**2018 Annual LUC/IC Inspection**	**3 days**	**0%**	**Mon 10/8/18**	**ed 10/10/18**	**Fri 9/7/18**	
1290	2007	Regulatory and AF Notice of Inspections	1 day	0%	Mon 10/8/18	Mon 10/8/18	Wed 9/5/18	1276FS+260 day
1291	2007	Site Inspection and Deed Notice Verification	2 days	0%	Tue 10/9/18	ed 10/10/18	Fri 9/7/18	1290
1292	**2007**	**2018 Annual LTM Report**	**69 days**	**0%**	**Thu 10/11/18**	**Tue 1/15/19**	**Thu 12/13/18**	
1293	2007	Prepare Working Copy	22 days	0%	Thu 10/11/18	Fri 11/9/18	Tue 10/9/18	1291
1294	2007	Air Force Review of Working Copy	22 days	0%	Mon 11/12/18	ue 12/11/18	Thu 11/8/18	1293
1295	2007	Resolve AF Comments on Working Copy AF	5 days	0%	Wed 12/12/18	ue 12/18/18	Thu 11/15/18	1294
1296	2007	AF Review and Approval of RTCs	15 days	0%	Wed 12/19/18	Tue 1/8/19	Thu 12/6/18	1295
1297	2007	AF Approval of Final 2018 Annual LTM Report	0 days	0%	Tue 1/8/19	Tue 1/8/19	Thu 12/6/18	1296
1298	2007	AF Approval of Final 2018 Annual LTM Report	0 days	0%	Tue 1/8/19	Tue 1/8/19	Thu 12/6/18	1296
1299	2007	AF Approval of Final 2018 Annual LTM Report	0 days	0%	Tue 1/8/19	Tue 1/8/19	Thu 12/6/18	1296
1300	2007	AF Approval of Final 2018 Annual LTM Report	0 days	0%	Tue 1/8/19	Tue 1/8/19	Thu 12/6/18	1296
1301	2007	AF Approval of Final 2018 Annual LTM Report	0 days	0%	Tue 1/8/19	Tue 1/8/19	Thu 12/6/18	1296
1302	2007	Submit Final to Regulators	5 days	0%	Wed 1/9/19	Tue 1/15/19	Thu 12/13/18	1301
1303	**2008**	**2019 Annual LUC/IC Inspection**	**3 days**	**0%**	**Tue 10/8/19**	**hu 10/10/19**	**Mon 9/9/19**	
1304	2008	Regulatory and AF Notice of Inspections	1 day	0%	Tue 10/8/19	Tue 10/8/19	Thu 9/5/19	1290FS+260 day
1305	2008	Site Inspection and Deed Notice Verification	2 days	0%	Wed 10/9/19	hu 10/10/19	Mon 9/9/19	1304
1306	**2008**	**2019 Annual LTM Report**	**69 days**	**0%**	**Fri 10/11/19**	**Wed 1/15/20**	**Fri 12/13/19**	
1307	2008	Prepare Working Copy	22 days	0%	Fri 10/11/19	on 11/11/19	Wed 10/9/19	1305
1308	2008	Air Force Review of Working Copy	22 days	0%	Tue 11/12/19	ed 12/11/19	Fri 11/8/19	1307
1309	2008	Resolve AF Comments on Working Copy AF	5 days	0%	Thu 12/12/19	ed 12/18/19	Fri 11/15/19	1308
1310	2008	AF Review and Approval of RTCs	15 days	0%	Thu 12/19/19	Wed 1/8/20	Fri 12/6/19	1309
1311	2008	AF Approval of Final 2019 Annual LTM Report	0 days	0%	Wed 1/8/20	Wed 1/8/20	Fri 12/6/19	1310
1312	2008	AF Approval of Final 2019 Annual LTM Report	0 days	0%	Wed 1/8/20	Wed 1/8/20	Fri 12/6/19	1310
1313	2008	AF Approval of Final 2019 Annual LTM Report	0 days	0%	Wed 1/8/20	Wed 1/8/20	Fri 12/6/19	1310
1314	2008	AF Approval of Final 2019 Annual LTM Report	0 days	0%	Wed 1/8/20	Wed 1/8/20	Fri 12/6/19	1310
1315	2008	AF Approval of Final 2019 Annual LTM Report	0 days	0%	Wed 1/8/20	Wed 1/8/20	Fri 12/6/19	1310
1316	2008	Submit Final to Regulators	5 days	0%	Thu 1/9/20	Wed 1/15/20	Fri 12/13/19	1315
1317	**2009**	**2020 Annual LUC/IC Inspection**	**3 days**	**0%**	**Wed 9/9/20**	**Fri 9/11/20**	**Tue 8/11/20**	
1318	2009	Regulatory and AF Notice of Inspections	1 day	0%	Wed 9/9/20	Wed 9/9/20	Fri 8/7/20	1304FS+240 day
1319	2009	Site Inspection and Deed Notice Verification	2 days	0%	Thu 9/10/20	Fri 9/11/20	Tue 8/11/20	1318
1320	**2009**	**2020 Annual LTM Report**	**45 days**	**0%**	**Mon 9/14/20**	**Fri 11/13/20**	**Tue 10/13/20**	
1321	2009	Prepare Working Copy	10 days	0%	Mon 9/14/20	Fri 9/25/20	Tue 8/25/20	1319
1322	2009	Air Force Review of Working Copy	22 days	0%	Mon 9/28/20	ue 10/27/20	Thu 9/24/20	1321
1323	2009	Resolve AF Comments on Working Copy AF	5 days	0%	Wed 10/28/20	Tue 11/3/20	Thu 10/1/20	1322
1324	2009	AF Review and Approval of RTCs	5 days	0%	Wed 11/4/20	ue 11/10/20	Thu 10/8/20	1323
1325	2009	AF Approval of Final 2020 Annual LTM Report; Distribute Report to Regulators	0 days	0%	Tue 11/10/20	ue 11/10/20	Thu 10/8/20	1324
1326	2009	AF Approval of Final 2020 Annual LTM Report; Distribute Report to Regulators	0 days	0%	Tue 11/10/20	ue 11/10/20	Thu 10/8/20	1324
1327	2009	AF Approval of Final 2020 Annual LTM Report; Distribute Report to Regulators	0 days	0%	Tue 11/10/20	ue 11/10/20	Thu 10/8/20	1324
1328	2009	AF Approval of Final 2020 Annual LTM Report; Distribute Report to Regulators	0 days	0%	Tue 11/10/20	ue 11/10/20	Thu 10/8/20	1324



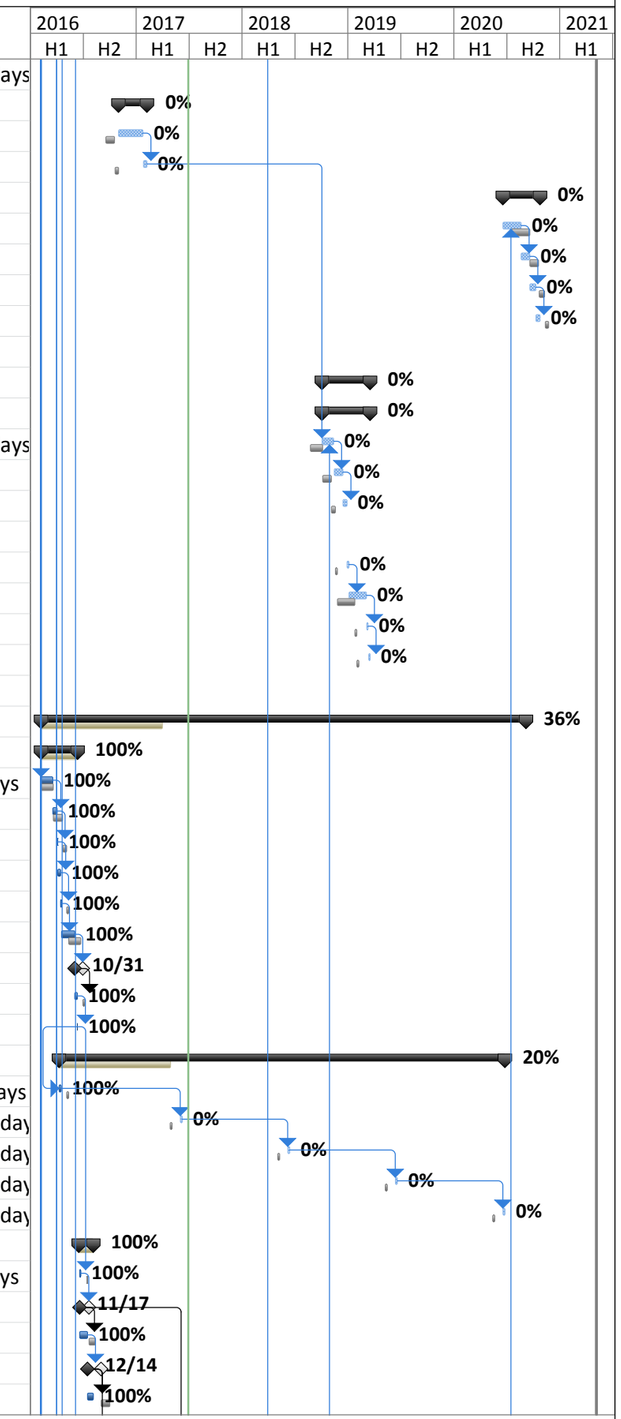
ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
1329	2009	AF Approval of Final 2020 Annual LTM Report; Distribute Report to Regulators	0 days	0%	Tue 11/10/20	ue 11/10/20	Thu 10/8/20	1324
1330	2009	Submit Final to Regulators	3 days	0%	Wed 11/11/20	Fri 11/13/20	Tue 10/13/20	1329
1331		**SC Sites SS017, DP022 and SS025**	**1095 days**	**42%**	**Wed 6/8/16**	**Tue 8/18/20**	**Fri 6/26/20**	
1332		**Supplemental Investigation**	**944 days**	**43%**	**Wed 6/8/16**	**Mon 1/20/20**	**Thu 11/28/19**	
1333		**Supplemental Investigation (SI) Work Plan (in UFP-QAPP format)**	**171 days**	**100%**	**Wed 6/8/16**	**Wed 2/1/17**	**Mon 2/27/17**	
1334	2020	Prepare Working Copy of SI Work Plan	94 days	100%	Wed 6/8/16	on 10/17/16	Tue 10/11/16	906
1335	2020	AF Review of Working Copy of SI Work Plan	57 days	100%	Mon 8/22/16	Wed 11/9/16	Thu 11/10/16	1334
1336	2020	RTC AF Comments on Working Copy of SI Work Plan	56 days	100%	Thu 8/25/16	Fri 11/11/16	Thu 11/24/16	1335
1337	2020	AF Approval of Draft SI Work Plan	55 days	100%	Wed 8/31/16	ed 11/16/16	Thu 11/24/16	1336
1338	2020	AF Approval of Draft SI Work Plan	51 days	100%	Tue 9/6/16	ed 11/16/16	Thu 11/24/16	1336
1339	2020	AF Approval of Draft SI Work Plan	51 days	100%	Tue 9/6/16	ed 11/16/16	Thu 11/24/16	1336
1340	2020	Submit Draft SI Work Plan to Regulators	20 days	100%	Fri 10/21/16	Fri 11/18/16	Thu 12/1/16	1339,1337,1338
1341	2020	Regulator Review of Draft SI Work Plan	43 days	100%	Fri 11/18/16	Wed 1/18/17	Thu 1/12/17	1340
1342	2020	RTC Regulator Comments on Draft SI Work Plan	0 days	100%	Wed 1/18/17	Wed 1/18/17	Thu 1/19/17	1341
1343	2020	Prepare Final SI Work Plan	9 days	100%	Wed 1/18/17	Tue 1/31/17	Thu 1/26/17	1342
1344	2020	Regulator Approval of Final SI Work Plan	0 days	100%	Wed 2/1/17	Wed 2/1/17	Mon 2/27/17	1343FS+22 days
1345	2020	Regulator Approval of Final SI Work Plan	0 days	100%	Wed 2/1/17	Wed 2/1/17	Mon 2/27/17	1344SS
1346	2020	Regulator Approval of Final SI Work Plan	0 days	100%	Wed 2/1/17	Wed 2/1/17	Mon 2/27/17	1345SS
1347		**Complete Soil Sampling and Risk Assessment (if necessary)**	**500 days**	**2%**	**Wed 5/31/17**	**Tue 4/30/19**	**Fri 3/8/19**	
1348	2020	Mobilization, Dig Permit and Sampling	4 days	100%	Wed 5/31/17	Mon 6/5/17	Mon 5/29/17	1346FS+35 days
1349	2020	Laboratory Analysis	1 day	100%	Fri 6/30/17	Fri 6/30/17	Fri 6/16/17	1348SS+22 days
1350	2020	Data Validation	5 days	100%	Mon 7/3/17	Fri 7/7/17	Fri 7/7/17	1349
1354		**SI Report**	**189 days**	**0%**	**Wed 5/1/19**	**Mon 1/20/20**	**Thu 11/28/19**	
1355	2023	Prepare Working Copy of SI Report	90 days	0%	Wed 5/1/19	Tue 9/3/19	Fri 7/12/19	1353
1356	2023	AF Review of Working Copy of SI Report	22 days	0%	Wed 9/4/19	Thu 10/3/19	Tue 8/13/19	1355
1357	2023	RTC AF Comments on Working Copy of SI Report	10 days	0%	Fri 10/4/19	hu 10/17/19	Tue 8/27/19	1356
1358	2023	AF Approval of Draft SI Report	0 days	0%	Thu 10/17/19	hu 10/17/19	Tue 8/27/19	1357
1359	2023	AF Approval of Draft SI Report	0 days	0%	Thu 10/17/19	hu 10/17/19	Tue 8/27/19	1357
1360	2023	AF Approval of Draft SI Report	0 days	0%	Thu 10/17/19	hu 10/17/19	Tue 8/27/19	1357
1361	2023	Submit Draft SI Report to Regulators	5 days	0%	Fri 10/18/19	hu 10/24/19	Tue 9/3/19	1358,1359,1360
1362	2023	Regulator Review of Draft SI Report	30 days	0%	Fri 10/25/19	Thu 12/5/19	Tue 10/15/19	1361
1363	2023	RTC Regulator Comments on Draft SI Report	5 days	0%	Fri 12/6/19	hu 12/12/19	Tue 10/22/19	1362
1364	2023	Prepare Final SI Report	5 days	0%	Fri 12/13/19	hu 12/19/19	Tue 10/29/19	1363
1365	2023	Regulator Approval of Final SI Report	0 days	0%	Mon 1/20/20	Mon 1/20/20	Thu 11/28/19	1364FS+22 days
1366	2023	Regulator Approval of Final SI Report	0 days	0%	Mon 1/20/20	Mon 1/20/20	Thu 11/28/19	1365SS
1367	2023	Regulator Approval of Final SI Report	0 days	0%	Mon 1/20/20	Mon 1/20/20	Thu 11/28/19	1366SS
1368		**LTM**	**601 days**	**55%**	**Wed 10/12/16**	**Wed 1/30/19**	**Wed 12/19/18**	
1373		**LTM Reporting**	**587 days**	**56%**	**Tue 11/1/16**	**Wed 1/30/19**	**Wed 12/19/18**	
1374		**Annual Report - Year 2016**	**68 days**	**100%**	**Tue 11/1/16**	**Thu 2/2/17**	**Tue 11/14/17**	
1375	2021	Prepare Working Copy of Annual Report	24 days	100%	Tue 11/1/16	Fri 12/2/16	Fri 9/22/17	1370,1352
1376	2021	AF Review of Working Copy of Annual Report	13 days	100%	Mon 12/5/16	ed 12/21/16	Tue 10/24/17	1375
1377	2021	RTC AF Comments on Working Copy of Annual Report	28 days	100%	Thu 12/22/16	Mon 1/30/17	Tue 11/7/17	1376
1378	2021	AF Approval of Final Annual LUC Report-2016	20 days	100%	Wed 1/4/17	Wed 2/1/17	Tue 11/7/17	1377
1379	2021	AF Approval of Final Annual LUC Report-2016	20 days	100%	Wed 1/4/17	Wed 2/1/17	Tue 11/7/17	1377



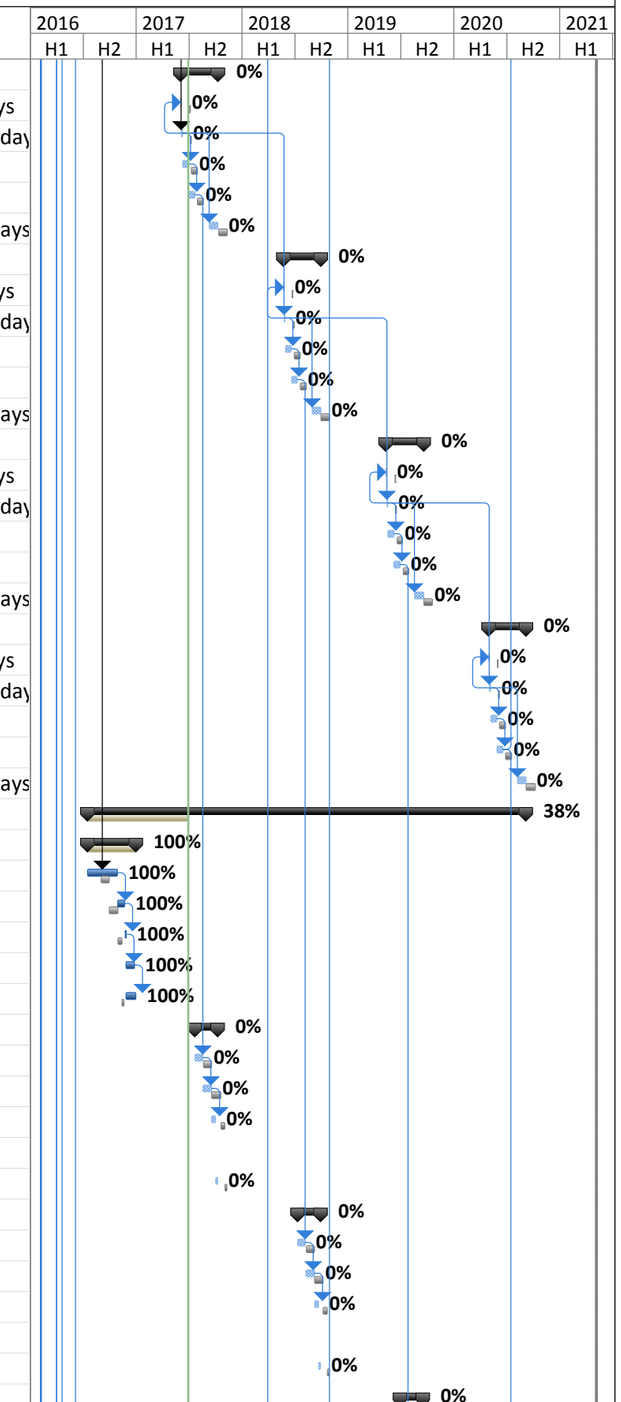
ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
1380	2021	AF Approval of Final Annual LUC Report-2016	20 days	100%	Wed 1/4/17	Wed 2/1/17	Tue 11/7/17	1377
1381	2021	Submit Final Annual LUC Report to Regulators	21 days	100%	Thu 1/5/17	Thu 2/2/17	Tue 11/14/17	1380,1378,1379
1382	**2021**	**Annual Report - Year 2017**	**57 days**	**0%**	**Tue 11/7/17**	**Wed 1/24/18**	**Wed 12/13/17**	
1383	2021	Prepare Working Copy of Annual Report	20 days	0%	Tue 11/7/17	Mon 12/4/17	Mon 10/23/17	1371
1384	2021	AF Review of Working Copy of Annual Report	22 days	0%	Tue 12/5/17	Wed 1/3/18	Wed 11/22/17	1383
1385	2021	RTC AF Comments on Working Copy of Annual Report	10 days	0%	Thu 1/4/18	Wed 1/17/18	Wed 12/6/17	1384
1386	2021	AF Approval of Final Annual LUC Report-2017	0 days	0%	Wed 1/17/18	Wed 1/17/18	Wed 12/6/17	1385
1387	2021	AF Approval of Final Annual LUC Report-2017	0 days	0%	Wed 1/17/18	Wed 1/17/18	Wed 12/6/17	1385
1388	2021	AF Approval of Final Annual LUC Report-2017	0 days	0%	Wed 1/17/18	Wed 1/17/18	Wed 12/6/17	1385
1389	2021	Submit Final Annual LUC Report to Regulators	5 days	0%	Thu 1/18/18	Wed 1/24/18	Wed 12/13/17	1388
1390		**Annual Report - Year 2018**	**57 days**	**0%**	**Tue 11/13/18**	**Wed 1/30/19**	**Wed 12/19/18**	
1391	2022	Prepare Working Copy of Annual Report	20 days	0%	Tue 11/13/18	Mon 12/10/18	Mon 10/29/18	1372
1392	2022	AF Review of Working Copy of Annual Report	22 days	0%	Tue 12/11/18	Wed 1/9/19	Wed 11/28/18	1391
1393	2022	RTC AF Comments on Working Copy of Annual Report	10 days	0%	Thu 1/10/19	Wed 1/23/19	Wed 12/12/18	1392
1394	2022	AF Approval of Final Annual LUC Report-2018	0 days	0%	Wed 1/23/19	Wed 1/23/19	Wed 12/12/18	1393
1395	2022	AF Approval of Final Annual LUC Report-2018	0 days	0%	Wed 1/23/19	Wed 1/23/19	Wed 12/12/18	1393
1396	2022	AF Approval of Final Annual LUC Report-2018	0 days	0%	Wed 1/23/19	Wed 1/23/19	Wed 12/12/18	1393
1397	2022	Submit Final Annual LUC Report to Regulators	5 days	0%	Thu 1/24/19	Wed 1/30/19	Wed 12/19/18	1396
1398		**Decision Document**	**151 days**	**0%**	**Tue 1/21/20**	**Tue 8/18/20**	**Fri 6/26/20**	
1399		**Explanation of Significant Difference (ESD)**	**151 days**	**0%**	**Tue 1/21/20**	**Tue 8/18/20**	**Fri 6/26/20**	
1400	2023	Prepare Working Copy of ESD	30 days	0%	Tue 1/21/20	Mon 3/2/20	Thu 1/9/20	1367
1401	2023	AF Review of Working Copy of ESD	22 days	0%	Tue 3/3/20	Wed 4/1/20	Mon 2/10/20	1400
1402	2023	RTC AF Comments on Working Copy of ESD	10 days	0%	Thu 4/2/20	Wed 4/15/20	Mon 2/24/20	1401
1403	2023	AF Approval of Draft ESD	0 days	0%	Wed 4/15/20	Wed 4/15/20	Mon 2/24/20	1402
1404	2023	AF Approval of Draft ESD	0 days	0%	Wed 4/15/20	Wed 4/15/20	Mon 2/24/20	1402
1405	2023	AF Approval of Draft ESD	0 days	0%	Wed 4/15/20	Wed 4/15/20	Mon 2/24/20	1402
1406	2023	Submit Draft Annual Report to ESD	5 days	0%	Thu 4/16/20	Wed 4/22/20	Mon 3/2/20	1405
1407	2023	Regulator Review of Draft ESD	30 days	0%	Thu 4/23/20	Wed 6/3/20	Mon 4/13/20	1406
1408	2023	RTC Regulator Comments on Draft ESD	5 days	0%	Thu 6/4/20	Wed 6/10/20	Mon 4/20/20	1407
1409	2023	Prepare Final ESD	5 days	0%	Thu 6/11/20	Wed 6/17/20	Mon 4/27/20	1408
1410	2023	Regulator Approval of Final ESD-Achieve SC	0 days	0%	Tue 8/18/20	Tue 8/18/20	Fri 6/26/20	1409FS+44 days
1411	2023	Regulator Approval of Final ESD- Achieve SC	0 days	0%	Tue 8/18/20	Tue 8/18/20	Fri 6/26/20	1409FS+44 days
1412	2023	Regulator Approval of Final ESD - Achieve SC	0 days	0%	Tue 8/18/20	Tue 8/18/20	Fri 6/26/20	1409FS+44 days
1413	**2010**	**OES Site SD052-01: Apron 2 Chlorinated Plume**	**1229 days**	**31%**	**Fri 7/8/16**	**Wed 3/24/21**	**Fri 4/23/21**	
1414	**2010**	**Optimization**	**1191 days**	**44%**	**Wed 8/31/16**	**Wed 3/24/21**	**Fri 4/23/21**	
1415	**2010**	**Remedial Optimization Work Plan**	**1191 days**	**44%**	**Wed 8/31/16**	**Wed 3/24/21**	**Fri 4/23/21**	
1416	2010	Prepare Working Copy of Remedial Optimization Work Plan	20 days	100%	Wed 8/31/16	Tue 9/27/16	Thu 9/29/16	906FS+60 days
1417	2010	AF Review of Working Copy of Remedial Optimization Work Plan	21 days	100%	Wed 9/28/16	Wed 10/26/16	Mon 10/31/16	1416
1418	2010	Resolve AF Comments on Working Copy of Remedial Optimization Work Plan	28 days	100%	Thu 10/27/16	Mon 12/5/16	Mon 11/14/16	1417
1419	2010	AF Approval of Draft Remedial Optimization Work Plan	13 days	100%	Mon 12/5/16	Thu 12/22/16	Mon 11/14/16	1418
1420	2010	Submit Draft Remedial Optimization Work Plan to Regulators	4 days	100%	Fri 12/23/16	Wed 12/28/16	Mon 11/21/16	1419
1421	2010	Regulator Review of Remedial Optimization Work Plan	30 days	100%	Thu 12/29/16	Wed 2/8/17	Mon 1/2/17	1420
1422	2010	RTC Regulator Comments on Draft Remedial Optimization Work Plan	5 days	100%	Thu 2/9/17	Wed 2/15/17	Mon 1/9/17	1421
1423	2010	Prepare Final Remedial Optimization Work Plan	5 days	100%	Thu 2/16/17	Wed 2/22/17	Mon 1/16/17	1422



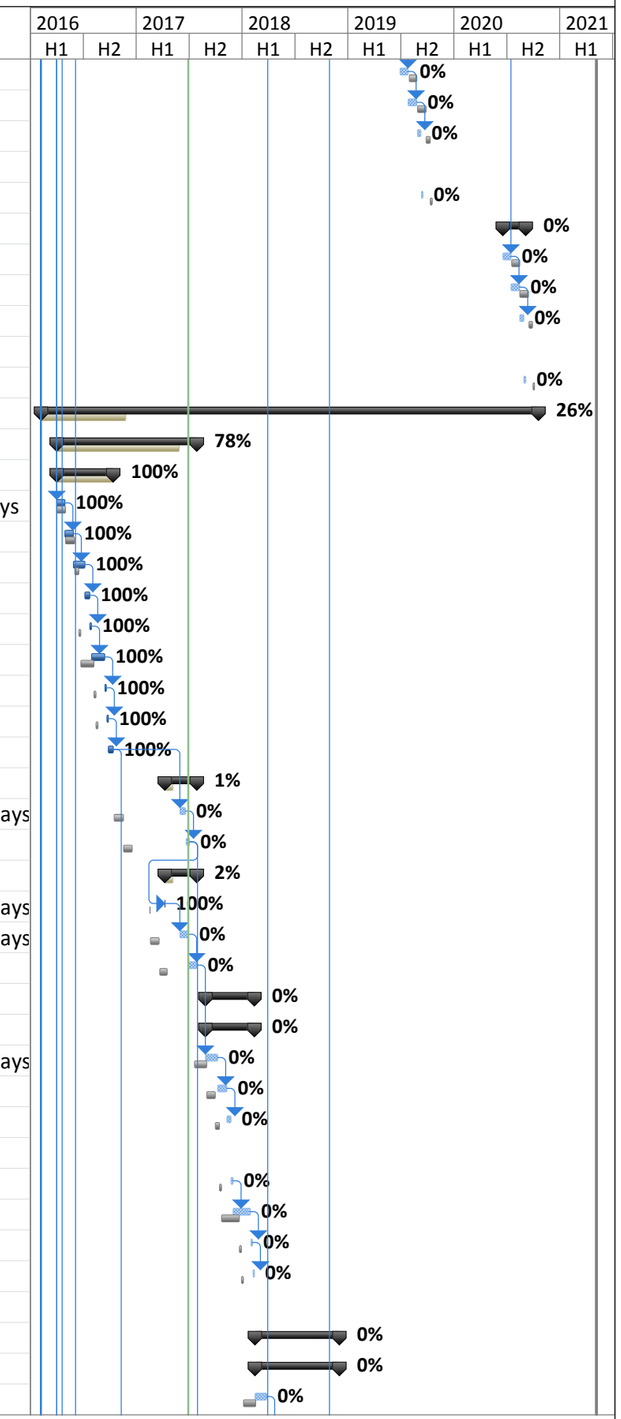
ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
1424	2010	Regulator Approval of Final Remedial Optimization Work Plan	0 days	100%	Mon 3/13/17	Mon 3/13/17	Wed 2/15/17	1423FS+22 days
1425	**2010**	**Remedial Optimization Field Implementation**	**70 days**	**0%**	**Sat 4/1/17**	**Fri 7/7/17**	**Fri 3/31/17**	
1426	2010	Mobilize and Obtain UIC and Dig Permits	60 days	0%	Sat 4/1/17	Fri 6/23/17	Fri 3/17/17	1424
1427	2010	Perform ISEB Injections	10 days	0%	Mon 6/26/17	Fri 7/7/17	Fri 3/31/17	1426
1428		**OES Report**	**92 days**	**0%**	**Tue 11/17/20**	**Wed 3/24/21**	**Fri 4/23/21**	
1429	2014	Prepare Working Copy of OES Report	45 days	0%	Tue 11/17/20	Mon 1/18/21	Wed 2/17/21	1490
1430	2014	Air Force Review of Working Copy	22 days	0%	Tue 1/19/21	Wed 2/17/21	Fri 3/19/21	1429
1431	2014	Resolve AF Comments on Working Copy AF	15 days	0%	Thu 2/18/21	Wed 3/10/21	Fri 4/9/21	1430
1432	2014	AF Review and Approval of RTCs	10 days	0%	Thu 3/11/21	Wed 3/24/21	Fri 4/23/21	1431
1433	2014	AF Approval of Final OES Report; Distribute Report to Regulators-Achieve O	0 days	0%	Wed 3/24/21	Wed 3/24/21	Fri 4/23/21	1432
1434		**Decision Document**	**120 days**	**0%**	**Mon 3/4/19**	**Fri 8/16/19**	**Mon 7/8/19**	
1435		**Explanation of Significant Difference (ESD)**	**120 days**	**0%**	**Mon 3/4/19**	**Fri 8/16/19**	**Mon 7/8/19**	
1436	2012	Prepare Working Copy of ESD	30 days	0%	Mon 3/4/19	Fri 4/12/19	Tue 3/5/19	1427FS+90 days
1437	2012	AF Review of Working Copy of ESD	22 days	0%	Mon 4/15/19	Tue 5/14/19	Thu 4/4/19	1436
1438	2012	Resolve AF Comments on Working Copy of ESD	10 days	0%	Wed 5/15/19	Tue 5/28/19	Thu 4/18/19	1437
1439	2012	AF Approval of Draft ESD	0 days	0%	Tue 5/28/19	Tue 5/28/19	Thu 4/18/19	1438
1440	2012	Submit Draft Annual Report to ESD	5 days	0%	Wed 5/29/19	Tue 6/4/19	Thu 4/25/19	1439
1441	2012	Regulator Review of Draft ESD	60 edays	0%	Tue 6/4/19	Sat 8/3/19	Mon 6/24/19	1440
1442	2013	RTC Regulator Comments on Draft ESD	5 days	0%	Mon 8/5/19	Fri 8/9/19	Mon 7/1/19	1441
1443	2013	Prepare Final ESD	5 days	0%	Mon 8/12/19	Fri 8/16/19	Mon 7/8/19	1442
1444	2013	Regulator Approval of Final ESD	0 days	0%	Fri 8/16/19	Fri 8/16/19	Mon 7/8/19	1443
1445		**Remedial Action -Operation (RA-O)**	**1195 days**	**36%**	**Fri 7/8/16**	**Thu 2/4/21**	**Mon 3/8/21**	
1446	**2010**	**LTM Work Plan**	**90 days**	**100%**	**Fri 7/8/16**	**Thu 11/10/16**	**Mon 12/5/16**	
1447	2010	Prepare Working Copy of LTM Work Plan	28 days	100%	Fri 7/8/16	Tue 8/16/16	Thu 8/18/16	906FS+22 days
1448	2010	AF Review of Working Copy of LTM Work Plan	11 days	100%	Wed 8/17/16	Wed 8/31/16	Mon 9/19/16	1447
1449	2010	Resolve AF Comments on Working Copy of LTM Work Plan	2 days	100%	Thu 9/1/16	Fri 9/2/16	Mon 10/3/16	1448
1450	2010	AF Approval of Draft LTM Work Plan	6 days	100%	Fri 9/2/16	Mon 9/12/16	Mon 10/3/16	1449
1451	2010	Submit Draft LTM Work Plan to Regulators	3 days	100%	Tue 9/13/16	Thu 9/15/16	Mon 10/10/16	1450
1452	2010	Regulator Review of Draft LTM Work Plan	32 days	100%	Fri 9/16/16	on 10/31/16	Mon 11/21/16	1451
1453	2010	RTC Regulator Comments on Draft LTM Work Plan	0 days	100%	Mon 10/31/16	on 10/31/16	Mon 11/28/16	1452
1454	2010	Prepare Final LTM Work Plan	7 days	100%	Mon 10/31/16	Wed 11/9/16	Mon 12/5/16	1453
1455	2010	Regulator Approval of Final LTM Work Plan	1 day	100%	Wed 11/9/16	hu 11/10/16	Mon 12/5/16	1454
1456	**2010**	**LUC Inspections**	**1098 days**	**20%**	**Thu 9/8/16**	**on 11/23/20**	**Mon 10/19/20**	
1457	2010	Annual LUC Inspection-2016	5 days	100%	Thu 9/8/16	Wed 9/14/16	Mon 10/10/16	1455SS-45 days
1458	2011	Annual LUC Inspection-2017	5 days	0%	Tue 10/31/17	Mon 11/6/17	Mon 10/2/17	1457FS+250 day
1459	2012	Annual LUC Inspection-2018	5 days	0%	Tue 11/6/18	on 11/12/18	Mon 10/8/18	1458FS+260 day
1460	2013	Annual LUC Inspection-2019	5 days	0%	Tue 11/12/19	on 11/18/19	Mon 10/14/19	1459FS+260 day
1461	2014	Annual LUC Inspection-2020	5 days	0%	Tue 11/17/20	on 11/23/20	Mon 10/19/20	1460FS+260 day
1462	**2010**	**Annual Groundwater Sampling and Well Inspections Year 2016**	**36 days**	**100%**	**Tue 11/15/16**	**Tue 1/3/17**	**Wed 3/1/17**	
1463	2010	Groundwater gaging and Well inspection	2 days	100%	Fri 11/18/16	on 11/21/16	Wed 12/14/16	1455FS+5 days
1464	2010	Sampling	0 days	100%	Tue 11/15/16	hu 11/17/16	Mon 12/19/16	1463
1465	2010	Offsite Analysis of Groundwater Samples	19 days	100%	Fri 11/18/16	ed 12/14/16	Mon 1/9/17	1464
1466	2010	Data Validation	0 days	100%	Wed 12/14/16	ed 12/14/16	Mon 1/30/17	1465
1467	2010	ERPIMS Submittal	14 days	100%	Thu 12/15/16	Tue 1/3/17	Wed 3/1/17	1466



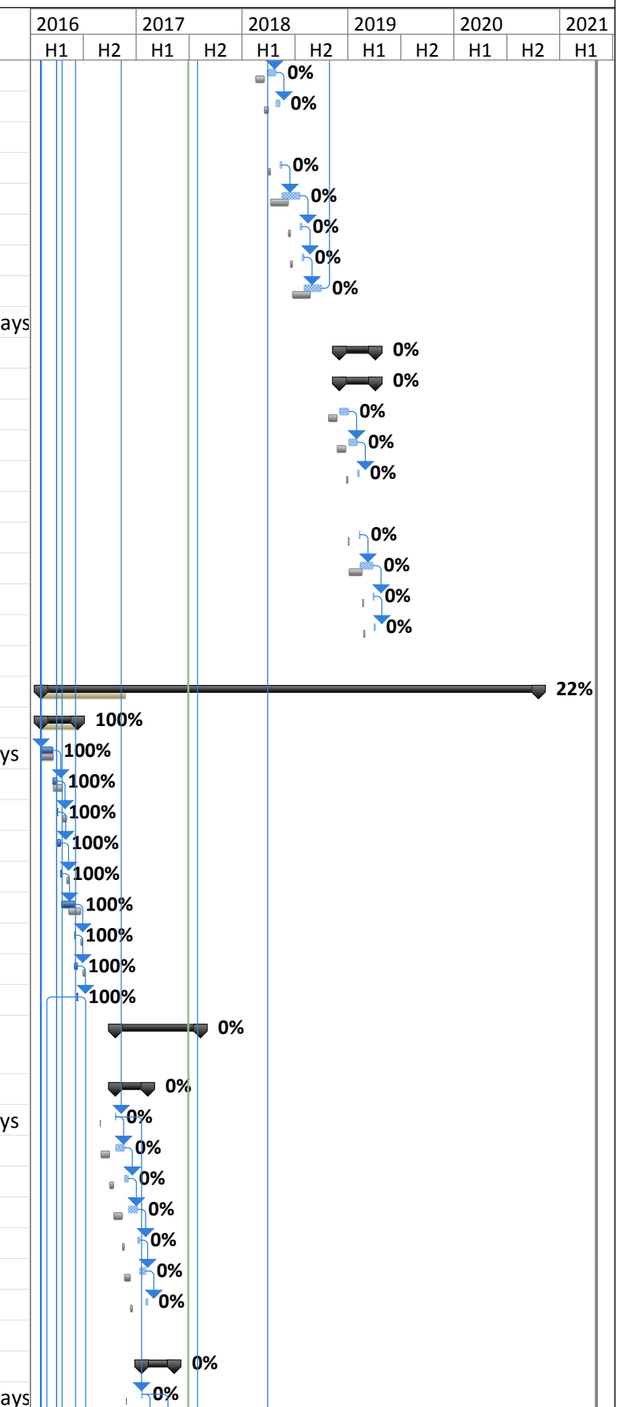
ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
1468	**2011**	**Annual Groundwater Sampling and Well Inspections Year 2017**	**93 days**	**0%**	**Wed 11/1/17**	**Fri 3/9/18**	**Tue 4/10/18**	
1469	2011	Groundwater gaging and Well inspection	2 days	0%	Wed 11/1/17	Thu 11/2/17	Mon 12/4/17	1470SS-2 days
1470	2011	Sampling	3 days	0%	Fri 11/3/17	Tue 11/7/17	Thu 12/7/17	1464FS+250 day
1471	2011	Offsite Analysis of Groundwater Samples	15 days	0%	Wed 11/8/17	ue 11/28/17	Thu 12/28/17	1470
1472	2011	Data Validation	15 days	0%	Wed 11/29/17	ue 12/19/17	Thu 1/18/18	1471
1473	2011	ERPIMS Submittal	22 days	0%	Thu 2/8/18	Fri 3/9/18	Tue 4/10/18	1470FS+66 days
1474	**2012**	**Annual Groundwater Sampling and Well Inspections Year 2018**	**93 days**	**0%**	**Mon 10/22/18**	**Ved 2/27/19**	**Fri 3/29/19**	
1475	2012	Groundwater gaging and Well inspection	2 days	0%	Mon 10/22/18	ue 10/23/18	Thu 11/22/18	1476SS-2 days
1476	2012	Sampling	3 days	0%	Wed 10/24/18	Fri 10/26/18	Tue 11/27/18	1470FS+250 day
1477	2012	Offsite Analysis of Groundwater Samples	15 days	0%	Mon 10/29/18	Fri 11/16/18	Tue 12/18/18	1476
1478	2012	Data Validation	15 days	0%	Mon 11/19/18	Fri 12/7/18	Tue 1/8/19	1477
1479	2012	ERPIMS Submittal	22 days	0%	Tue 1/29/19	Ved 2/27/19	Fri 3/29/19	1476FS+66 days
1480	**2013**	**Annual Groundwater Sampling and Well Inspections Year 2019**	**93 days**	**0%**	**Thu 10/10/19**	**Ion 2/17/20**	**Wed 3/18/20**	
1481	2013	Groundwater gaging and Well inspection	2 days	0%	Thu 10/10/19	Fri 10/11/19	Tue 11/12/19	1482SS-2 days
1482	2013	Sampling	3 days	0%	Mon 10/14/19	ed 10/16/19	Fri 11/15/19	1476FS+250 day
1483	2013	Offsite Analysis of Groundwater Samples	15 days	0%	Thu 10/17/19	Ved 11/6/19	Fri 12/6/19	1482
1484	2013	Data Validation	15 days	0%	Thu 11/7/19	ed 11/27/19	Fri 12/27/19	1483
1485	2013	ERPIMS Submittal	22 days	0%	Fri 1/17/20	Ion 2/17/20	Wed 3/18/20	1482FS+66 days
1486	**2014**	**Annual Groundwater Sampling and Well Inspections Year 2020**	**93 days**	**0%**	**Tue 9/29/20**	**Thu 2/4/21**	**Mon 3/8/21**	
1487	2014	Groundwater gaging and Well inspection	2 days	0%	Tue 9/29/20	Ved 9/30/20	Fri 10/30/20	1488SS-2 days
1488	2014	Sampling	3 days	0%	Thu 10/1/20	Ion 10/5/20	Wed 11/4/20	1482FS+250 day
1489	2014	Offsite Analysis of Groundwater Samples	15 days	0%	Tue 10/6/20	on 10/26/20	Wed 11/25/20	1488
1490	2014	Data Validation	15 days	0%	Tue 10/27/20	on 11/16/20	Wed 12/16/20	1489
1491	2014	ERPIMS Submittal	22 days	0%	Wed 1/6/21	Thu 2/4/21	Mon 3/8/21	1488FS+66 days
1492		**LTM Reporting**	**1080 days**	**38%**	**Thu 12/15/16**	**Wed 2/3/21**	**Fri 3/5/21**	
1493	**2010**	**Annual Report - Year 2016**	**119 days**	**100%**	**Thu 12/15/16**	**Tue 5/30/17**	**Wed 4/19/17**	
1494	2010	Prepare Working Copy of Annual Report	73 days	100%	Thu 12/15/16	Ion 3/27/17	Mon 2/27/17	1466
1495	2010	AF Review of Working Copy of Annual Report	18 days	100%	Tue 3/28/17	Fri 4/21/17	Wed 3/29/17	1494
1496	2010	Resolve AF Comments on Working Copy of Annual Report	3 days	100%	Mon 4/24/17	Ved 4/26/17	Wed 4/12/17	1495
1497	2010	AF Approval of Final Annual LTM Report-2016	21 days	100%	Wed 4/26/17	Thu 5/25/17	Wed 4/12/17	1496
1498	2010	Submit Final Annual Report to Regulators; AF Approval of ERPIMS Upload	24 days	100%	Thu 4/27/17	Tue 5/30/17	Wed 4/19/17	1497
1499	**2011**	**Annual Report - Year 2017**	**57 days**	**0%**	**Wed 12/20/17**	**Thu 3/8/18**	**Mon 4/9/18**	
1500	2011	Prepare Working Copy of Annual Report	20 days	0%	Wed 12/20/17	Tue 1/16/18	Thu 2/15/18	1472
1501	2011	AF Review of Working Copy of Annual Report	22 days	0%	Wed 1/17/18	Thu 2/15/18	Mon 3/19/18	1500
1502	2011	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Fri 2/16/18	Thu 3/1/18	Mon 4/2/18	1501
1503	2011	AF Approval of Final Annual LTM Report-2017	0 days	0%	Thu 3/1/18	Thu 3/1/18	Mon 4/2/18	1502
1504	2011	Submit Final Annual Report to Regulators; AF Approval of ERPIMS Upload	5 days	0%	Fri 3/2/18	Thu 3/8/18	Mon 4/9/18	1503
1505	**2012**	**Annual Report - Year 2018**	**57 days**	**0%**	**Mon 12/10/18**	**Tue 2/26/19**	**Thu 3/28/19**	
1506	2012	Prepare Working Copy of Annual Report	20 days	0%	Mon 12/10/18	Fri 1/4/19	Tue 2/5/19	1478
1507	2012	AF Review of Working Copy of Annual Report	22 days	0%	Mon 1/7/19	Tue 2/5/19	Thu 3/7/19	1506
1508	2012	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Wed 2/6/19	Tue 2/19/19	Thu 3/21/19	1507
1509	2012	AF Approval of Final Annual LTM Report-2018	0 days	0%	Tue 2/19/19	Tue 2/19/19	Thu 3/21/19	1508
1510	2012	Submit Final Annual Report to Regulators; AF Approval of ERPIMS Upload	5 days	0%	Wed 2/20/19	Tue 2/26/19	Thu 3/28/19	1509
1511	**2013**	**Annual Report - Year 2019**	**57 days**	**0%**	**Thu 11/28/19**	**Fri 2/14/20**	**Tue 3/17/20**	



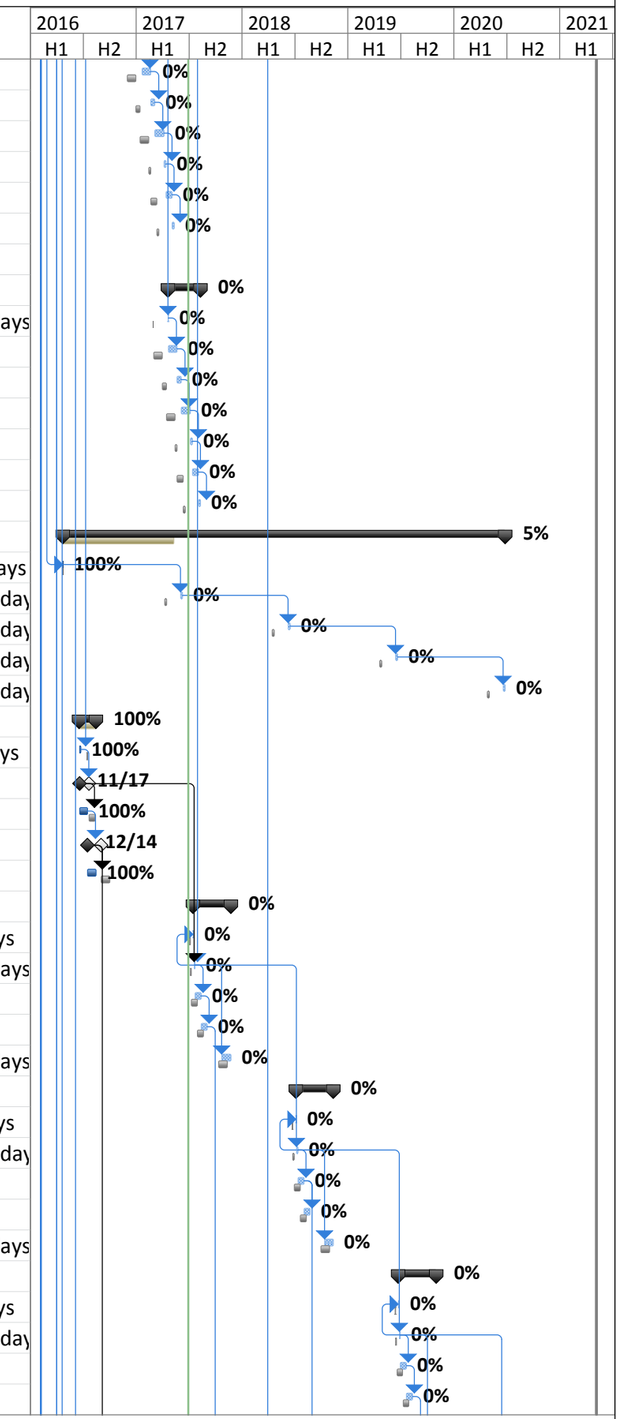
ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
1512	2013	Prepare Working Copy of Annual Report	20 days	0%	Thu 11/28/19	ed 12/25/19	Fri 1/24/20	1484
1513	2013	AF Review of Working Copy of Annual Report	22 days	0%	Thu 12/26/19	Fri 1/24/20	Tue 2/25/20	1512
1514	2013	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Mon 1/27/20	Fri 2/7/20	Tue 3/10/20	1513
1515	2013	AF Approval of Final Annual LTM Report-2019	0 days	0%	Fri 2/7/20	Fri 2/7/20	Tue 3/10/20	1514
1516	2013	Submit Final Annual Report to Regulators; AF Approval of ERPIMS Upload	5 days	0%	Mon 2/10/20	Fri 2/14/20	Tue 3/17/20	1515
1517	**2014**	**Annual Report - Year 2020**	**57 days**	**0%**	**Tue 11/17/20**	**Wed 2/3/21**	**Fri 3/5/21**	
1518	2014	Prepare Working Copy of Annual Report	20 days	0%	Tue 11/17/20	on 12/14/20	Wed 1/13/21	1490
1519	2014	AF Review of Working Copy of Annual Report	22 days	0%	Tue 12/15/20	Ved 1/13/21	Fri 2/12/21	1518
1520	2014	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Thu 1/14/21	Ved 1/27/21	Fri 2/26/21	1519
1521	2014	AF Approval of Final Annual Report-2020	0 days	0%	Wed 1/27/21	Ved 1/27/21	Fri 2/26/21	1520
1522	2014	Submit Final Annual Report to Regulators; AF Approval of ERPIMS Upload	5 days	0%	Thu 1/28/21	Wed 2/3/21	Fri 3/5/21	1521
1523		**RC Site SD052-02: Bldg. 775, Pump house 3 - Chlorinated Plume**	**1226 days**	**26%**	**Fri 7/8/16**	**Fri 3/19/21**	**Mon 3/8/21**	
1524		**Optimization via Pilot Study**	**345 days**	**78%**	**Wed 8/31/16**	**ue 12/26/17**	**Fri 9/15/17**	
1525	**2015**	**Remedial Optimization Work Plan**	**139 days**	**100%**	**Wed 8/31/16**	**Mon 3/13/17**	**Thu 1/19/17**	
1526	2015	Prepare Working Copy of Remedial Optimization Work Plan	20 days	100%	Wed 8/31/16	Tue 9/27/16	Thu 9/29/16	906FS+60 days
1527	2015	AF Review of Working Copy of Remedial Optimization Work Plan	21 days	100%	Wed 9/28/16	ed 10/26/16	Mon 10/31/16	1526
1528	2015	Resolve AF Comments on Working Copy of Remedial Optimization Work Plan	28 days	100%	Thu 10/27/16	Mon 12/5/16	Mon 11/14/16	1527
1529	2015	AF Approval of Draft Remedial Optimization Work Plan	13 days	100%	Mon 12/5/16	hu 12/22/16	Mon 11/14/16	1528
1530	2015	Submit Draft Remedial Optimization Work Plan to Regulators	4 days	100%	Fri 12/23/16	ed 12/28/16	Mon 11/21/16	1529
1531	2015	Regulator Review of Remedial Optimization Work Plan	45 edays	100%	Wed 12/28/16	Sat 2/11/17	Thu 1/5/17	1530
1532	2015	RTC Regulator Comments on Draft Remedial Optimization Work Plan	5 days	100%	Mon 2/13/17	Fri 2/17/17	Thu 1/12/17	1531
1533	2015	Prepare Final Remedial Optimization Work Plan	5 days	100%	Mon 2/20/17	Fri 2/24/17	Thu 1/19/17	1532
1534	2015	Regulator Approval of Final Remedial Optimization Work Plan	11 days	100%	Fri 2/24/17	Mon 3/13/17	Thu 1/19/17	1533
1535	**2015**	**Remedial Optimization Pilot Test**	**78 days**	**1%**	**Fri 9/8/17**	**ue 12/26/17**	**Fri 9/15/17**	
1536	2015	Mobilize and Obtain UIC and Dig Permits	15 days	0%	Mon 10/30/17	Fri 11/17/17	Mon 4/17/17	1534FS+22 days
1537	2015	Complete Pilot Study	10 days	0%	Mon 11/20/17	Fri 12/1/17	Wed 5/17/17	1536
1538	**2016**	**Remedial Optimization Field Implementation**	**78 days**	**2%**	**Fri 9/8/17**	**ue 12/26/17**	**Fri 9/15/17**	
1539	2016	Shut extraction system down	1 day	100%	Fri 9/8/17	Fri 9/8/17	Wed 7/19/17	1537FS+44 days
1540	2016	Mobilize and Obtain UIC and Dig Permits	22 days	0%	Mon 10/30/17	ue 11/28/17	Fri 8/18/17	1539FS+35 days
1541	2016	Complete Full Scale Injections	20 days	0%	Wed 11/29/17	ue 12/26/17	Fri 9/15/17	1540
1542	**2016**	**Feasibility Study**	**121 days**	**0%**	**Fri 1/26/18**	**Fri 7/13/18**	**Tue 6/5/18**	
1543	**2016**	**Focused Feasibility Study (FFS)**	**121 days**	**0%**	**Fri 1/26/18**	**Fri 7/13/18**	**Tue 6/5/18**	
1544	2016	Prepare Working Copy of FFS	30 days	0%	Fri 1/26/18	Thu 3/8/18	Mon 1/29/18	1541FS+22 days
1545	2016	AF Review of Working Copy of FFS	22 days	0%	Fri 3/9/18	Mon 4/9/18	Wed 2/28/18	1544
1546	2016	Resolve AF Comments on Working Copy of FFS	10 days	0%	Tue 4/10/18	Mon 4/23/18	Wed 3/14/18	1545
1547	2016	AF Approval of Draft FFS	0 days	0%	Mon 4/23/18	Mon 4/23/18	Wed 3/14/18	1546
1548	2016	Submit Draft Annual Report to FFS	5 days	0%	Tue 4/24/18	Mon 4/30/18	Wed 3/21/18	1547
1549	2016	Regulator Review of Draft FFS	44 days	0%	Tue 5/1/18	Fri 6/29/18	Tue 5/22/18	1548
1550	2016	RTC Regulator Comments on Draft FFS	5 days	0%	Mon 7/2/18	Fri 7/6/18	Tue 5/29/18	1549
1551	2016	Prepare Final FFS	5 days	0%	Mon 7/9/18	Fri 7/13/18	Tue 6/5/18	1550
1552	2016	Regulator Approval of Final FFS	0 days	0%	Fri 7/13/18	Fri 7/13/18	Tue 6/5/18	1551
1553		**Proposed Plan**	**209 days**	**0%**	**Mon 7/16/18**	**Thu 5/2/19**	**Mon 3/25/19**	
1554		**Proposed Plan**	**209 days**	**0%**	**Mon 7/16/18**	**Thu 5/2/19**	**Mon 3/25/19**	
1555	2016	Prepare Working Copy of Proposed Plan	30 days	0%	Mon 7/16/18	Fri 8/24/18	Tue 7/17/18	1552



ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
1556	2017	AF Review of Working Copy of Proposed Plan	22 days	0%	Mon 8/27/18	Tue 9/25/18	Thu 8/16/18	1555
1557	2017	Resolve AF Comments on Working Copy of Proposed Plan	10 days	0%	Wed 9/26/18	Tue 10/9/18	Thu 8/30/18	1556
1558	2017	AF Approval of Draft Proposed Plan	0 days	0%	Tue 10/9/18	Tue 10/9/18	Thu 8/30/18	1557
1559	2017	Submit Draft Annual Report to Proposed Plan	5 days	0%	Wed 10/10/18	ue 10/16/18	Thu 9/6/18	1558
1560	2017	Regulator Review of Draft Proposed Plan	44 days	0%	Wed 10/17/18	on 12/17/18	Wed 11/7/18	1559
1561	2017	RTC Regulator Comments on Draft Proposed Plan	5 days	0%	Tue 12/18/18	on 12/24/18	Wed 11/14/18	1560
1562	2017	Prepare Final Proposed Plan	5 days	0%	Tue 12/25/18	on 12/31/18	Wed 11/21/18	1561
1563	2017	Public Review, Meeting and Comment	44 days	0%	Tue 1/1/19	Fri 3/1/19	Tue 1/22/19	1562
1564	2017	Regulator Approval of Final Proposed Plan	0 days	0%	Thu 5/2/19	Thu 5/2/19	Mon 3/25/19	1563FS+44 days
1565		**Decision Document**	**88 days**	**0%**	**Fri 5/3/19**	**Tue 9/3/19**	**Mon 7/29/19**	
1566		**Prepare ESD**	**88 days**	**0%**	**Fri 5/3/19**	**Tue 9/3/19**	**Mon 7/29/19**	
1567	2018	Prepare Working Copy of ESD	22 days	0%	Fri 5/3/19	Mon 6/3/19	Wed 4/24/19	1564
1568	2018	AF Review of Working Copy of ESD	22 days	0%	Tue 6/4/19	Wed 7/3/19	Fri 5/24/19	1567
1569	2018	Resolve AF Comments on Working Copy of ESD	5 days	0%	Thu 7/4/19	Wed 7/10/19	Fri 5/31/19	1568
1570	2018	AF Approval of Draft ESD	0 days	0%	Wed 7/10/19	Wed 7/10/19	Fri 5/31/19	1569
1571	2018	Submit Draft ESD to Regulators	2 days	0%	Thu 7/11/19	Fri 7/12/19	Tue 6/4/19	1570
1572	2018	Regulator Review of Draft ESD	45 edays	0%	Fri 7/12/19	Mon 8/26/19	Fri 7/19/19	1571
1573	2018	RTC Regulator Comments on ESD	3 days	0%	Tue 8/27/19	Thu 8/29/19	Wed 7/24/19	1572
1574	2018	Prepare Final ESD	3 days	0%	Fri 8/30/19	Tue 9/3/19	Mon 7/29/19	1573
1575	2018	Regulator Approval of Final ESD	0 days	0%	Tue 9/3/19	Tue 9/3/19	Mon 7/29/19	1574
1576		**LTM**	**1226 days**	**22%**	**Fri 7/8/16**	**Fri 3/19/21**	**Mon 3/8/21**	
1577		**LTM Work Plan**	**90 days**	**100%**	**Fri 7/8/16**	**hu 11/10/16**	**Mon 12/5/16**	
1578	2015	Prepare Working Copy of LTM Work Plan	28 days	100%	Fri 7/8/16	Tue 8/16/16	Thu 8/18/16	906FS+22 days
1579	2015	AF Review of Working Copy of LTM Work Plan	11 days	100%	Wed 8/17/16	Wed 8/31/16	Mon 9/19/16	1578
1580	2015	Resolve AF Comments on Working Copy of LTM Work Plan	2 days	100%	Thu 9/1/16	Fri 9/2/16	Mon 10/3/16	1579
1581	2015	AF Approval of Draft LTM Work Plan	7 days	100%	Fri 9/2/16	Mon 9/12/16	Mon 10/3/16	1580
1582	2015	Submit Draft LTM Work Plan to Regulators	3 days	100%	Tue 9/13/16	Thu 9/15/16	Mon 10/10/16	1581
1583	2015	Regulator Review of Draft LTM Work Plan	32 days	100%	Fri 9/16/16	on 10/31/16	Mon 11/21/16	1582
1584	2015	RTC Regulator Comments on Draft LTM Work Plan	1 day	100%	Mon 10/31/16	on 10/31/16	Mon 11/28/16	1583
1585	2015	Prepare Final LTM Work Plan	8 days	100%	Mon 10/31/16	Wed 11/9/16	Mon 12/5/16	1584
1586	2015	Regulator Approval of Final LTM Work Plan	2 days	100%	Wed 11/9/16	hu 11/10/16	Mon 12/5/16	1585
1587	**2015**	**Quarterly O&M Sampling and Reporting (Contingent if system needs to be restarted)**	**210 days**	**0%**	**Tue 3/21/17**	**Mon 1/8/18**	**Thu 11/16/17**	
1588	**2015**	**Quarterly O&M Event-Q1 2017**	**80 days**	**0%**	**Tue 3/21/17**	**Mon 7/10/17**	**Thu 5/18/17**	
1589	2015	Quarterly O&M Sampling	1 day	0%	Tue 3/21/17	Tue 3/21/17	Fri 1/27/17	1534FS+5 days
1590	2015	Sample Analysis	22 days	0%	Wed 3/22/17	Thu 4/20/17	Tue 2/28/17	1589
1591	2015	Prepare Working Copy of O&M Report	10 days	0%	Fri 4/21/17	Thu 5/4/17	Tue 3/14/17	1590
1592	2015	Air Force Review of Working Copy	22 days	0%	Fri 5/5/17	Mon 6/5/17	Thu 4/13/17	1591
1593	2015	Resolve AF Comments on Working Copy AF	5 days	0%	Tue 6/6/17	Mon 6/12/17	Thu 4/20/17	1592
1594	2015	AF Review and Approval of RTCs	15 days	0%	Tue 6/13/17	Mon 7/3/17	Thu 5/11/17	1593
1595	2015	Prepare Final O&M Report	5 days	0%	Tue 7/4/17	Mon 7/10/17	Thu 5/18/17	1594
1596	2015	AF Approval of Final O&M Report for Q1 2017 and ERPIMS Upload	0 days	0%	Mon 7/10/17	Mon 7/10/17	Thu 5/18/17	1595
1597		**Quarterly O&M Event - Q2 2017**	**80 days**	**0%**	**Tue 6/20/17**	**Mon 10/9/17**	**Thu 8/17/17**	
1598	2015	Quarterly O&M Sampling	1 day	0%	Tue 6/20/17	Tue 6/20/17	Fri 4/28/17	1589FS+64 days

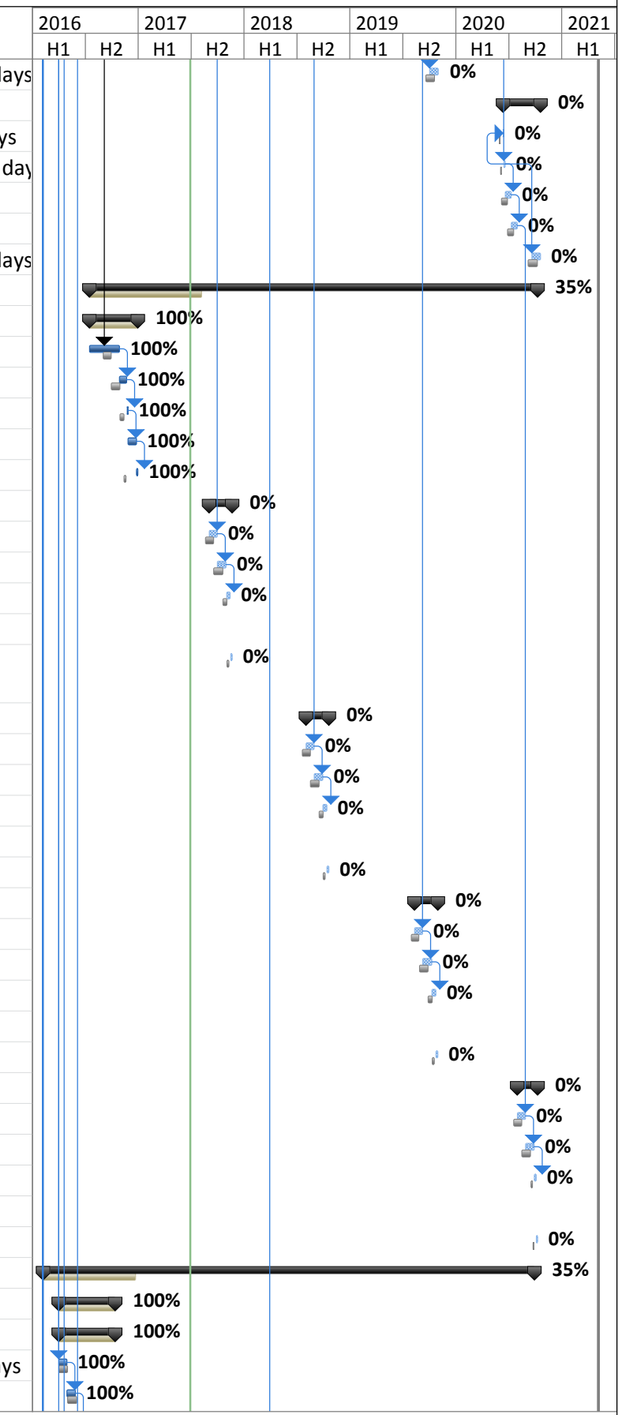


ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
1599	2015	Sample Analysis	22 days	0%	Wed 6/21/17	Thu 7/20/17	Tue 5/30/17	1598
1600	2015	Prepare Working Copy of O&M Report	10 days	0%	Fri 7/21/17	Thu 8/3/17	Tue 6/13/17	1599
1601	2015	Air Force Review of Working Copy	22 days	0%	Fri 8/4/17	Mon 9/4/17	Thu 7/13/17	1600
1602	2016	Resolve AF Comments on Working Copy AF	5 days	0%	Tue 9/5/17	Mon 9/11/17	Thu 7/20/17	1601
1603	2016	AF Review and Approval of RTCs	15 days	0%	Tue 9/12/17	Mon 10/2/17	Thu 8/10/17	1602
1604	2016	Prepare Final O&M Report	5 days	0%	Tue 10/3/17	Mon 10/9/17	Thu 8/17/17	1603
1605	2016	AF Approval of Final O&M Report for Q2 2017 and ERPIMS Upload	0 days	0%	Mon 10/9/17	Mon 10/9/17	Thu 8/17/17	1604
1606	**2016**	**Quarterly O&M Event- Q3 2017**	**80 days**	**0%**	**Tue 9/19/17**	**Mon 1/8/18**	**Thu 11/16/17**	
1607	2016	Quarterly O&M Sampling	1 day	0%	Tue 9/19/17	Tue 9/19/17	Fri 7/28/17	1598FS+64 days
1608	2016	Sample Analysis	22 days	0%	Wed 9/20/17	Thu 10/19/17	Tue 8/29/17	1607
1609	2016	Prepare Working Copy of O&M Report	10 days	0%	Fri 10/20/17	Thu 11/2/17	Tue 9/12/17	1608
1610	2016	Air Force Review of Working Copy	22 days	0%	Fri 11/3/17	Mon 12/4/17	Thu 10/12/17	1609
1611	2016	Resolve AF Comments on Working Copy AF	5 days	0%	Tue 12/5/17	on 12/11/17	Thu 10/19/17	1610
1612	2016	AF Review and Approval of RTCs	15 days	0%	Tue 12/12/17	Mon 1/1/18	Thu 11/9/17	1611
1613	2016	Prepare Final O&M Report	5 days	0%	Tue 1/2/18	Mon 1/8/18	Thu 11/16/17	1612
1615		**LUC Inspections**	**1090 days**	**5%**	**Wed 9/21/16**	**ue 11/24/20**	**Wed 9/30/20**	
1616	2015	Annual LUC Inspection-2016	1 day	100%	Wed 9/21/16	Wed 9/21/16	Wed 9/21/16	1586SS-90 days
1617	2016	Annual LUC Inspection-2017	5 days	0%	Wed 11/1/17	Tue 11/7/17	Wed 9/13/17	1616FS+250 day
1618	2017	Annual LUC Inspection-2018	5 days	0%	Wed 11/7/18	ue 11/13/18	Wed 9/19/18	1617FS+260 day
1619	2018	Annual LUC Inspection-2019	5 days	0%	Wed 11/13/19	ue 11/19/19	Wed 9/25/19	1618FS+260 day
1620	2019	Annual LUC Inspection-2020	5 days	0%	Wed 11/18/20	ue 11/24/20	Wed 9/30/20	1619FS+260 day
1621		**Annual Groundwater Sampling and Well Inspections Year 2016**	**42 days**	**100%**	**Wed 11/16/16**	**Thu 1/12/17**	**Wed 3/1/17**	
1622	2015	Groundwater gaging and Well inspection	2 days	100%	Fri 11/18/16	on 11/21/16	Wed 12/14/16	1586FS+5 days
1623	2015	Sampling	0 days	100%	Wed 11/16/16	hu 11/17/16	Mon 12/19/16	1622
1624	2015	Offsite Analysis of Groundwater Samples	19 days	100%	Fri 11/18/16	ed 12/14/16	Mon 1/9/17	1623
1625	2015	Data Validation	0 days	100%	Wed 12/14/16	ed 12/14/16	Mon 1/30/17	1624
1626	2015	ERPIMS Submittal	21 days	100%	Thu 12/15/16	Thu 1/12/17	Wed 3/1/17	1625
1627		**Annual Groundwater Sampling and Well Inspections Year 2017**	**93 days**	**0%**	**Thu 12/14/17**	**Mon 4/23/18**	**Tue 4/10/18**	
1628	2016	Groundwater gaging and Well inspection	2 days	0%	Thu 12/14/17	Fri 12/15/17	Mon 12/4/17	1629SS-2 days
1629	2016	Sampling	3 days	0%	Mon 12/18/17	ed 12/20/17	Thu 12/7/17	1537FS+10 days
1630	2016	Offsite Analysis of Groundwater Samples	15 days	0%	Thu 12/21/17	Wed 1/10/18	Thu 12/28/17	1629
1631	2016	Data Validation	15 days	0%	Thu 1/11/18	Wed 1/31/18	Thu 1/18/18	1630
1632	2016	ERPIMS Submittal	22 days	0%	Fri 3/23/18	Mon 4/23/18	Tue 4/10/18	1629FS+66 days
1633		**Annual Groundwater Sampling and Well Inspections Year 2018**	**93 days**	**0%**	**Tue 12/4/18**	**Thu 4/11/19**	**Fri 3/29/19**	
1634	2017	Groundwater gaging and Well inspection	2 days	0%	Tue 12/4/18	Wed 12/5/18	Thu 11/22/18	1635SS-2 days
1635	2017	Sampling	3 days	0%	Thu 12/6/18	on 12/10/18	Tue 11/27/18	1629FS+250 day
1636	2017	Offsite Analysis of Groundwater Samples	15 days	0%	Tue 12/11/18	on 12/31/18	Tue 12/18/18	1635
1637	2017	Data Validation	15 days	0%	Tue 1/1/19	Mon 1/21/19	Tue 1/8/19	1636
1638	2017	ERPIMS Submittal	22 days	0%	Wed 3/13/19	Thu 4/11/19	Fri 3/29/19	1635FS+66 days
1639		**Annual Groundwater Sampling and Well Inspections Year 2019**	**93 days**	**0%**	**Fri 11/22/19**	**Tue 3/31/20**	**Wed 3/18/20**	
1640	2018	Groundwater gaging and Well inspection	2 days	0%	Fri 11/22/19	on 11/25/19	Tue 11/12/19	1641SS-2 days
1641	2018	Sampling	3 days	0%	Tue 11/26/19	hu 11/28/19	Fri 11/15/19	1635FS+250 day
1642	2018	Offsite Analysis of Groundwater Samples	15 days	0%	Fri 11/29/19	hu 12/19/19	Fri 12/6/19	1641
1643	2018	Data Validation	15 days	0%	Fri 12/20/19	Thu 1/9/20	Fri 12/27/19	1642

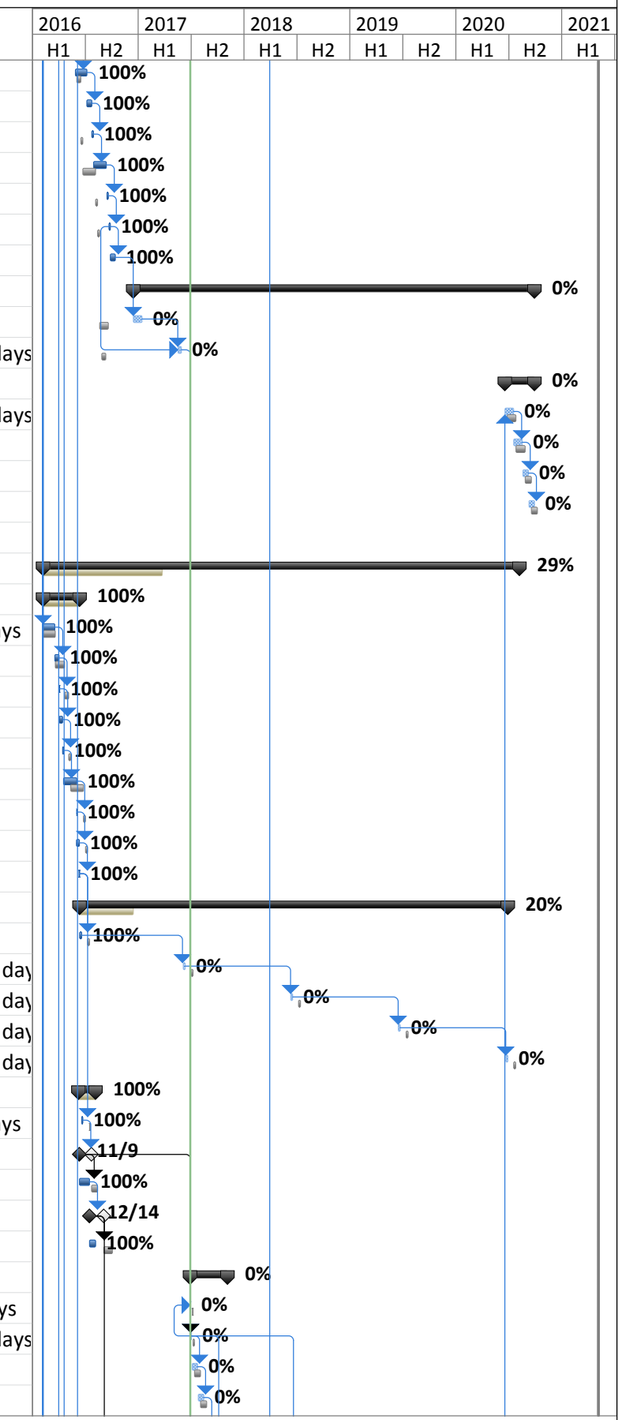


Appendix E. Project Schedule

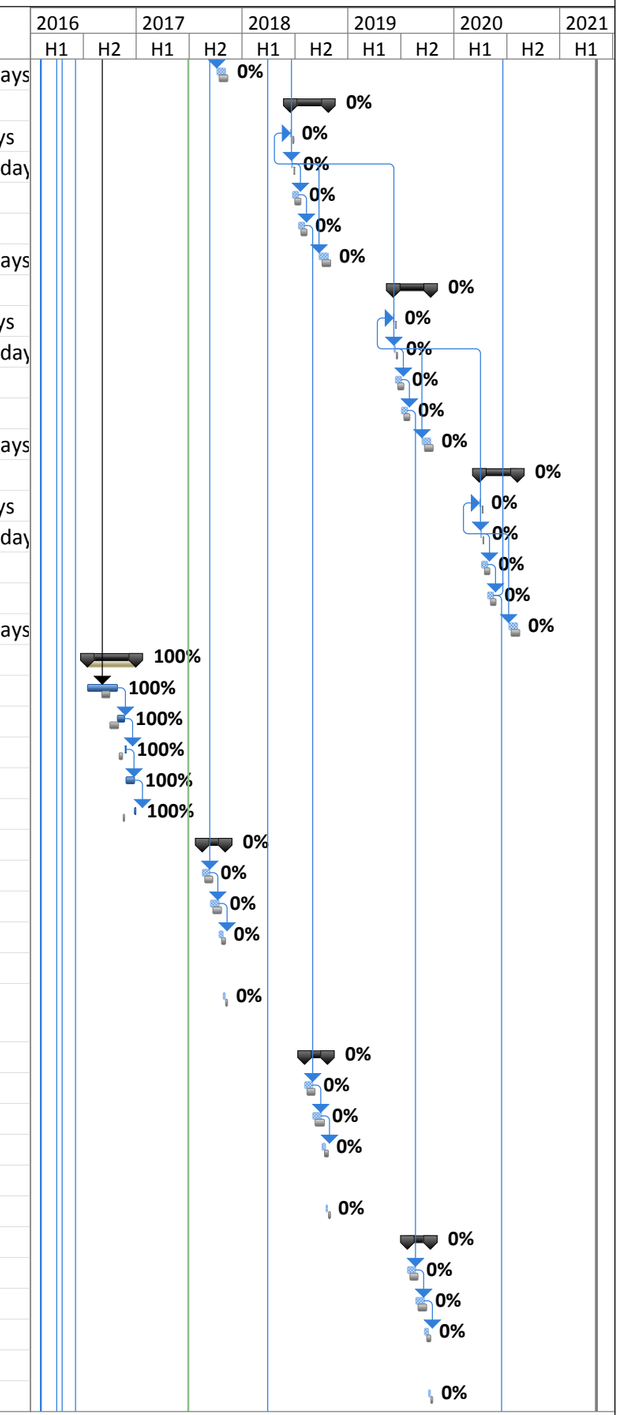
ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
1644	2018	ERPIMS Submittal	22 days	0%	Mon 3/2/20	Tue 3/31/20	Wed 3/18/20	1641FS+66 days
1645		**Annual Groundwater Sampling and Well Inspections Year 2020**	**93 days**	**0%**	**Wed 11/11/20**	**Fri 3/19/21**	**Mon 3/8/21**	
1646	2019	Groundwater gaging and Well inspection	2 days	0%	Wed 11/11/20	hu 11/12/20	Fri 10/30/20	1647SS-2 days
1647	2019	Sampling	3 days	0%	Fri 11/13/20	ue 11/17/20	Wed 11/4/20	1641FS+250 day
1648	2019	Offsite Analysis of Groundwater Samples	15 days	0%	Wed 11/18/20	Tue 12/8/20	Wed 11/25/20	1647
1649	2019	Data Validation	15 days	0%	Wed 12/9/20	ue 12/29/20	Wed 12/16/20	1648
1650	2019	ERPIMS Submittal	22 days	0%	Thu 2/18/21	Fri 3/19/21	Mon 3/8/21	1647FS+66 days
1652		**LTM Reporting**	**1104 days**	**35%**	**Thu 12/15/16**	**Tue 3/9/21**	**Wed 2/24/21**	
1653		**Annual Report - Year 2016**	**119 days**	**100%**	**Thu 12/15/16**	**Tue 5/30/17**	**Wed 4/19/17**	
1654	2015	Prepare Working Copy of Annual Report	73 days	100%	Thu 12/15/16	Mon 3/27/17	Mon 2/27/17	1625
1655	2015	AF Review of Working Copy of Annual Report	19 days	100%	Tue 3/28/17	Fri 4/21/17	Wed 3/29/17	1654
1656	2015	Resolve AF Comments on Working Copy of Annual Report	3 days	100%	Mon 4/24/17	Wed 4/26/17	Wed 4/12/17	1655
1657	2015	AF Approval of Final Annual LTM Report-2016	21 days	100%	Wed 4/26/17	Thu 5/25/17	Wed 4/12/17	1656
1658	2015	Submit Final Annual LTM Report to Regulators; AF Approval of ERPIMS Uplc	3 days	100%	Fri 5/26/17	Tue 5/30/17	Wed 4/19/17	1657
1659		**Annual Report - Year 2017**	**57 days**	**0%**	**Thu 2/1/18**	**Fri 4/20/18**	**Mon 4/9/18**	
1660	2016	Prepare Working Copy of Annual Report	20 days	0%	Thu 2/1/18	Wed 2/28/18	Thu 2/15/18	1631
1661	2016	AF Review of Working Copy of Annual Report	22 days	0%	Thu 3/1/18	Fri 3/30/18	Mon 3/19/18	1660
1662	2016	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Mon 4/2/18	Fri 4/13/18	Mon 4/2/18	1661
1663	2016	AF Approval of Draft Final LTM Report-2017	0 days	0%	Fri 4/13/18	Fri 4/13/18	Mon 4/2/18	1662
1664	2016	Submit Final Annual LTM Report to Regulators; AF Approval of ERPIMS Upload	5 days	0%	Mon 4/16/18	Fri 4/20/18	Mon 4/9/18	1663
1665		**Annual Report - Year 2018**	**57 days**	**0%**	**Tue 1/1/19**	**Wed 3/20/19**	**Thu 3/7/19**	
1666	2017	Prepare Working Copy of Annual Report	20 days	0%	Tue 1/1/19	Mon 1/28/19	Tue 1/15/19	1636
1667	2017	AF Review of Working Copy of Annual Report	22 days	0%	Tue 1/29/19	Wed 2/27/19	Thu 2/14/19	1666
1668	2017	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Thu 2/28/19	Wed 3/13/19	Thu 2/28/19	1667
1669	2017	AF Approval of Final Annual LTM Report-2018	0 days	0%	Wed 3/13/19	Wed 3/13/19	Thu 2/28/19	1668
1670	2017	Submit Final Annual LTM Report to Regulators; AF Approval of ERPIMS Uplc	5 days	0%	Thu 3/14/19	Wed 3/20/19	Thu 3/7/19	1669
1671		**Annual Report - Year 2019**	**57 days**	**0%**	**Fri 1/10/20**	**Mon 3/30/20**	**Tue 3/17/20**	
1672	2018	Prepare Working Copy of Annual Report	20 days	0%	Fri 1/10/20	Thu 2/6/20	Fri 1/24/20	1643,1651
1673	2018	AF Review of Working Copy of Annual Report	22 days	0%	Fri 2/7/20	Mon 3/9/20	Tue 2/25/20	1672
1674	2018	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Tue 3/10/20	Mon 3/23/20	Tue 3/10/20	1673
1675	2018	AF Approval of Final Annual LTM Report-2019	0 days	0%	Mon 3/23/20	Mon 3/23/20	Tue 3/10/20	1674
1676	2018	Submit Final Annual LTM Report to Regulators; AF Approval of ERPIMS Uplc	5 days	0%	Tue 3/24/20	Mon 3/30/20	Tue 3/17/20	1675
1677		**Annual Report - Year 2020**	**50 days**	**0%**	**Wed 12/30/20**	**Tue 3/9/21**	**Wed 2/24/21**	
1678	2019	Prepare Working Copy of Annual Report	20 days	0%	Wed 12/30/20	Tue 1/26/21	Wed 1/13/21	1649
1679	2019	AF Review of Working Copy of Annual Report	22 days	0%	Wed 1/27/21	Thu 2/25/21	Fri 2/12/21	1678
1680	2019	Resolve AF Comments on Working Copy of Annual Report	5 days	0%	Fri 2/26/21	Thu 3/4/21	Fri 2/19/21	1679
1681	2019	AF Approval of Final Annual LTM Report-Achieve RC	0 days	0%	Thu 3/4/21	Thu 3/4/21	Fri 2/19/21	1680
1682	2019	Submit Final Annual LTM Report to Regulators; AF Approval of ERPIMS Uplc	3 days	0%	Fri 3/5/21	Tue 3/9/21	Wed 2/24/21	1681
1683		**OES Site SD052-04: Landfill 6 Chlorinated Plume**	**1211 days**	**35%**	**Fri 7/8/16**	**Fri 2/26/21**	**Mon 3/8/21**	
1684		**Optimization**	**139 days**	**100%**	**Wed 8/31/16**	**Mon 3/13/17**	**Wed 1/18/17**	
1685	**2010**	**Remedial Optimization Work Plan**	**139 days**	**100%**	**Wed 8/31/16**	**Mon 3/13/17**	**Wed 1/18/17**	
1686	2010	Prepare Working Copy of Remedial Optimization Work Plan	20 days	100%	Wed 8/31/16	Tue 9/27/16	Thu 9/29/16	906FS+60 days
1687	2010	AF Review of Working Copy of Remedial Optimization Work Plan	21 days	100%	Wed 9/28/16	ed 10/26/16	Mon 10/31/16	1686



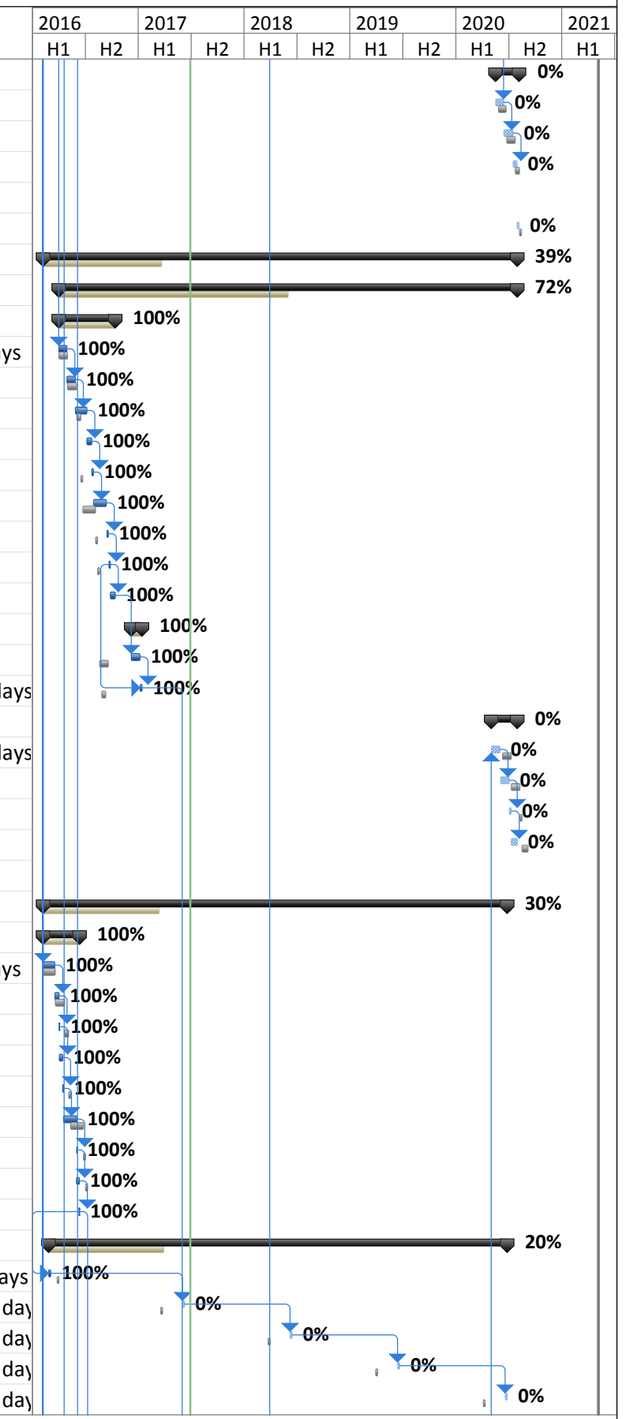
ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
1688	2010	Resolve AF Comments on Working Copy of Remedial Optimization Work Plan	28 days	100%	Thu 10/27/16	Mon 12/5/16	Mon 11/14/16	1687
1689	2010	AF Approval of Draft Remedial Optimization Work Plan	13 days	100%	Mon 12/5/16	Thu 12/22/16	Mon 11/14/16	1688
1690	2010	Submit Draft Remedial Optimization Work Plan to Regulators	4 days	100%	Fri 12/23/16	Wed 12/28/16	Mon 11/21/16	1689
1691	2010	Regulator Review of Remedial Optimization Work Plan	32 days	100%	Thu 12/29/16	Fri 2/10/17	Wed 1/4/17	1690
1692	2010	RTC Regulator Comments on Draft Remedial Optimization Work Plan	5 days	100%	Mon 2/13/17	Fri 2/17/17	Wed 1/11/17	1691
1693	2010	Prepare Final Remedial Optimization Work Plan	5 days	100%	Mon 2/20/17	Fri 2/24/17	Wed 1/18/17	1692
1694	2010	Regulator Approval of Final Remedial Optimization Work Plan	11 days	100%	Fri 2/24/17	Mon 3/13/17	Wed 1/18/17	1693
1695	**2010**	**Remedial Optimization Field Implementation**	**990 days**	**0%**	**Mon 5/15/17**	**Fri 2/26/21**	**Mon 3/8/21**	
1696	2010	Mobilize and Obtain UIC and Dig Permits	22 days	0%	Mon 5/15/17	Tue 6/13/17	Fri 2/17/17	1694
1697	2010	Perform ISEB Injections	10 days	0%	Mon 10/16/17	Fri 10/27/17	Wed 2/8/17	1693SS+10 days
1698	**2014**	**OES Report**	**74 days**	**0%**	**Tue 11/17/20**	**Fri 2/26/21**	**Mon 3/8/21**	
1699	2014	Prepare Working Copy of OES Report	22 days	0%	Tue 11/17/20	Wed 12/16/20	Thu 12/24/20	1749FS+22 days
1700	2014	Air Force Review of Working Copy	22 days	0%	Thu 12/17/20	Fri 1/15/21	Mon 1/25/21	1699
1701	2014	Resolve AF Comments on Working Copy AF	15 days	0%	Mon 1/18/21	Fri 2/5/21	Mon 2/15/21	1700
1702	2014	AF Review and Approval of RTCs	15 days	0%	Mon 2/8/21	Fri 2/26/21	Mon 3/8/21	1701
1703	2014	AF Approval of Final OES Report; Distribute Report to Regulators-Achieve OES	0 days	0%	Fri 2/26/21	Fri 2/26/21	Mon 3/8/21	1702
1704		**RA-O**	**1173 days**	**29%**	**Fri 7/8/16**	**Tue 1/5/21**	**Wed 1/13/21**	
1705	**2010**	**LTM Work Plan**	**90 days**	**100%**	**Fri 7/8/16**	**Thu 11/10/16**	**Wed 12/7/16**	
1706	2010	Prepare Working Copy of LTM Work Plan	28 days	100%	Fri 7/8/16	Tue 8/16/16	Thu 8/18/16	906FS+22 days
1707	2010	AF Review of Working Copy of LTM Work Plan	11 days	100%	Wed 8/17/16	Wed 8/31/16	Mon 9/19/16	1706
1708	2010	Resolve AF Comments on Working Copy of LTM Work Plan	2 days	100%	Thu 9/1/16	Fri 9/2/16	Mon 10/3/16	1707
1709	2010	AF Approval of Draft LTM Work Plan	7 days	100%	Fri 9/2/16	Mon 9/12/16	Mon 10/3/16	1708
1710	2010	Submit Draft LTM Work Plan to Regulators	3 days	100%	Tue 9/13/16	Thu 9/15/16	Mon 10/10/16	1709
1711	2010	Regulator Review of Draft LTM Work Plan	32 days	100%	Fri 9/16/16	Mon 10/31/16	Wed 11/23/16	1710
1712	2010	RTC Regulator Comments on Draft LTM Work Plan	1 day	100%	Mon 10/31/16	Mon 10/31/16	Wed 11/30/16	1711
1713	2010	Prepare Final LTM Work Plan	8 days	100%	Mon 10/31/16	Wed 11/9/16	Wed 12/7/16	1712
1714	2010	Regulator Approval of Final LTM Work Plan	2 days	100%	Wed 11/9/16	Thu 11/10/16	Wed 12/7/16	1713
1715		**LUC Inspections**	**1055 days**	**20%**	**Fri 11/11/16**	**Thu 11/26/20**	**Wed 12/23/20**	
1716	2010	Annual LUC Inspection-2016	5 days	100%	Fri 11/11/16	Thu 11/17/16	Wed 12/14/16	1714
1717	2011	Annual LUC Inspection-2017	5 days	0%	Wed 11/1/17	Thu 11/9/17	Wed 12/6/17	1716FS+250 day
1718	2012	Annual LUC Inspection-2018	5 days	0%	Fri 11/9/18	Thu 11/15/18	Wed 12/12/18	1717FS+260 day
1719	2013	Annual LUC Inspection-2019	5 days	0%	Fri 11/15/19	Thu 11/21/19	Wed 12/18/19	1718FS+260 day
1720	2014	Annual LUC Inspection-2020	5 days	0%	Fri 11/20/20	Thu 11/26/20	Wed 12/23/20	1719FS+260 day
1721		**Annual Groundwater Sampling and Well Inspections Year 1**	**43 days**	**100%**	**Mon 11/7/16**	**Wed 1/4/17**	**Fri 3/3/17**	
1722	2010	Groundwater gaging and Well inspection	2 days	100%	Fri 11/18/16	Mon 11/21/16	Fri 12/16/16	1714FS+5 days
1723	2010	Sampling	0 days	100%	Mon 11/7/16	Wed 11/9/16	Wed 12/21/16	1722
1724	2010	Offsite Analysis of Groundwater Samples	25 days	100%	Thu 11/10/16	Wed 12/14/16	Wed 1/11/17	1723
1725	2010	Data Validation	0 days	100%	Wed 12/14/16	Wed 12/14/16	Wed 2/1/17	1724
1726	2010	ERPIMS Submittal	15 days	100%	Thu 12/15/16	Wed 1/4/17	Fri 3/3/17	1725
1727		**Annual Groundwater Sampling and Well Inspections Year 2**	**93 days**	**0%**	**Mon 11/27/17**	**Wed 4/4/18**	**Thu 4/12/18**	
1728	2011	Groundwater gaging and Well inspection	2 days	0%	Mon 11/27/17	Tue 11/28/17	Wed 12/6/17	1729SS-2 days
1729	2011	Sampling	3 days	0%	Wed 11/29/17	Fri 12/1/17	Mon 12/11/17	1697FS+22 days
1730	2011	Offsite Analysis of Groundwater Samples	15 days	0%	Mon 12/4/17	Fri 12/22/17	Mon 1/1/18	1729
1731	2011	Data Validation	15 days	0%	Mon 12/25/17	Fri 1/12/18	Mon 1/22/18	1730



ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
1732	2011	ERPIMS Submittal	22 days	0%	Tue 3/6/18	Wed 4/4/18	Thu 4/12/18	1729FS+66 days
1733		**Annual Groundwater Sampling and Well Inspections Year 3**	**93 days**	**0%**	**Thu 11/15/18**	**Mon 3/25/19**	**Tue 4/2/19**	
1734	2012	Groundwater gaging and Well inspection	2 days	0%	Thu 11/15/18	Fri 11/16/18	Mon 11/26/18	1735SS-2 days
1735	2012	Sampling	3 days	0%	Mon 11/19/18	ed 11/21/18	Thu 11/29/18	1729FS+250 day
1736	2012	Offsite Analysis of Groundwater Samples	15 days	0%	Thu 11/22/18	ed 12/12/18	Thu 12/20/18	1735
1737	2012	Data Validation	15 days	0%	Thu 12/13/18	Wed 1/2/19	Thu 1/10/19	1736
1738	2012	ERPIMS Submittal	22 days	0%	Fri 2/22/19	Mon 3/25/19	Tue 4/2/19	1735FS+66 days
1739		**Annual Groundwater Sampling and Well Inspections Year 4**	**93 days**	**0%**	**Tue 11/5/19**	**Thu 3/12/20**	**Fri 3/20/20**	
1740	2013	Groundwater gaging and Well inspection	2 days	0%	Tue 11/5/19	Wed 11/6/19	Thu 11/14/19	1741SS-2 days
1741	2013	Sampling	3 days	0%	Thu 11/7/19	on 11/11/19	Tue 11/19/19	1735FS+250 day
1742	2013	Offsite Analysis of Groundwater Samples	15 days	0%	Tue 11/12/19	Mon 12/2/19	Tue 12/10/19	1741
1743	2013	Data Validation	15 days	0%	Tue 12/3/19	on 12/23/19	Tue 12/31/19	1742
1744	2013	ERPIMS Submittal	22 days	0%	Wed 2/12/20	Thu 3/12/20	Fri 3/20/20	1741FS+66 days
1745		**Annual Groundwater Sampling and Well Inspections Year 5**	**93 days**	**0%**	**Fri 8/28/20**	**Tue 1/5/21**	**Wed 1/13/21**	
1746	2014	Groundwater gaging and Well inspection	2 days	0%	Fri 8/28/20	Mon 8/31/20	Tue 9/8/20	1747SS-2 days
1747	2014	Sampling	3 days	0%	Tue 9/1/20	Thu 9/3/20	Fri 9/11/20	1741FS+210 day
1748	2014	Offsite Analysis of Groundwater Samples	15 days	0%	Fri 9/4/20	Thu 9/24/20	Fri 10/2/20	1747
1749	2014	Data Validation	15 days	0%	Fri 9/25/20	hu 10/15/20	Fri 10/23/20	1748
1750	2014	ERPIMS Submittal	22 days	0%	Mon 12/7/20	Tue 1/5/21	Wed 1/13/21	1747FS+66 days
1752		**Annual Report - Year 2016**	**119 days**	**100%**	**Thu 12/15/16**	**Tue 5/30/17**	**Fri 4/21/17**	
1753	2010	Prepare Working Copy of Annual Report	73 days	100%	Thu 12/15/16	Mon 3/27/17	Wed 3/1/17	1725
1754	2010	AF Review of Working Copy of Annual Report	19 days	100%	Tue 3/28/17	Fri 4/21/17	Fri 3/31/17	1753
1755	2010	Resolve AF Comments on Working Copy of Annual Report	3 days	100%	Mon 4/24/17	Wed 4/26/17	Fri 4/14/17	1754
1756	2010	AF Approval of Final Annual LTM Report-2016	21 days	100%	Wed 4/26/17	Thu 5/25/17	Fri 4/14/17	1755
1757	2010	Submit Final Annual LTM Report to Regulators; AF Approval of ERPIMS Upload	3 days	100%	Fri 5/26/17	Tue 5/30/17	Fri 4/21/17	1756
1758		**Annual Report - Year 2017**	**57 days**	**0%**	**Mon 1/15/18**	**Tue 4/3/18**	**Wed 4/11/18**	
1759	2011	Prepare Working Copy of Annual Report	20 days	0%	Mon 1/15/18	Fri 2/9/18	Mon 2/19/18	1731
1760	2011	AF Review of Working Copy of Annual Report	22 days	0%	Mon 2/12/18	Tue 3/13/18	Wed 3/21/18	1759
1761	2011	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Wed 3/14/18	Tue 3/27/18	Wed 4/4/18	1760
1762	2011	AF Approval of Final Annual LTM Report-2017	0 days	0%	Tue 3/27/18	Tue 3/27/18	Wed 4/4/18	1761
1763	2011	Submit Final Annual LTM Report to Regulators; AF Approval of ERPIMS Upload	5 days	0%	Wed 3/28/18	Tue 4/3/18	Wed 4/11/18	1762
1764		**Annual Report - Year 2018**	**57 days**	**0%**	**Thu 1/3/19**	**Fri 3/22/19**	**Mon 4/1/19**	
1765	2012	Prepare Working Copy of Annual Report	20 days	0%	Thu 1/3/19	Wed 1/30/19	Thu 2/7/19	1737
1766	2012	AF Review of Working Copy of Annual Report	22 days	0%	Thu 1/31/19	Fri 3/1/19	Mon 3/11/19	1765
1767	2012	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Mon 3/4/19	Fri 3/15/19	Mon 3/25/19	1766
1768	2012	AF Approval of Final Annual LTM Report-2018	0 days	0%	Fri 3/15/19	Fri 3/15/19	Mon 3/25/19	1767
1769	2012	Submit Final Annual LTM Report to Regulators; AF Approval of ERPIMS Upload	5 days	0%	Mon 3/18/19	Fri 3/22/19	Mon 4/1/19	1768
1770		**Annual Report - Year 2019**	**57 days**	**0%**	**Tue 12/24/19**	**Wed 3/11/20**	**Thu 3/19/20**	
1771	2013	Prepare Working Copy of Annual Report	20 days	0%	Tue 12/24/19	Mon 1/20/20	Tue 1/28/20	1743,1751
1772	2013	AF Review of Working Copy of Annual Report	22 days	0%	Tue 1/21/20	Wed 2/19/20	Thu 2/27/20	1771
1773	2013	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Thu 2/20/20	Wed 3/4/20	Thu 3/12/20	1772
1774	2013	AF Approval of Final Annual LTM Report-2019	0 days	0%	Wed 3/4/20	Wed 3/4/20	Thu 3/12/20	1773
1775	2013	Submit Final Annual LTM Report to Regulators; AF Approval of ERPIMS Upload	5 days	0%	Thu 3/5/20	Wed 3/11/20	Thu 3/19/20	1774

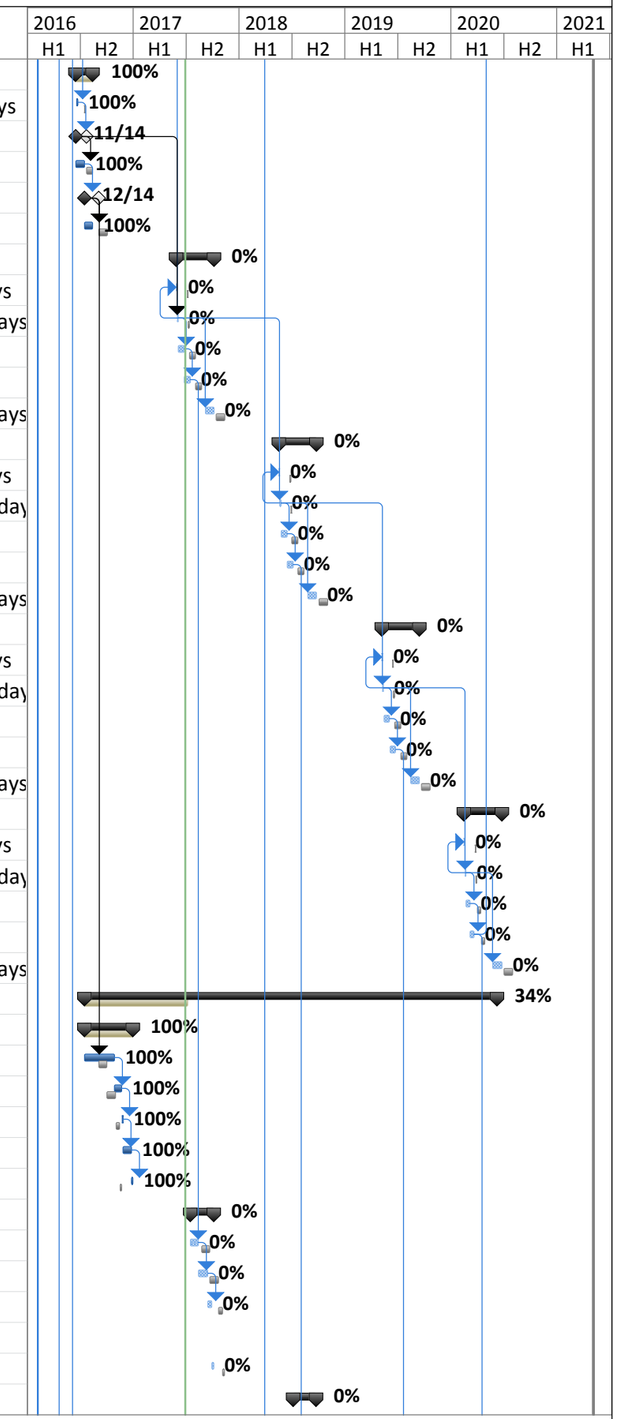


ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
1776		**Annual Report - Year 2020**	**57 days**	**0%**	**Fri 10/16/20**	**Mon 1/4/21**	**Tue 1/12/21**	
1777	2014	Prepare Working Copy of Annual Report	20 days	0%	Fri 10/16/20	hu 11/12/20	Fri 11/20/20	1749
1778	2014	AF Review of Working Copy of Annual Report	22 days	0%	Fri 11/13/20	on 12/14/20	Tue 12/22/20	1777
1779	2014	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Tue 12/15/20	on 12/28/20	Tue 1/5/21	1778
1780	2014	AF Approval of Final Annual Report-2020	0 days	0%	Mon 12/28/20	on 12/28/20	Tue 1/5/21	1779
1781	2014	Submit Final Annual LTM Report to Regulators; AF Approval of ERPIMS Upload	5 days	0%	Tue 12/29/20	Mon 1/4/21	Tue 1/12/21	1780
1782		**OES Site SD052-05: Bldg. 817 Chlorinated Plume**	**1168 days**	**39%**	**Fri 7/8/16**	**ue 12/29/20**	**Thu 2/4/21**	
1783		**Optimization**	**1130 days**	**72%**	**Wed 8/31/16**	**ue 12/29/20**	**Thu 2/4/21**	
1784	**2010**	**Remedial Optimization Work Plan**	**139 days**	**100%**	**Wed 8/31/16**	**Mon 3/13/17**	**Wed 1/18/17**	
1785	2010	Prepare Working Copy of Remedial Optimization Work Plan	20 days	100%	Wed 8/31/16	Tue 9/27/16	Thu 9/29/16	906FS+60 days
1786	2010	AF Review of Working Copy of Remedial Optimization Work Plan	21 days	100%	Wed 9/28/16	ed 10/26/16	Mon 10/31/16	1785
1787	2010	Resolve AF Comments on Working Copy of Remedial Optimization Work Plan	28 days	100%	Thu 10/27/16	Mon 12/5/16	Mon 11/14/16	1786
1788	2010	AF Approval of Draft Remedial Optimization Work Plan	13 days	100%	Mon 12/5/16	hu 12/22/16	Mon 11/14/16	1787
1789	2010	Submit Draft Remedial Optimization Work Plan to Regulators	4 days	100%	Fri 12/23/16	ed 12/28/16	Mon 11/21/16	1788
1790	2010	Regulator Review of Remedial Optimization Work Plan	32 days	100%	Thu 12/29/16	Fri 2/10/17	Wed 1/4/17	1789
1791	2010	RTC Regulator Comments on Draft Remedial Optimization Work Plan	5 days	100%	Mon 2/13/17	Fri 2/17/17	Wed 1/11/17	1790
1792	2010	Prepare Final Remedial Optimization Work Plan	5 days	100%	Mon 2/20/17	Fri 2/24/17	Wed 1/18/17	1791
1793	2010	Regulator Approval of Final Remedial Optimization Work Plan	11 days	100%	Fri 2/24/17	Mon 3/13/17	Wed 1/18/17	1792
1794	**2010**	**Remedial Optimization Field Implementation**	**27 days**	**100%**	**Mon 5/8/17**	**Tue 6/13/17**	**Fri 2/17/17**	
1795	2010	Mobilize and Obtain UIC and Dig Permits	22 days	100%	Mon 5/8/17	Tue 6/6/17	Fri 2/17/17	1793
1796	2010	Perform ISEB Injections	5 days	100%	Wed 6/7/17	Tue 6/13/17	Wed 2/8/17	1792SS+10 days
1797	**2014**	**OES Report**	**64 days**	**0%**	**Thu 10/1/20**	**ue 12/29/20**	**Thu 2/4/21**	
1798	2014	Prepare Working Copy of OES Report	22 days	0%	Thu 10/1/20	Fri 10/30/20	Tue 12/8/20	1848FS+30 days
1799	2014	Air Force Review of Working Copy	22 days	0%	Mon 11/2/20	Tue 12/1/20	Thu 1/7/21	1798
1800	2014	Resolve AF Comments on Working Copy AF	5 days	0%	Wed 12/2/20	Tue 12/8/20	Thu 1/14/21	1799
1801	2014	AF Review and Approval of RTCs	15 days	0%	Wed 12/9/20	ue 12/29/20	Thu 2/4/21	1800
1802	2014	AF Approval of Final OES Report; Distribute Report to Regulators-Achieve OES	0 days	0%	Tue 12/29/20	ue 12/29/20	Thu 2/4/21	1801
1803		**RA-O**	**1143 days**	**30%**	**Fri 7/8/16**	**ue 11/24/20**	**Wed 12/30/20**	
1804	**2010**	**LTM Work Plan**	**90 days**	**100%**	**Fri 7/8/16**	**hu 11/10/16**	**Wed 12/7/16**	
1805	2010	Prepare Working Copy of LTM Work Plan	28 days	100%	Fri 7/8/16	Tue 8/16/16	Thu 8/18/16	906FS+22 days
1806	2010	AF Review of Working Copy of LTM Work Plan	11 days	100%	Wed 8/17/16	Wed 8/31/16	Mon 9/19/16	1805
1807	2010	Resolve AF Comments on Working Copy of LTM Work Plan	2 days	100%	Thu 9/1/16	Fri 9/2/16	Mon 10/3/16	1806
1808	2010	AF Approval of Draft LTM Work Plan	7 days	100%	Fri 9/2/16	Mon 9/12/16	Mon 10/3/16	1807
1809	2010	Submit Draft LTM Work Plan to Regulators	3 days	100%	Tue 9/13/16	Thu 9/15/16	Mon 10/10/16	1808
1810	2010	Regulator Review of Draft LTM Work Plan	32 days	100%	Fri 9/16/16	on 10/31/16	Wed 11/23/16	1809
1811	2010	RTC Regulator Comments on Draft LTM Work Plan	1 day	100%	Mon 10/31/16	on 10/31/16	Wed 11/30/16	1810
1812	2010	Prepare Final LTM Work Plan	8 days	100%	Mon 10/31/16	Wed 11/9/16	Wed 12/7/16	1811
1813	2010	Regulator Approval of Final LTM Work Plan	2 days	100%	Wed 11/9/16	hu 11/10/16	Wed 12/7/16	1812
1814		**LUC Inspections**	**1130 days**	**20%**	**Wed 7/27/16**	**ue 11/24/20**	**Wed 9/9/20**	
1815	2010	Annual LUC Inspection-2016	5 days	100%	Wed 7/27/16	Tue 8/2/16	Wed 8/31/16	1813SS-75 days
1816	2011	Annual LUC Inspection-2017	5 days	0%	Wed 11/1/17	Tue 11/7/17	Wed 8/23/17	1815FS+250 day
1817	2012	Annual LUC Inspection-2018	5 days	0%	Wed 11/7/18	ue 11/13/18	Wed 8/29/18	1816FS+260 day
1818	2013	Annual LUC Inspection-2019	5 days	0%	Wed 11/13/19	ue 11/19/19	Wed 9/4/19	1817FS+260 day
1819	2014	Annual LUC Inspection-2020	5 days	0%	Wed 11/18/20	ue 11/24/20	Wed 9/9/20	1818FS+260 day

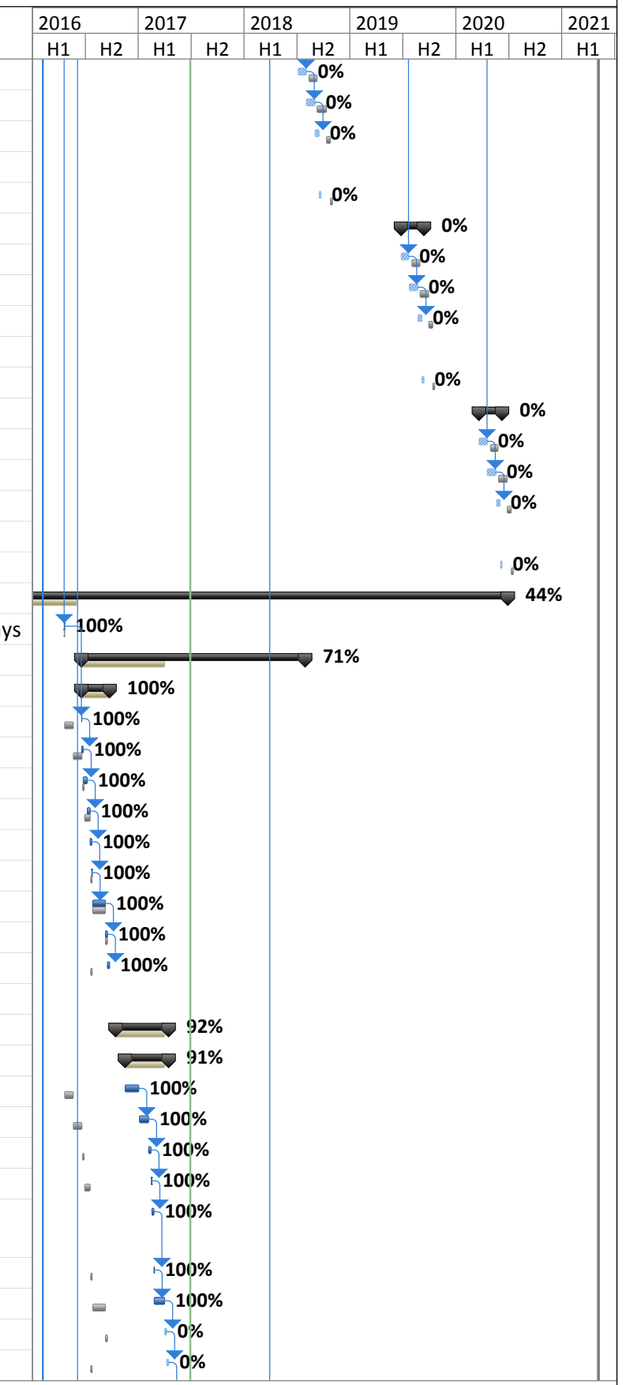


Appendix E. Project Schedule

ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
1820		**Annual Groundwater Sampling and Well Inspections Year 1**	**43 days**	**100%**	**Mon 11/14/16**	**Wed 1/11/17**	**Fri 3/3/17**	
1821	2010	Groundwater gaging and Well inspection	2 days	100%	Fri 11/18/16	Mon 11/21/16	Fri 12/16/16	1813FS+5 days
1822	2010	Sampling	0 days	100%	Mon 11/14/16	Mon 11/14/16	Wed 12/21/16	1821
1823	2010	Offsite Analysis of Groundwater Samples	22 days	100%	Tue 11/15/16	Wed 12/14/16	Wed 1/11/17	1822
1824	2010	Data Validation	0 days	100%	Wed 12/14/16	Wed 12/14/16	Wed 2/1/17	1823
1825	2010	ERPIMS Submittal	20 days	100%	Thu 12/15/16	Wed 1/11/17	Fri 3/3/17	1824
1826		**Annual Groundwater Sampling and Well Inspections Year 2**	**93 days**	**0%**	**Fri 10/27/17**	**Tue 3/6/18**	**Thu 4/12/18**	
1827	2011	Groundwater gaging and Well inspection	2 days	0%	Fri 10/27/17	Mon 10/30/17	Wed 12/6/17	1828SS-2 days
1828	2011	Sampling	3 days	0%	Tue 10/31/17	Thu 11/2/17	Mon 12/11/17	1796FS+22 days
1829	2011	Offsite Analysis of Groundwater Samples	15 days	0%	Fri 11/3/17	Thu 11/23/17	Mon 1/1/18	1828
1830	2011	Data Validation	15 days	0%	Fri 11/24/17	Thu 12/14/17	Mon 1/22/18	1829
1831	2011	ERPIMS Submittal	22 days	0%	Mon 2/5/18	Tue 3/6/18	Thu 4/12/18	1828FS+66 days
1832		**Annual Groundwater Sampling and Well Inspections Year 3**	**93 days**	**0%**	**Wed 10/17/18**	**Fri 2/22/19**	**Tue 4/2/19**	
1833	2012	Groundwater gaging and Well inspection	2 days	0%	Wed 10/17/18	Thu 10/18/18	Mon 11/26/18	1834SS-2 days
1834	2012	Sampling	3 days	0%	Fri 10/19/18	Tue 10/23/18	Thu 11/29/18	1828FS+250 day
1835	2012	Offsite Analysis of Groundwater Samples	15 days	0%	Wed 10/24/18	Tue 11/13/18	Thu 12/20/18	1834
1836	2012	Data Validation	15 days	0%	Wed 11/14/18	Tue 12/4/18	Thu 1/10/19	1835
1837	2012	ERPIMS Submittal	22 days	0%	Thu 1/24/19	Fri 2/22/19	Tue 4/2/19	1834FS+66 days
1838		**Annual Groundwater Sampling and Well Inspections Year 4**	**93 days**	**0%**	**Mon 10/7/19**	**Wed 2/12/20**	**Fri 3/20/20**	
1839	2013	Groundwater gaging and Well inspection	2 days	0%	Mon 10/7/19	Tue 10/8/19	Thu 11/14/19	1840SS-2 days
1840	2013	Sampling	3 days	0%	Wed 10/9/19	Fri 10/11/19	Tue 11/19/19	1834FS+250 day
1841	2013	Offsite Analysis of Groundwater Samples	15 days	0%	Mon 10/14/19	Fri 11/1/19	Tue 12/10/19	1840
1842	2013	Data Validation	15 days	0%	Mon 11/4/19	Fri 11/22/19	Tue 12/31/19	1841
1843	2013	ERPIMS Submittal	22 days	0%	Tue 1/14/20	Wed 2/12/20	Fri 3/20/20	1840FS+66 days
1844		**Annual Groundwater Sampling and Well Inspections Year 5**	**93 days**	**0%**	**Thu 7/16/20**	**Mon 11/23/20**	**Wed 12/30/20**	
1845	2014	Groundwater gaging and Well inspection	2 days	0%	Thu 7/16/20	Fri 7/17/20	Tue 8/25/20	1846SS-2 days
1846	2014	Sampling	3 days	0%	Mon 7/20/20	Wed 7/22/20	Fri 8/28/20	1840FS+200 day
1847	2014	Offsite Analysis of Groundwater Samples	10 days	0%	Thu 7/23/20	Wed 8/5/20	Fri 9/11/20	1846
1848	2014	Data Validation	10 days	0%	Thu 8/6/20	Wed 8/19/20	Fri 9/25/20	1847
1849	2014	ERPIMS Submittal	22 days	0%	Fri 10/23/20	Mon 11/23/20	Wed 12/30/20	1846FS+66 days
1851		**LTM Reporting**	**1017 days**	**34%**	**Thu 12/15/16**	**Fri 11/6/20**	**Tue 12/15/20**	
1852		**Annual Report - Year 2016**	**119 days**	**100%**	**Thu 12/15/16**	**Tue 5/30/17**	**Fri 4/21/17**	
1853	2010	Prepare Working Copy of Annual Report	73 days	100%	Thu 12/15/16	Mon 3/27/17	Wed 3/1/17	1824
1854	2010	AF Review of Working Copy of Annual Report	19 days	100%	Tue 3/28/17	Fri 4/21/17	Fri 3/31/17	1853
1855	2010	Resolve AF Comments on Working Copy of Annual Report	3 days	100%	Mon 4/24/17	Wed 4/26/17	Fri 4/14/17	1854
1856	2010	AF Approval of Final Annual LTM Report	21 days	100%	Wed 4/26/17	Thu 5/25/17	Fri 4/14/17	1855
1857	2010	Submit Final Annual Report to Regulators; AF Approval of ERPIMS	3 days	100%	Fri 5/26/17	Tue 5/30/17	Fri 4/21/17	1856
1858		**Annual Report - Year 2017**	**57 days**	**0%**	**Fri 12/15/17**	**Mon 3/5/18**	**Wed 4/11/18**	
1859	2011	Prepare Working Copy of Annual Report	20 days	0%	Fri 12/15/17	Thu 1/11/18	Mon 2/19/18	1830
1860	2011	AF Review of Working Copy of Annual Report	22 days	0%	Fri 1/12/18	Mon 2/12/18	Wed 3/21/18	1859
1861	2011	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Tue 2/13/18	Mon 2/26/18	Wed 4/4/18	1860
1862	2011	AF Approval of Final Annual LTM Report	0 days	0%	Mon 2/26/18	Mon 2/26/18	Wed 4/4/18	1861
1863	2011	Submit Final Annual Report to Regulators;AF Approval of ERPIMS	5 days	0%	Tue 2/27/18	Mon 3/5/18	Wed 4/11/18	1862
1864		**Annual Report - Year 2018**	**57 days**	**0%**	**Wed 12/5/18**	**Thu 2/21/19**	**Mon 4/1/19**	

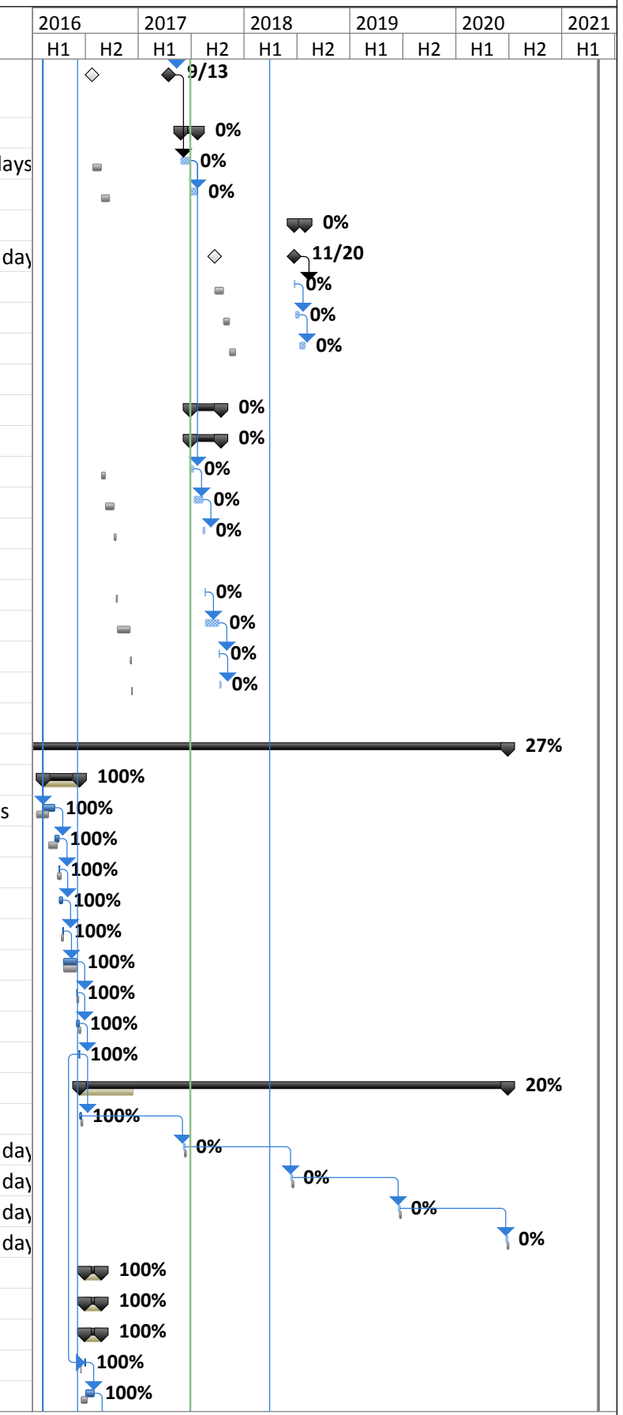


ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
1865	2012	Prepare Working Copy of Annual Report	20 days	0%	Wed 12/5/18	Tue 1/1/19	Thu 2/7/19	1836
1866	2012	AF Review of Working Copy of Annual Report	22 days	0%	Wed 1/2/19	Thu 1/31/19	Mon 3/11/19	1865
1867	2012	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Fri 2/1/19	Thu 2/14/19	Mon 3/25/19	1866
1868	2012	AF Approval of Final Annual LTM Report	0 days	0%	Thu 2/14/19	Thu 2/14/19	Mon 3/25/19	1867
1869	2012	Submit Final Annual Report to Regulators; AF Approval of ERPIMS	5 days	0%	Fri 2/15/19	Thu 2/21/19	Mon 4/1/19	1868
1870		**Annual Report - Year 2019**	**57 days**	**0%**	**Mon 11/25/19**	**Tue 2/11/20**	**Thu 3/19/20**	
1871	2013	Prepare Working Copy of Annual Report	20 days	0%	Mon 11/25/19	Fri 12/20/19	Tue 1/28/20	1842,1850
1872	2013	AF Review of Working Copy of Annual Report	22 days	0%	Mon 12/23/19	Tue 1/21/20	Thu 2/27/20	1871
1873	2013	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Wed 1/22/20	Tue 2/4/20	Thu 3/12/20	1872
1874	2013	AF Approval of Final Annual LTM Report	0 days	0%	Tue 2/4/20	Tue 2/4/20	Thu 3/12/20	1873
1875	2013	Submit Final Annual Report to Regulators; AF Approval of ERPIMS	5 days	0%	Wed 2/5/20	Tue 2/11/20	Thu 3/19/20	1874
1876		**Annual Report - Year 2020**	**57 days**	**0%**	**Thu 8/20/20**	**Fri 11/6/20**	**Tue 12/15/20**	
1877	2014	Prepare Working Copy of Annual Report	20 days	0%	Thu 8/20/20	Wed 9/16/20	Fri 10/23/20	1848
1878	2014	AF Review of Working Copy of Annual Report	22 days	0%	Thu 9/17/20	Fri 10/16/20	Tue 11/24/20	1877
1879	2014	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Mon 10/19/20	Fri 10/30/20	Tue 12/8/20	1878
1880	2014	AF Approval of Final Annual Report	0 days	0%	Fri 10/30/20	Fri 10/30/20	Tue 12/8/20	1879
1881	2014	Submit Final Annual Report to Regulators;AF Approval of ERPIMS	5 days	0%	Mon 11/2/20	Fri 11/6/20	Tue 12/15/20	1880
1882		**OES Site SD052-SVI**	**1392 days**	**44%**	**Wed 7/29/15**	**hu 11/26/20**	**Mon 11/30/20**	
1883	2010	Draft ROD to Regulators	1 day	100%	Mon 9/19/16	Mon 9/19/16	Mon 9/19/16	906FS+73 days
1884		**Optimization**	**552 days**	**71%**	**Thu 11/17/16**	**Fri 12/28/18**	**Wed 5/2/18**	
1885		**Optimization Plan**	**69 days**	**100%**	**Thu 11/17/16**	**Tue 2/21/17**	**Tue 2/14/17**	
1886	2010	Prepare Working Copy of Optimization Plan	1 day	100%	Thu 11/17/16	hu 11/17/16	Wed 10/19/16	1883
1887	2010	Air Force Review of Working Copy	3 days	100%	Fri 11/18/16	ue 11/22/16	Fri 11/18/16	1886
1888	2010	Resolve AF Comments on Working Copy AF	10 days	100%	Wed 11/23/16	Tue 12/6/16	Fri 11/25/16	1887
1889	2010	AF Review and Approval of RTCs	8 days	100%	Wed 12/7/16	Fri 12/16/16	Fri 12/16/16	1888
1890	2010	AF Approval of Draft Optimization Plan	4 days	100%	Fri 12/16/16	hu 12/22/16	Fri 12/16/16	1889
1891	2010	Submit Draft Optimization Plan to Regulators	1 day	100%	Fri 12/23/16	Fri 12/23/16	Fri 12/23/16	1890
1892	2010	Regulator Review of Draft Optimization Plan	32 days	100%	Mon 12/26/16	Tue 2/7/17	Tue 2/7/17	1891
1893	2010	Resolve Regulator Comments on Draft Optimization Plan	5 days	100%	Wed 2/8/17	Tue 2/14/17	Tue 2/14/17	1892
1894	2010	Prepare Final Optimization Plan	5 days	100%	Wed 2/15/17	Tue 2/21/17	Fri 12/23/16	1893
1895	2010	AF Approval of Final Optimization Plan	0 days	100%	Tue 2/21/17	Tue 2/21/17	Fri 12/23/16	1894
1896		**Request for Optimization**	**131 days**	**92%**	**Wed 3/15/17**	**Wed 9/13/17**	**NA**	
1901		**Technical Memorandum Summarizing Optimization Plan and Rationale**	**108 days**	**91%**	**Mon 4/17/17**	**Wed 9/13/17**	**Tue 2/14/17**	
1902	2010	Prepare Working Copy of Technical Memorandum	35 days	100%	Mon 4/17/17	Fri 6/2/17	Wed 10/19/16	1899
1903	2010	Air Force Review of Working Copy	24 days	100%	Mon 6/5/17	Thu 7/6/17	Fri 11/18/16	1902
1904	2010	Resolve AF Comments on Working Copy AF	6 days	100%	Fri 7/7/17	Fri 7/14/17	Fri 11/25/16	1903
1905	2010	AF Review and Approval of RTCs	1 day	100%	Mon 7/17/17	Mon 7/17/17	Fri 12/16/16	1904
1906	2010	AF Approval of Draft Technical Memorandum for Optimization and Rationale	5 days	100%	Tue 7/18/17	Mon 7/24/17	Fri 12/16/16	1905
1907	2010	Submit Draft Optimization Plan to Regulators	1 day	100%	Tue 7/25/17	Tue 7/25/17	Fri 12/23/16	1906
1908	2010	Regulator Review of Draft Optimization Plan	26 days	100%	Wed 7/26/17	Wed 8/30/17	Tue 2/7/17	1907
1909	2010	Resolve Regulator Comments on Draft Optimization Plan	5 days	0%	Thu 8/31/17	Wed 9/6/17	Tue 2/14/17	1908
1910	2010	Prepare Final Optimization Plan	5 days	0%	Thu 9/7/17	Wed 9/13/17	Fri 12/23/16	1909

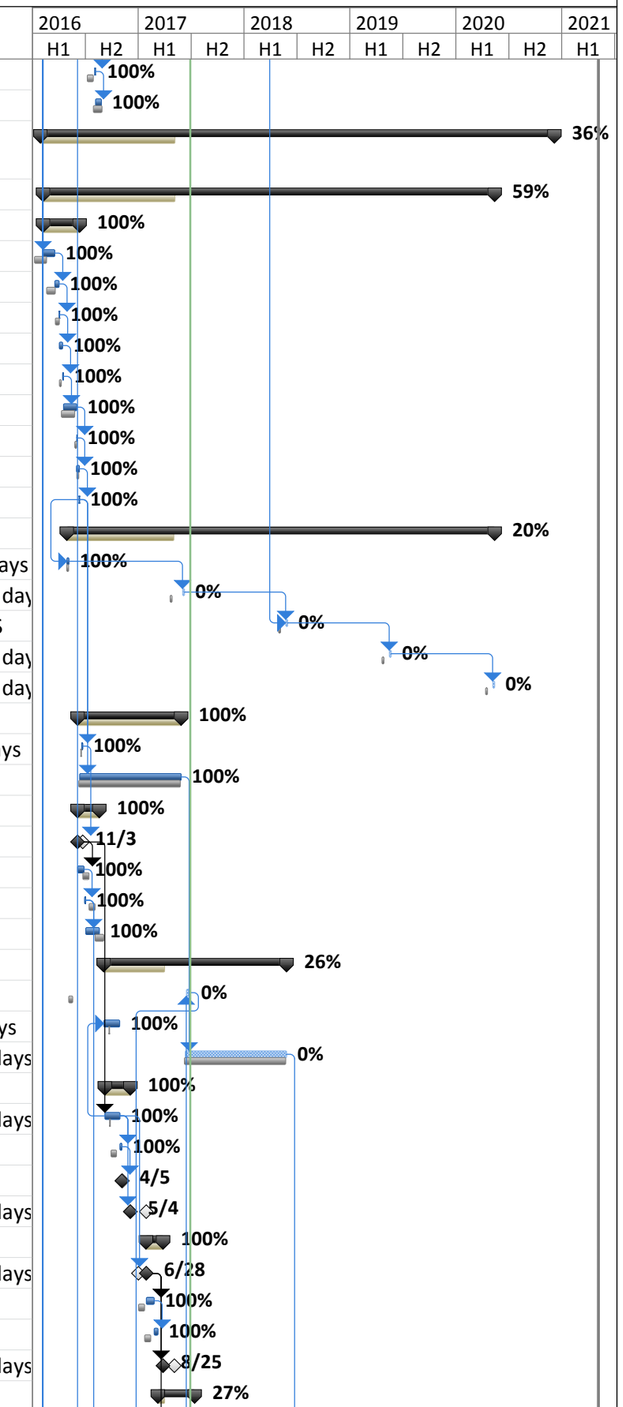


Appendix E. Project Schedule

ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
1911	2010	Regulator Approval of Technical Memorandum for Optimization and Rationale; AF Approval of ERPIMS Upload	0 days	0%	Wed 9/13/17	Wed 9/13/17	Fri 12/23/16	1910
1912		**Remedial Optimization Field Implementation**	**42 days**	**0%**	**Thu 10/26/17**	**Fri 12/22/17**	**Tue 2/21/17**	
1913	2010	Mobilize and Obtain Dig Permits	22 days	0%	Thu 10/26/17	Fri 11/24/17	Tue 1/24/17	1911FS+30 days
1914	2010	Install Passive Air Inlet Wells	20 days	0%	Mon 11/27/17	Fri 12/22/17	Tue 2/21/17	1913
1915		**OES Report**	**28 days**	**0%**	**Tue 11/20/18**	**Fri 12/28/18**	**Wed 5/2/18**	
1916	2012	Prepare Working Copy of OES Report	0 days	0%	Tue 11/20/18	ue 11/20/18	Mon 2/19/18	1931FS+180 day
1917	2012	Air Force Review of Working Copy	3 days	0%	Wed 11/21/18	Fri 11/23/18	Wed 3/21/18	1916
1918	2012	Resolve AF Comments on Working Copy AF	10 days	0%	Mon 11/26/18	Fri 12/7/18	Wed 4/11/18	1917
1919	2012	AF Review and Approval of RTCs	15 days	0%	Mon 12/10/18	Fri 12/28/18	Wed 5/2/18	1918
1920	2012	AF Approval of Final OES Report; Distribute Report to Regulators-Achieve OES	0 days	0%	Fri 12/28/18	Fri 12/28/18	Wed 5/2/18	1919
1921		**Remedial Action -Construction (RA-C)**	**77 days**	**0%**	**Mon 11/27/17**	**Tue 3/13/18**	**Thu 5/11/17**	
1922		**Construction Completion Report (CCR)**	**77 days**	**0%**	**Mon 11/27/17**	**Tue 3/13/18**	**Thu 5/11/17**	
1923	2010	Prepare Working Copy of Construction Completion Report	10 days	0%	Mon 11/27/17	Fri 12/8/17	Tue 2/7/17	1913
1924	2010	AF Review of Working Copy of Construction Completion Report	22 days	0%	Mon 12/11/17	Tue 1/9/18	Thu 3/9/17	1923
1925	2010	Resolve AF Comments on Working Copy of Construction Completion Report	5 days	0%	Wed 1/10/18	Tue 1/16/18	Thu 3/16/17	1924
1926	2010	AF Approval of Draft Construction Completion Report	0 days	0%	Tue 1/16/18	Tue 1/16/18	Thu 3/16/17	1925
1927	2010	Submit Draft Construction Completion Report to Regulators	2 days	0%	Wed 1/17/18	Thu 1/18/18	Mon 3/20/17	1926
1928	2010	Regulator Review of Draft Construction Completion Report	32 days	0%	Fri 1/19/18	Mon 3/5/18	Wed 5/3/17	1927
1929	2010	RTC Regulator Comments on Construction Completion Report	3 days	0%	Tue 3/6/18	Thu 3/8/18	Mon 5/8/17	1928
1930	2010	Prepare Final Construction Completion Report	3 days	0%	Fri 3/9/18	Tue 3/13/18	Thu 5/11/17	1929
1931	2010	Regulator Approval of Final Construction Completion Report	0 days	0%	Tue 3/13/18	Tue 3/13/18	Thu 5/11/17	1930
1932		**LTM**	**1392 days**	**27%**	**Wed 7/29/15**	**hu 11/26/20**	**Mon 11/30/20**	
1933		**LTM Work Plan**	**90 days**	**100%**	**Fri 7/8/16**	**hu 11/10/16**	**Mon 11/14/16**	
1934	2010	Prepare Working Copy of LTM Work Plan	28 days	100%	Fri 7/8/16	Tue 8/16/16	Tue 7/26/16	906FS+5 days
1935	2010	AF Review of Working Copy of LTM Work Plan	11 days	100%	Wed 8/17/16	Wed 8/31/16	Thu 8/25/16	1934
1936	2010	Resolve AF Comments on Working Copy of LTM Work Plan	2 days	100%	Thu 9/1/16	Fri 9/2/16	Thu 9/8/16	1935
1937	2010	AF Approval of Draft LTM Work Plan	7 days	100%	Fri 9/2/16	Mon 9/12/16	Thu 9/8/16	1936
1938	2010	Submit Draft LTM Work Plan to Regulators	3 days	100%	Tue 9/13/16	Thu 9/15/16	Thu 9/15/16	1937
1939	2010	Regulator Review of Draft LTM Work Plan	32 days	100%	Fri 9/16/16	on 10/31/16	Mon 10/31/16	1938
1940	2010	RTC Regulator Comments on Draft LTM Work Plan	1 day	100%	Mon 10/31/16	on 10/31/16	Mon 11/7/16	1939
1941	2010	Prepare Final LTM Work Plan	8 days	100%	Mon 10/31/16	Wed 11/9/16	Mon 11/14/16	1940
1942	2010	Regulator Approval of Final LTM Work Plan	2 days	100%	Wed 11/9/16	hu 11/10/16	Mon 11/14/16	1941
1943		**LUC Inspections**	**1055 days**	**20%**	**Fri 11/11/16**	**hu 11/26/20**	**Mon 11/30/20**	
1944	2010	Annual LUC Inspection-2016	5 days	100%	Fri 11/11/16	hu 11/17/16	Mon 11/21/16	1942
1945	2011	Annual LUC Inspection-2017	5 days	0%	Wed 11/1/17	Thu 11/9/17	Mon 11/13/17	1944FS+250 day
1946	2012	Annual LUC Inspection-2018	5 days	0%	Fri 11/9/18	hu 11/15/18	Mon 11/19/18	1945FS+260 day
1947	2013	Annual LUC Inspection-2019	5 days	0%	Fri 11/15/19	hu 11/21/19	Mon 11/25/19	1946FS+260 day
1948	2014	Annual LUC Inspection-2020	5 days	0%	Fri 11/20/20	hu 11/26/20	Mon 11/30/20	1947FS+260 day
1950		**RA-O**	**42 days**	**100%**	**Mon 11/28/16**	**Tue 1/24/17**	**Mon 2/12/18**	
1951		**Semi-Annual O&M Sampling and Reporting**	**42 days**	**100%**	**Mon 11/28/16**	**Tue 1/24/17**	**Mon 2/12/18**	
1952		**Semi-Annual O&M Event**	**42 days**	**100%**	**Mon 11/28/16**	**Tue 1/24/17**	**Thu 3/23/17**	
1953	2010	Semi-Annual O&M Sampling	4 days	100%	Mon 11/28/16	Thu 12/1/16	Tue 11/15/16	1942SS
1954	2010	Offsite Analysis of Air Samples	21 days	100%	Fri 12/2/16	Fri 12/30/16	Tue 12/6/16	1953

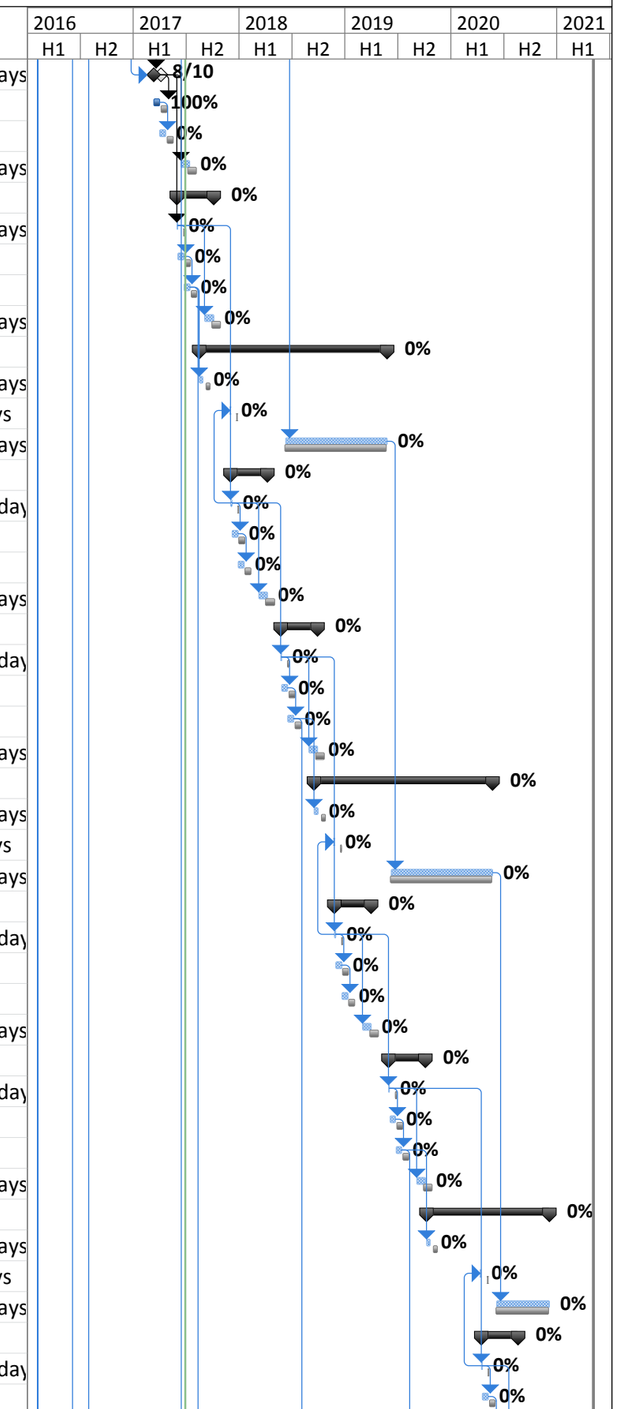


ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
1955	2010	Data Validation	3 days	100%	Mon 1/2/17	Wed 1/4/17	Tue 12/27/16	1954
1956	2010	ERPIMS Submittal	14 days	100%	Thu 1/5/17	Tue 1/24/17	Thu 1/26/17	1955
1957		**OES: Site SS054 Bldg. 781. Pump house-Free Product on Groundwater (NYDEC Spill #9202658)**	**1267 days**	**36%**	**Wed 6/29/16**	**Thu 5/6/21**	**Mon 5/3/21**	
1958		**RA-O**	**1112 days**	**59%**	**Fri 7/8/16**	**on 10/12/20**	**Thu 9/17/20**	
1959		**LTM Work Plan**	**90 days**	**100%**	**Fri 7/8/16**	**hu 11/10/16**	**Mon 11/7/16**	
1960	2010	Prepare Working Copy of LTM Work Plan	28 days	100%	Fri 7/8/16	Tue 8/16/16	Tue 7/19/16	906
1961	2010	AF Review of Working Copy of LTM Work Plan	11 days	100%	Wed 8/17/16	Ved 8/31/16	Thu 8/18/16	1960
1962	2010	Resolve AF Comments on Working Copy of LTM Work Plan	2 days	100%	Thu 9/1/16	Fri 9/2/16	Thu 9/1/16	1961
1963	2010	AF Approval of Draft LTM Work Plan	7 days	100%	Fri 9/2/16	Mon 9/12/16	Thu 9/1/16	1962
1964	2010	Submit Draft LTM Work Plan to Regulators	3 days	100%	Tue 9/13/16	Thu 9/15/16	Thu 9/8/16	1963
1965	2010	Regulator Review of Draft LTM Work Plan	32 days	100%	Fri 9/16/16	on 10/31/16	Mon 10/24/16	1964
1966	2010	RTC Regulator Comments on Draft LTM Work Plan	1 day	100%	Mon 10/31/16	on 10/31/16	Mon 10/31/16	1965
1967	2010	Prepare Final LTM Work Plan	8 days	100%	Mon 10/31/16	Ved 11/9/16	Mon 11/7/16	1966
1968	2010	Regulator Approval of Final LTM Work Plan	2 days	100%	Wed 11/9/16	hu 11/10/16	Mon 11/7/16	1967
1969		**LUC Inspections**	**1054 days**	**20%**	**Wed 9/28/16**	**on 10/12/20**	**Thu 9/17/20**	
1970	2010	Annual LUC Inspection-2016	5 days	100%	Wed 9/28/16	Tue 10/4/16	Mon 10/3/16	1968SS-30 days
1971	2011	Annual LUC Inspection-2017	5 days	0%	Wed 11/1/17	Tue 11/7/17	Mon 9/25/17	1970FS+250 day
1972	2012	Annual LUC Inspection-2018	5 days	0%	Tue 10/23/18	on 10/29/18	Thu 10/4/18	1971,1052SS
1973	2013	Annual LUC Inspection-2019	5 days	0%	Tue 10/15/19	on 10/21/19	Thu 9/26/19	1972FS+250 day
1974	2014	Annual LUC Inspection-2020	5 days	0%	Tue 10/6/20	on 10/12/20	Thu 9/17/20	1973FS+250 day
1975		**Annual Groundwater Sampling and Well Inspections Year 2016**	**255 days**	**100%**	**Thu 11/3/16**	**hu 10/26/17**	**Mon 10/23/17**	
1976	2010	Groundwater gaging and Well inspection	2 days	100%	Fri 11/18/16	on 11/21/16	Wed 11/16/16	1968FS+5 days
1977	2010	Monthly ORP and DO monitoring	250 days	100%	Fri 11/11/16	hu 10/26/17	Mon 10/23/17	1968
1978		**Q4-2016 Groundwater Sampling**	**53 days**	**100%**	**Thu 11/3/16**	**Tue 1/17/17**	**Wed 2/1/17**	
1979	2010	Sampling	0 days	100%	Thu 11/3/16	Thu 11/3/16	Mon 11/21/16	1976
1980	2010	Offsite Analysis of Groundwater Samples	16 days	100%	Fri 11/4/16	Fri 11/25/16	Mon 12/12/16	1979
1981	2010	Data Validation	4 days	100%	Mon 11/28/16	Thu 12/1/16	Mon 1/2/17	1980
1982	2010	ERPIMS Submittal	33 days	100%	Fri 12/2/16	Tue 1/17/17	Wed 2/1/17	1981
1983	**2010**	**Annual Groundwater Sampling and Well Inspections Year 2017**	**451 days**	**26%**	**Thu 2/2/17**	**hu 10/25/18**	**Mon 10/22/18**	
1984	2010	Optimize Biosparge System-Pilot Test	10 days	0%	Tue 11/14/17	on 11/27/17	Mon 10/17/16	2086
1985	2010	Groundwater gaging and Well inspection	39 days	100%	Thu 2/2/17	Tue 3/28/17	Tue 2/21/17	1988SS-2 days
1986	2010	Monthly ORP and DO monitoring	250 days	0%	Fri 11/10/17	hu 10/25/18	Mon 10/22/18	1977FS+10 days
1987	**2010**	**Q1-2017 Groundwater Sampling**	**64 days**	**100%**	**Mon 2/6/17**	**Thu 5/4/17**	**Wed 6/28/17**	
1988	2010	Sampling	38 days	100%	Mon 2/6/17	Ved 3/29/17	Fri 2/24/17	1979FS+66 days
1989	2010	Offsite Analysis of Groundwater Samples	5 days	100%	Thu 3/30/17	Wed 4/5/17	Fri 3/17/17	1988
1990	2010	Data Validation	0 days	100%	Wed 4/5/17	Wed 4/5/17	Fri 4/7/17	1989
1991	2010	ERPIMS Submittal	0 days	100%	Thu 5/4/17	Thu 5/4/17	Wed 6/28/17	1988FS+66 days
1992	**2010**	**Q2 - 2017 Groundwater Sampling**	**43 days**	**100%**	**Wed 6/28/17**	**Fri 8/25/17**	**Tue 10/3/17**	
1993	2010	Sampling	0 days	100%	Wed 6/28/17	Ved 6/28/17	Thu 6/1/17	1988FS+66 days
1994	2010	Offsite Analysis of Groundwater Samples	19 days	100%	Thu 6/29/17	Tue 7/25/17	Thu 6/22/17	1993
1995	2010	Data Validation	9 days	100%	Wed 7/26/17	Mon 8/7/17	Thu 7/13/17	1994
1996	2010	ERPIMS Submittal	0 days	100%	Fri 8/25/17	Fri 8/25/17	Tue 10/3/17	1993FS+66 days
1997	**2011**	**Q3 -2017 Groundwater Sampling**	**91 days**	**27%**	**Tue 8/8/17**	**ue 12/12/17**	**Thu 1/4/18**	

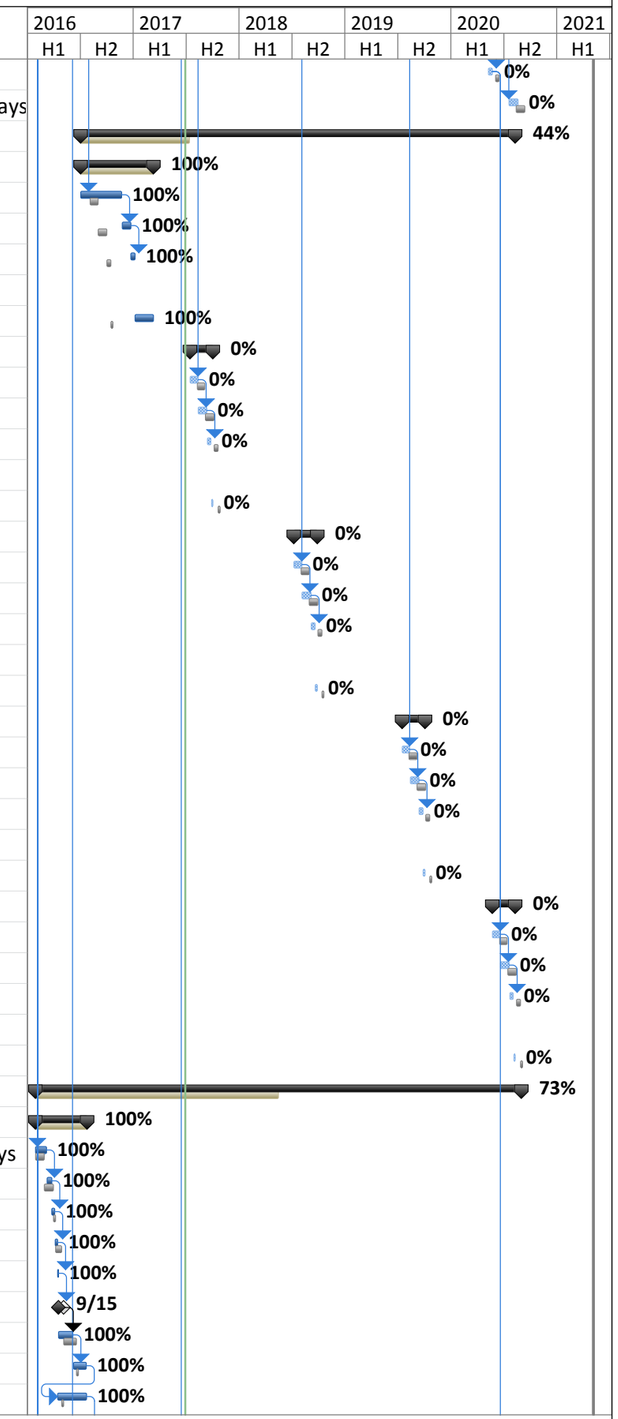


Appendix E. Project Schedule

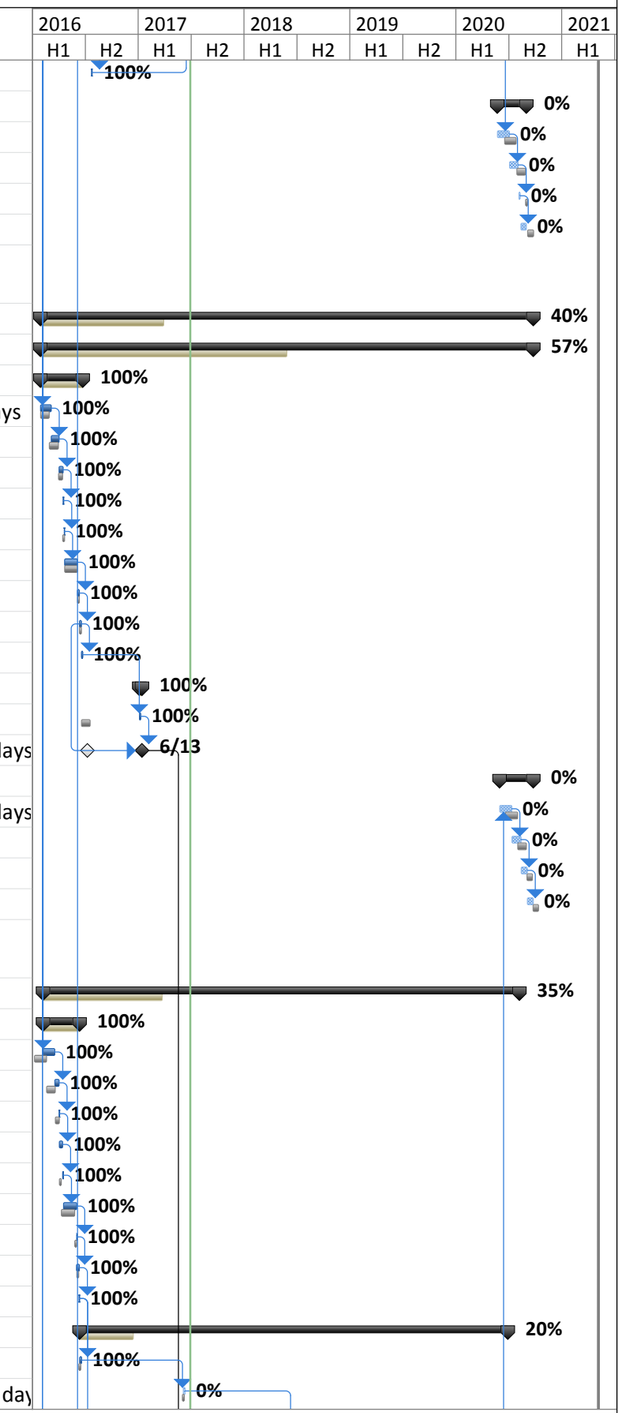
ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
1998	2011	Sampling	0 days	100%	Tue 8/8/17	Thu 8/10/17	Mon 9/4/17	1993FS+64 days
1999	2011	Offsite Analysis of Groundwater Samples	14 days	100%	Fri 8/11/17	Wed 8/30/17	Mon 9/25/17	1998
2000	2011	Data Validation	15 days	0%	Thu 8/31/17	Wed 9/20/17	Mon 10/16/17	1999
2001	2011	ERPIMS Submittal	22 days	0%	Mon 11/13/17	ue 12/12/17	Thu 1/4/18	1998FS+66 days
2002	**2011**	**Q4 -2017 Groundwater Sampling**	**91 days**	**0%**	**Mon 10/30/17**	**Mon 3/5/18**	**Wed 3/28/18**	
2003	2011	Sampling	3 days	0%	Mon 10/30/17	Wed 11/1/17	Fri 11/24/17	1998FS+56 days
2004	2011	Offsite Analysis of Groundwater Samples	15 days	0%	Thu 11/2/17	ed 11/22/17	Fri 12/15/17	2003
2005	2011	Data Validation	15 days	0%	Thu 11/23/17	ed 12/13/17	Fri 1/5/18	2004
2006	2011	ERPIMS Submittal	22 days	0%	Fri 2/2/18	Mon 3/5/18	Wed 3/28/18	2003FS+66 days
2007	**2011**	**Annual Groundwater Sampling and Well Inspections Year 2018**	**464 days**	**0%**	**Mon 1/15/18**	**hu 10/24/19**	**Mon 10/21/19**	
2008	2011	Optimize Biosparge System and Well Network	10 days	0%	Mon 1/15/18	Fri 1/26/18	Tue 2/20/18	2005FS+22 days
2009	2011	Groundwater gaging and Well inspection	2 days	0%	Tue 5/1/18	Wed 5/2/18	Fri 5/25/18	2012SS-2 days
2010	2011	Monthly ORP and DO monitoring	250 days	0%	Fri 11/9/18	hu 10/24/19	Mon 10/21/19	1986FS+10 days
2011	**2011**	**Semi-Annual Groundwater Sampling**	**91 days**	**0%**	**Thu 5/3/18**	**Thu 9/6/18**	**Mon 10/1/18**	
2012	2011	Sampling	3 days	0%	Thu 5/3/18	Mon 5/7/18	Wed 5/30/18	2003FS+130 day
2013	2011	Offsite Analysis of Groundwater Samples	15 days	0%	Tue 5/8/18	Mon 5/28/18	Wed 6/20/18	2012
2014	2011	Data Validation	15 days	0%	Tue 5/29/18	Mon 6/18/18	Wed 7/11/18	2013
2015	2011	ERPIMS Submittal	22 days	0%	Wed 8/8/18	Thu 9/6/18	Mon 10/1/18	2012FS+66 days
2016	**2012**	**Annual Groundwater Sampling-2018**	**91 days**	**0%**	**Tue 10/23/18**	**Tue 2/26/19**	**Thu 3/21/19**	
2017	2012	Sampling	3 days	0%	Tue 10/23/18	hu 10/25/18	Mon 11/19/18	2012FS+120 day
2018	2012	Offsite Analysis of Groundwater Samples	15 days	0%	Fri 10/26/18	hu 11/15/18	Mon 12/10/18	2017
2019	2012	Data Validation	15 days	0%	Fri 11/16/18	Thu 12/6/18	Mon 12/31/18	2018
2020	2012	ERPIMS Submittal	22 days	0%	Mon 1/28/19	Tue 2/26/19	Thu 3/21/19	2017FS+66 days
2021	**2012**	**Annual Groundwater Sampling and Well Inspections Year 2019**	**440 days**	**0%**	**Fri 2/15/19**	**hu 10/22/20**	**Mon 10/19/20**	
2022	2012	Optimize Biosparge System and Well Network	10 days	0%	Fri 2/15/19	Thu 2/28/19	Mon 3/25/19	2019FS+50 days
2023	2012	Groundwater gaging and Well inspection	2 days	0%	Wed 4/24/19	Thu 4/25/19	Mon 5/20/19	2026SS-2 days
2024	2012	Monthly ORP and DO monitoring	250 days	0%	Fri 11/8/19	hu 10/22/20	Mon 10/19/20	2010FS+10 days
2025	**2012**	**Semi-Annual Groundwater Sampling**	**91 days**	**0%**	**Fri 4/26/19**	**Fri 8/30/19**	**Tue 9/24/19**	
2026	2012	Sampling	3 days	0%	Fri 4/26/19	Tue 4/30/19	Thu 5/23/19	2017FS+130 day
2027	2012	Offsite Analysis of Groundwater Samples	15 days	0%	Wed 5/1/19	Tue 5/21/19	Thu 6/13/19	2026
2028	2012	Data Validation	15 days	0%	Wed 5/22/19	Tue 6/11/19	Thu 7/4/19	2027
2029	2012	ERPIMS Submittal	22 days	0%	Thu 8/1/19	Fri 8/30/19	Tue 9/24/19	2026FS+66 days
2030	**2013**	**Annual Groundwater Sampling**	**91 days**	**0%**	**Wed 10/30/19**	**Wed 3/4/20**	**Fri 3/27/20**	
2031	2013	Sampling	3 days	0%	Wed 10/30/19	Fri 11/1/19	Tue 11/26/19	2026FS+130 day
2032	2013	Offsite Analysis of Groundwater Samples	15 days	0%	Mon 11/4/19	Fri 11/22/19	Tue 12/17/19	2031
2033	2013	Data Validation	15 days	0%	Mon 11/25/19	Fri 12/13/19	Tue 1/7/20	2032
2034	2013	ERPIMS Submittal	22 days	0%	Tue 2/4/20	Wed 3/4/20	Fri 3/27/20	2031FS+66 days
2035	**2013**	**Annual Groundwater Sampling and Well Inspections Year 2020**	**304 days**	**0%**	**Mon 3/9/20**	**Thu 5/6/21**	**Mon 5/3/21**	
2036	2013	Optimize Biosparge System and Well Network	10 days	0%	Mon 3/9/20	Fri 3/20/20	Tue 4/14/20	2033FS+60 days
2037	2013	Groundwater gaging and Well inspection	2 days	0%	Thu 9/10/20	Fri 9/11/20	Tue 10/6/20	2040SS-2 days
2038	2013	Monthly ORP and DO monitoring	130 days	0%	Fri 11/6/20	Thu 5/6/21	Mon 5/3/21	2024FS+10 days
2039	**2014**	**Annual Groundwater Sampling**	**91 days**	**0%**	**Mon 9/14/20**	**Mon 1/18/21**	**Wed 2/10/21**	
2040	2014	Sampling	3 days	0%	Mon 9/14/20	Wed 9/16/20	Fri 10/9/20	2031FS+225 day
2041	2014	Offsite Analysis of Groundwater Samples	15 days	0%	Thu 9/17/20	Wed 10/7/20	Fri 10/30/20	2040



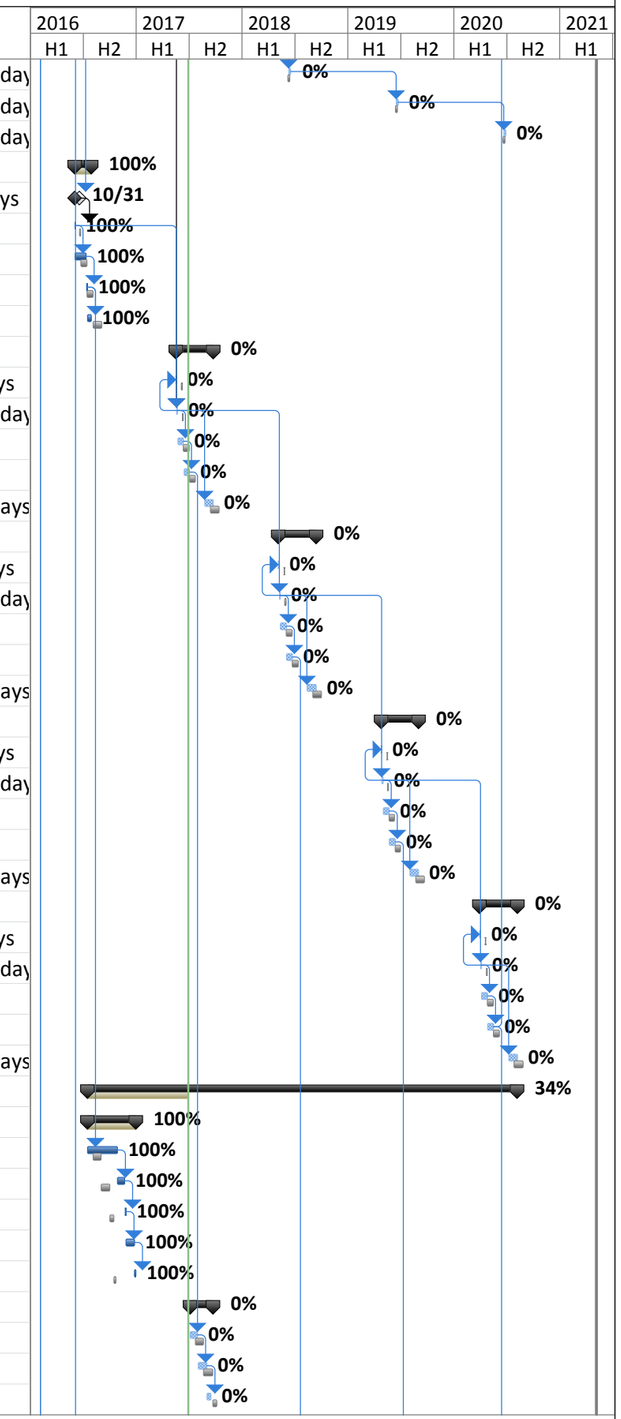
ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
2042	2014	Data Validation	10 days	0%	Thu 10/8/20	ed 10/21/20	Fri 11/13/20	2041
2043	2014	ERPIMS Submittal	22 days	0%	Fri 12/18/20	Mon 1/18/21	Wed 2/10/21	2040FS+66 days
2044	**2010**	**LTM Reporting**	**1071 days**	**44%**	**Fri 12/2/16**	**Fri 1/8/21**	**Tue 2/2/21**	
2045	**2010**	**Annual Report - Year 2016**	**179 days**	**100%**	**Fri 12/2/16**	**Wed 8/9/17**	**Wed 3/22/17**	
2046	2010	Prepare Working Copy of Annual Report	101 days	100%	Fri 12/2/16	Fri 4/21/17	Mon 1/30/17	1981
2047	2010	AF Review of Working Copy of Annual Report	22 days	100%	Mon 4/24/17	Tue 5/23/17	Wed 3/1/17	2046
2048	2010	Resolve AF Comments on Working Copy of Annual Report	10 days	100%	Wed 5/24/17	Tue 6/6/17	Wed 3/15/17	2047
2049	2010	AF Approval of Final 2016 Annual LTM and O&M Report	0 days	100%	Tue 6/6/17	Tue 6/6/17	Wed 3/15/17	2048
2050	2010	Submit Final Annual Report to Regulators;AF Approval of ERPIMS	46 days	100%	Wed 6/7/17	Wed 8/9/17	Wed 3/22/17	2049
2051	**2011**	**Annual Report - Year 2017**	**57 days**	**0%**	**Thu 12/14/17**	**Fri 3/2/18**	**Tue 3/27/18**	
2052	2011	Prepare Working Copy of Annual Report	20 days	0%	Thu 12/14/17	Wed 1/10/18	Fri 2/2/18	2005
2053	2011	AF Review of Working Copy of Annual Report	22 days	0%	Thu 1/11/18	Fri 2/9/18	Tue 3/6/18	2052
2054	2011	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Mon 2/12/18	Fri 2/23/18	Tue 3/20/18	2053
2055	2011	AF Approval of Final 2017 Annual LTM and O&M Report	0 days	0%	Fri 2/23/18	Fri 2/23/18	Tue 3/20/18	2054
2056	2011	Submit Final Annual Report to Regulators;AF Approval of ERPIMS	5 days	0%	Mon 2/26/18	Fri 3/2/18	Tue 3/27/18	2055
2057	**2012**	**Annual Report - Year 2018**	**57 days**	**0%**	**Fri 12/7/18**	**Mon 2/25/19**	**Wed 3/20/19**	
2058	2012	Prepare Working Copy of Annual Report	20 days	0%	Fri 12/7/18	Thu 1/3/19	Mon 1/28/19	2019
2059	2012	AF Review of Working Copy of Annual Report	22 days	0%	Fri 1/4/19	Mon 2/4/19	Wed 2/27/19	2058
2060	2012	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Tue 2/5/19	Mon 2/18/19	Wed 3/13/19	2059
2061	2012	AF Approval of Final 2018 Annual LTM and O&M Report	0 days	0%	Mon 2/18/19	Mon 2/18/19	Wed 3/13/19	2060
2062	2012	Submit Final Annual Report to Regulators;AF Approval of ERPIMS	5 days	0%	Tue 2/19/19	Mon 2/25/19	Wed 3/20/19	2061
2063	**2013**	**Annual Report - Year 2019**	**57 days**	**0%**	**Mon 12/16/19**	**Tue 3/3/20**	**Thu 3/26/20**	
2064	2013	Prepare Working Copy of Annual Report	20 days	0%	Mon 12/16/19	Fri 1/10/20	Tue 2/4/20	2033
2065	2013	AF Review of Working Copy of Annual Report	22 days	0%	Mon 1/13/20	Tue 2/11/20	Thu 3/5/20	2064
2066	2013	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Wed 2/12/20	Tue 2/25/20	Thu 3/19/20	2065
2067	2013	AF Approval of Final 2019 Annual LTM and O&M Report	0 days	0%	Tue 2/25/20	Tue 2/25/20	Thu 3/19/20	2066
2068	2013	Submit Final Annual Report to Regulators;AF Approval of ERPIMS	5 days	0%	Wed 2/26/20	Tue 3/3/20	Thu 3/26/20	2067
2069	**2014**	**Annual Report - Year 2020**	**57 days**	**0%**	**Thu 10/22/20**	**Fri 1/8/21**	**Tue 2/2/21**	
2070	2014	Prepare Working Copy of Annual Report	20 days	0%	Thu 10/22/20	ed 11/18/20	Fri 12/11/20	2042
2071	2014	AF Review of Working Copy of Annual Report	22 days	0%	Thu 11/19/20	Fri 12/18/20	Tue 1/12/21	2070
2072	2014	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Mon 12/21/20	Fri 1/1/21	Tue 1/26/21	2071
2073	2014	AF Approval of Final 2020 Annual LTM and O&M Report	0 days	0%	Fri 1/1/21	Fri 1/1/21	Tue 1/26/21	2072
2074	2014	Submit Final Annual Report to Regulators;AF Approval of ERPIMS	5 days	0%	Mon 1/4/21	Fri 1/8/21	Tue 2/2/21	2073
2075		**Optimization**	**1198 days**	**73%**	**Wed 6/29/16**	**Fri 1/29/21**	**Tue 2/23/21**	
2076		**Optimization Plan**	**128 days**	**100%**	**Wed 6/29/16**	**Fri 12/23/16**	**Wed 11/23/16**	
2077	2010	Prepare Working Copy of Optimization Plan	28 days	100%	Wed 6/29/16	Fri 8/5/16	Thu 7/28/16	906FS+15 days
2078	2010	Air Force Review of Working Copy	12 days	100%	Mon 8/8/16	Tue 8/23/16	Mon 8/29/16	2077
2079	2010	Resolve AF Comments on Working Copy AF	8 days	100%	Wed 8/24/16	Fri 9/2/16	Mon 9/5/16	2078
2080	2010	AF Review and Approval of RTCs	6 days	100%	Mon 9/5/16	Mon 9/12/16	Mon 9/26/16	2079
2081	2010	AF Approval of Draft Optimization Plan	3 days	100%	Mon 9/12/16	Thu 9/15/16	Mon 9/26/16	2080
2082	2010	Submit Draft Optimization Plan to Regulators	0 days	100%	Thu 9/15/16	Thu 9/15/16	Mon 10/3/16	2081
2083	2010	Regulator Review of Draft Optimization Plan	36 days	100%	Fri 9/16/16	Fri 11/4/16	Wed 11/16/16	2082
2084	2010	Resolve Regulator Comments on Draft Optimization Plan	32 days	100%	Mon 11/7/16	ue 12/20/16	Wed 11/23/16	2083
2085	2010	Prepare Final Optimization Plan	72 days	100%	Tue 9/13/16	ed 12/21/16	Mon 10/3/16	2084



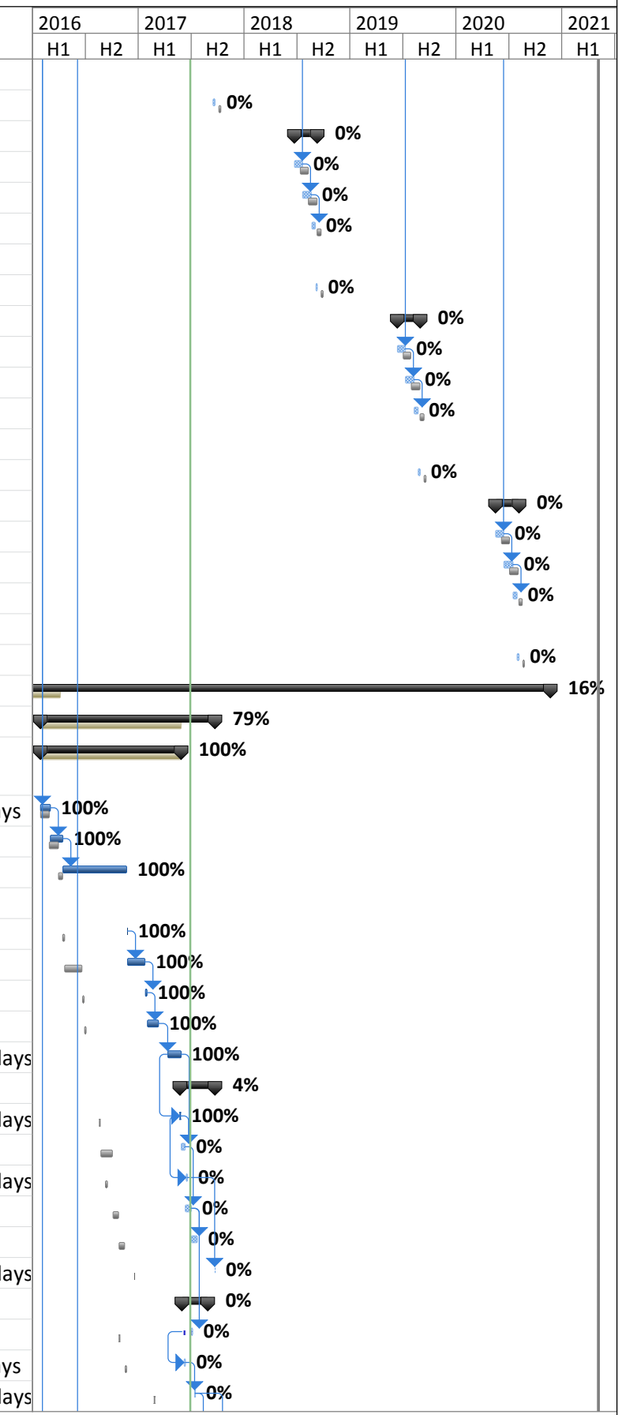
ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
2086	2010	AF Approval of Final Optimization Plan	2 days	100%	Wed 12/21/16	Fri 12/23/16	Mon 10/3/16	2085
2087	**2014**	**OES Report**	**72 days**	**0%**	**Thu 10/22/20**	**Fri 1/29/21**	**Tue 2/23/21**	
2088	2014	Prepare Working Copy of OES Report	30 days	0%	Thu 10/22/20	Wed 12/2/20	Fri 12/25/20	2042
2089	2014	Air Force Review of Working Copy	22 days	0%	Thu 12/3/20	Fri 1/1/21	Tue 1/26/21	2088
2090	2014	Resolve AF Comments on Working Copy AF	5 days	0%	Mon 1/4/21	Fri 1/8/21	Tue 2/2/21	2089
2091	2014	AF Review and Approval of RTCs	15 days	0%	Mon 1/11/21	Fri 1/29/21	Tue 2/23/21	2090
2092	2014	AF Approval of Final OES Report; Distribute Report to Regulators-Achieve OES	0 days	0%	Fri 1/29/21	Fri 1/29/21	Tue 2/23/21	2091
2093		**OES Site SS062: AOC 9 Weapons Storage Area Landfill Chlorinated Plume**	**1214 days**	**40%**	**Wed 6/29/16**	**Mon 2/22/21**	**Fri 3/12/21**	
2094		**Optimization**	**1214 days**	**57%**	**Wed 6/29/16**	**Mon 2/22/21**	**Fri 3/12/21**	
2095	**2010**	**Remedial Optimization Work Plan**	**104 days**	**100%**	**Wed 6/29/16**	**on 11/21/16**	**Wed 11/16/16**	
2096	2010	Prepare Working Copy of Remedial Optimization Work Plan	27 days	100%	Wed 6/29/16	Thu 8/4/16	Thu 7/28/16	906FS+15 days
2097	2010	AF Review of Working Copy of Remedial Optimization Work Plan	19 days	100%	Fri 8/5/16	Wed 8/31/16	Mon 8/29/16	2096
2098	2010	Resolve AF Comments on Working Copy of Remedial Optimization Work Plan	10 days	100%	Thu 9/1/16	Wed 9/14/16	Mon 9/12/16	2097
2099	2010	AF Approval of Draft Remedial Optimization Work Plan	2 days	100%	Wed 9/14/16	Fri 9/16/16	Mon 9/12/16	2098
2100	2010	Submit Draft Remedial Optimization Work Plan to Regulators	1 day	100%	Mon 9/19/16	Mon 9/19/16	Mon 9/19/16	2099
2101	2010	Regulator Review of Remedial Optimization Work Plan	32 days	100%	Tue 9/20/16	Wed 11/2/16	Wed 11/2/16	2100
2102	2010	RTC Regulator Comments on Draft Remedial Optimization Work Plan	5 days	100%	Thu 11/3/16	Wed 11/9/16	Wed 11/9/16	2101
2103	2010	Prepare Final Remedial Optimization Work Plan	5 days	100%	Thu 11/10/16	ed 11/16/16	Wed 11/16/16	2102
2104	2010	Regulator Approval of Final Remedial Optimization Work Plan	3 days	100%	Wed 11/16/16	on 11/21/16	Wed 11/16/16	2103
2105	**2010**	**Remedial Optimization Field Implementation**	**7 days**	**100%**	**Mon 6/5/17**	**Tue 6/13/17**	**Fri 3/12/21**	
2106	2010	Mobilize and Obtain UIC and Dig Permits	5 days	100%	Mon 6/5/17	Fri 6/9/17	Fri 12/16/16	2104
2107	2010	Perform ISCO Injections	0 days	100%	Tue 6/13/17	Tue 6/13/17	Wed 12/7/16	2103SS+10 days
2108	**2014**	**OES Report**	**82 days**	**0%**	**Fri 10/30/20**	**Mon 2/22/21**	**Fri 3/12/21**	
2109	2014	Prepare Working Copy of OES Report	30 days	0%	Fri 10/30/20	hu 12/10/20	Wed 12/30/20	2159FS+10 days
2110	2014	Air Force Review of Working Copy	22 days	0%	Fri 12/11/20	Mon 1/11/21	Fri 1/29/21	2109
2111	2014	Resolve AF Comments on Working Copy AF	15 days	0%	Tue 1/12/21	Mon 2/1/21	Fri 2/19/21	2110
2112	2014	AF Review and Approval of RTCs	15 days	0%	Tue 2/2/21	Mon 2/22/21	Fri 3/12/21	2111
2113	2014	AF Approval of Final OES Report; Distribute Report to Regulators-Achieve OES	0 days	0%	Mon 2/22/21	Mon 2/22/21	Fri 3/12/21	2112
2114		**RA-O**	**1173 days**	**35%**	**Fri 7/8/16**	**Tue 1/5/21**	**Mon 1/25/21**	
2115		**LTM Work Plan**	**90 days**	**100%**	**Fri 7/8/16**	**hu 11/10/16**	**Mon 11/7/16**	
2116	2010	Prepare Working Copy of LTM Work Plan	28 days	100%	Fri 7/8/16	Tue 8/16/16	Tue 7/19/16	906
2117	2010	AF Review of Working Copy of LTM Work Plan	11 days	100%	Wed 8/17/16	Wed 8/31/16	Thu 8/18/16	2116
2118	2010	Resolve AF Comments on Working Copy of LTM Work Plan	2 days	100%	Thu 9/1/16	Fri 9/2/16	Thu 9/1/16	2117
2119	2010	AF Approval of Draft LTM Work Plan	7 days	100%	Fri 9/2/16	Mon 9/12/16	Thu 9/1/16	2118
2120	2010	Submit Draft LTM Work Plan to Regulators	3 days	100%	Tue 9/13/16	Thu 9/15/16	Thu 9/8/16	2119
2121	2010	Regulator Review of Draft LTM Work Plan	32 days	100%	Fri 9/16/16	on 10/31/16	Mon 10/24/16	2120
2122	2010	RTC Regulator Comments on Draft LTM Work Plan	1 day	100%	Mon 10/31/16	on 10/31/16	Mon 10/31/16	2121
2123	2010	Prepare Final LTM Work Plan	8 days	100%	Mon 10/31/16	Wed 11/9/16	Mon 11/7/16	2122
2124	2010	Regulator Approval of Final LTM Work Plan	2 days	100%	Wed 11/9/16	hu 11/10/16	Mon 11/7/16	2123
2125		**LUC Inspections**	**1055 days**	**20%**	**Fri 11/11/16**	**hu 11/26/20**	**Mon 11/23/20**	
2126	2010	Annual LUC Inspection-2016	5 days	100%	Fri 11/11/16	hu 11/17/16	Mon 11/14/16	2124
2127	2011	Annual LUC Inspection-2017	5 days	0%	Wed 11/1/17	Thu 11/9/17	Mon 11/6/17	2126FS+250 day



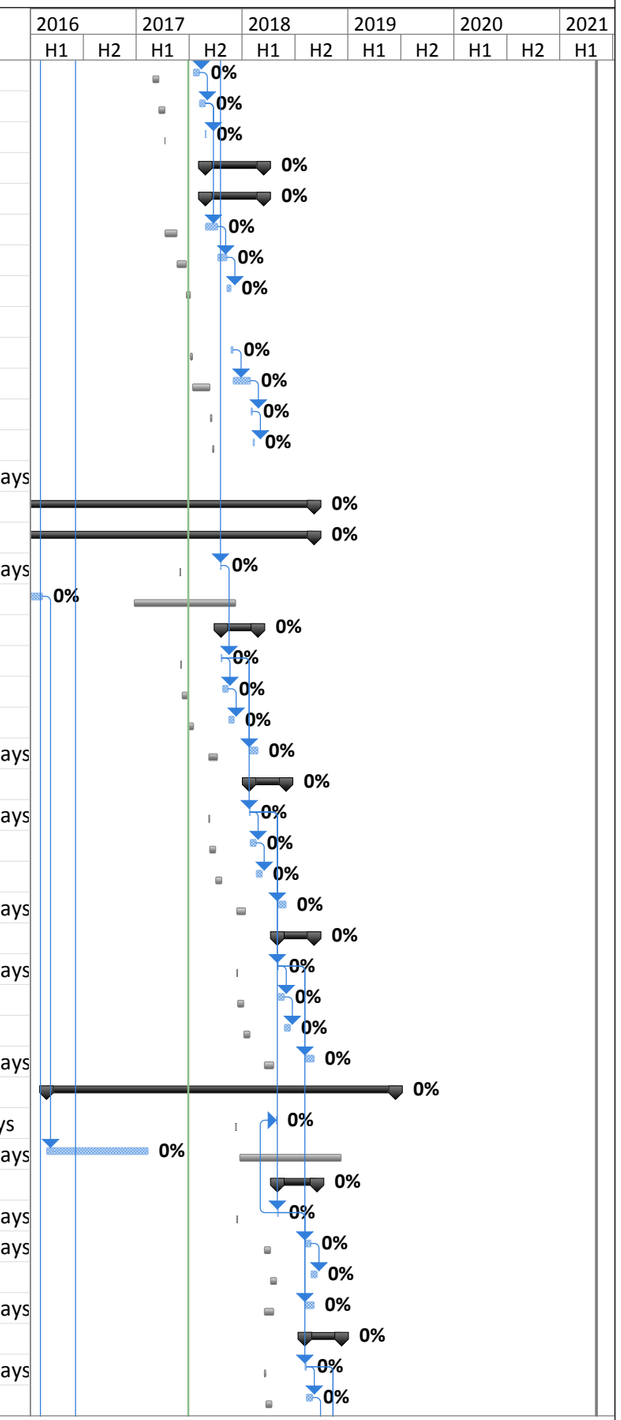
ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
2128	2012	Annual LUC Inspection-2018	5 days	0%	Fri 11/9/18	hu 11/15/18	Mon 11/12/18	2127FS+260 day
2129	2013	Annual LUC Inspection-2019	5 days	0%	Fri 11/15/19	hu 11/21/19	Mon 11/18/19	2128FS+260 day
2130	2014	Annual LUC Inspection-2020	5 days	0%	Fri 11/20/20	hu 11/26/20	Mon 11/23/20	2129FS+260 day
2131		**Annual Groundwater Sampling and Well Inspections Year 1**	**41 days**	**100%**	**Mon 10/31/16**	**ue 12/27/16**	**Wed 2/1/17**	
2132	2010	Groundwater gaging and Well inspection	0 days	100%	Mon 10/31/16	on 10/31/16	Wed 11/16/16	2124FS+5 days
2133	2010	Sampling	1 day	100%	Mon 10/31/16	Tue 11/1/16	Mon 11/21/16	2132
2134	2010	Offsite Analysis of Groundwater Samples	28 days	100%	Wed 11/2/16	Fri 12/9/16	Mon 12/12/16	2133
2135	2010	Data Validation	3 days	100%	Mon 12/12/16	ed 12/14/16	Mon 1/2/17	2134
2136	2010	ERPIMS Submittal	9 days	100%	Thu 12/15/16	ue 12/27/16	Wed 2/1/17	2135
2137		**Annual Groundwater Sampling and Well Inspections Year 2**	**93 days**	**0%**	**Mon 10/16/17**	**Ved 2/21/18**	**Tue 3/13/18**	
2138	2011	Groundwater gaging and Well inspection	2 days	0%	Mon 10/16/17	ue 10/17/17	Mon 11/6/17	2139SS-2 days
2139	2011	Sampling	3 days	0%	Wed 10/18/17	Fri 10/20/17	Thu 11/9/17	2133FS+250 day
2140	2011	Offsite Analysis of Groundwater Samples	15 days	0%	Mon 10/23/17	Fri 11/10/17	Thu 11/30/17	2139
2141	2011	Data Validation	15 days	0%	Mon 11/13/17	Fri 12/1/17	Thu 12/21/17	2140
2142	2011	ERPIMS Submittal	22 days	0%	Tue 1/23/18	Ved 2/21/18	Tue 3/13/18	2139FS+66 days
2143		**Annual Groundwater Sampling and Well Inspections Year 3**	**93 days**	**0%**	**Thu 10/4/18**	**Ion 2/11/19**	**Fri 3/1/19**	
2144	2012	Groundwater gaging and Well inspection	2 days	0%	Thu 10/4/18	Fri 10/5/18	Thu 10/25/18	2145SS-2 days
2145	2012	Sampling	3 days	0%	Mon 10/8/18	ed 10/10/18	Tue 10/30/18	2139FS+250 day
2146	2012	Offsite Analysis of Groundwater Samples	15 days	0%	Thu 10/11/18	ed 10/31/18	Tue 11/20/18	2145
2147	2012	Data Validation	15 days	0%	Thu 11/1/18	ed 11/21/18	Tue 12/11/18	2146
2148	2012	ERPIMS Submittal	22 days	0%	Fri 1/11/19	Ion 2/11/19	Fri 3/1/19	2145FS+66 days
2149		**Annual Groundwater Sampling and Well Inspections Year 4**	**93 days**	**0%**	**Tue 9/24/19**	**Thu 1/30/20**	**Wed 2/19/20**	
2150	2013	Groundwater gaging and Well inspection	2 days	0%	Tue 9/24/19	Ved 9/25/19	Tue 10/15/19	2151SS-2 days
2151	2013	Sampling	3 days	0%	Thu 9/26/19	Ion 9/30/19	Fri 10/18/19	2145FS+250 day
2152	2013	Offsite Analysis of Groundwater Samples	15 days	0%	Tue 10/1/19	on 10/21/19	Fri 11/8/19	2151
2153	2013	Data Validation	15 days	0%	Tue 10/22/19	on 11/11/19	Fri 11/29/19	2152
2154	2013	ERPIMS Submittal	22 days	0%	Wed 1/1/20	Thu 1/30/20	Wed 2/19/20	2151FS+66 days
2155		**Annual Groundwater Sampling and Well Inspections Year 5**	**93 days**	**0%**	**Fri 8/28/20**	**Tue 1/5/21**	**Mon 1/25/21**	
2156	2014	Groundwater gaging and Well inspection	2 days	0%	Fri 8/28/20	Ion 8/31/20	Fri 9/18/20	2157SS-2 days
2157	2014	Sampling	3 days	0%	Tue 9/1/20	Thu 9/3/20	Wed 9/23/20	2151FS+240 day
2158	2014	Offsite Analysis of Groundwater Samples	15 days	0%	Fri 9/4/20	Thu 9/24/20	Wed 10/14/20	2157
2159	2014	Data Validation	15 days	0%	Fri 9/25/20	hu 10/15/20	Wed 11/4/20	2158
2160	2014	ERPIMS Submittal	22 days	0%	Mon 12/7/20	Tue 1/5/21	Mon 1/25/21	2157FS+66 days
2161		**LTM Reporting**	**1058 days**	**34%**	**Thu 12/15/16**	**Mon 1/4/21**	**Fri 1/22/21**	
2162	**2010**	**Annual Report - Year 2016**	**119 days**	**100%**	**Thu 12/15/16**	**Tue 5/30/17**	**Wed 3/22/17**	
2163	2010	Prepare Working Copy of Annual Report	73 days	100%	Thu 12/15/16	Ion 3/27/17	Mon 1/30/17	2135
2164	2010	AF Review of Working Copy of Annual Report	19 days	100%	Tue 3/28/17	Fri 4/21/17	Wed 3/1/17	2163
2165	2010	Resolve AF Comments on Working Copy of Annual Report	3 days	100%	Mon 4/24/17	Ved 4/26/17	Wed 3/15/17	2164
2166	2010	AF Approval of Final 2016 Annual LTM Report	21 days	100%	Wed 4/26/17	Thu 5/25/17	Wed 3/15/17	2165
2167	2010	Submit Final Annual Report to Regulators	3 days	100%	Fri 5/26/17	Tue 5/30/17	Wed 3/22/17	2166
2168		**Annual Report - Year 2017**	**57 days**	**0%**	**Mon 12/4/17**	**Tue 2/20/18**	**Mon 3/12/18**	
2169	2011	Prepare Working Copy of Annual Report	20 days	0%	Mon 12/4/17	Fri 12/29/17	Thu 1/18/18	2141
2170	2011	AF Review of Working Copy of Annual Report	22 days	0%	Mon 1/1/18	Tue 1/30/18	Mon 2/19/18	2169
2171	2011	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Wed 1/31/18	Tue 2/13/18	Mon 3/5/18	2170



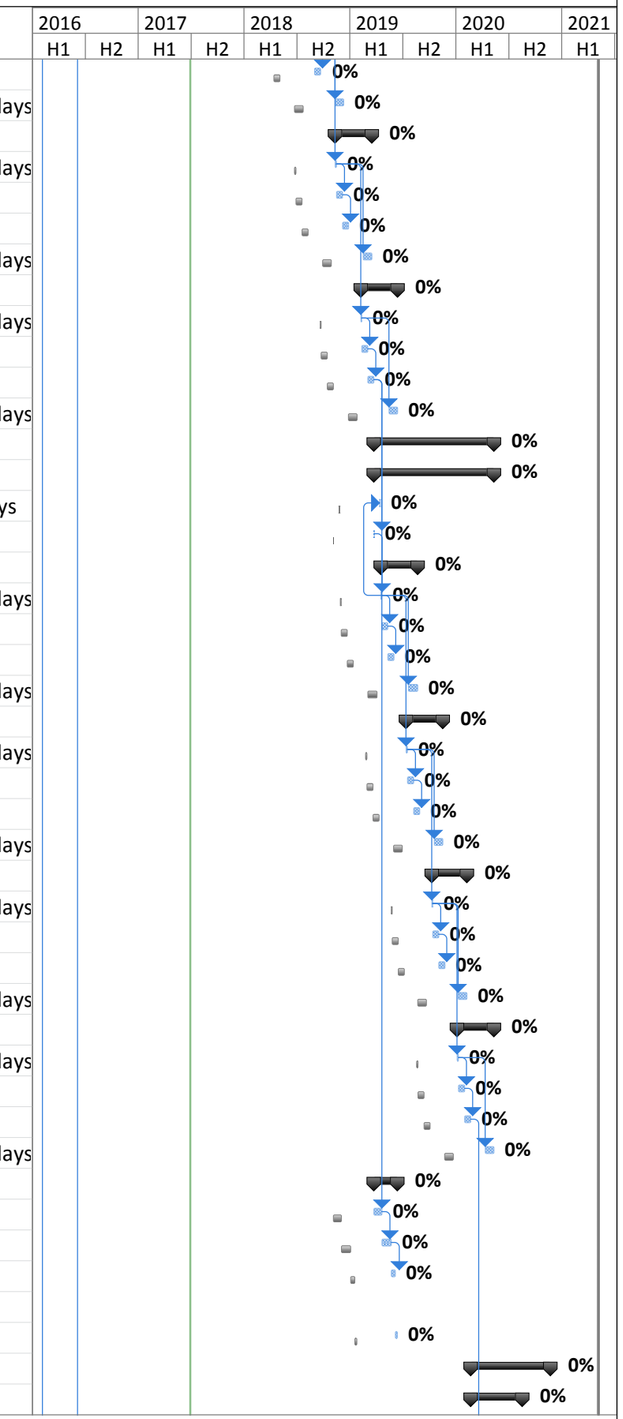
ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
2172	2011	AF Approval of Final Annual 2017 LTM Report	0 days	0%	Tue 2/13/18	Tue 2/13/18	Mon 3/5/18	2171
2173	2011	Submit Final Annual Report to Regulators; AF Approval of ERPIMS Upload	5 days	0%	Wed 2/14/18	Tue 2/20/18	Mon 3/12/18	2172
2174		**Annual Report - Year 2018**	**57 days**	**0%**	**Thu 11/22/18**	**Fri 2/8/19**	**Thu 2/28/19**	
2175	2012	Prepare Working Copy of Annual Report	20 days	0%	Thu 11/22/18	ed 12/19/18	Tue 1/8/19	2147
2176	2012	AF Review of Working Copy of Annual Report	22 days	0%	Thu 12/20/18	Fri 1/18/19	Thu 2/7/19	2175
2177	2012	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Mon 1/21/19	Fri 2/1/19	Thu 2/21/19	2176
2178	2012	AF Approval of Final 2018 Annual LTM Report	0 days	0%	Fri 2/1/19	Fri 2/1/19	Thu 2/21/19	2177
2179	2012	Submit Final Annual Report to Regulators; AF Approval of ERPIMS Upload	5 days	0%	Mon 2/4/19	Fri 2/8/19	Thu 2/28/19	2178
2180		**Annual Report - Year 2019**	**57 days**	**0%**	**Tue 11/12/19**	**Wed 1/29/20**	**Tue 2/18/20**	
2181	2013	Prepare Working Copy of Annual Report	20 days	0%	Tue 11/12/19	Mon 12/9/19	Fri 12/27/19	2153
2182	2013	AF Review of Working Copy of Annual Report	22 days	0%	Tue 12/10/19	Wed 1/8/20	Tue 1/28/20	2181
2183	2013	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Thu 1/9/20	Wed 1/22/20	Tue 2/11/20	2182
2184	2013	AF Approval of Final 2019 Annual LTM Report	0 days	0%	Wed 1/22/20	Wed 1/22/20	Tue 2/11/20	2183
2185	2013	Submit Final Annual Report to Regulators; AF Approval of ERPIMS Upload	5 days	0%	Thu 1/23/20	Wed 1/29/20	Tue 2/18/20	2184
2186		**Annual Report - Year 2020**	**57 days**	**0%**	**Fri 10/16/20**	**Mon 1/4/21**	**Fri 1/22/21**	
2187	2014	Prepare Working Copy of Annual Report	20 days	0%	Fri 10/16/20	hu 11/12/20	Wed 12/2/20	2159
2188	2014	AF Review of Working Copy of Annual Report	22 days	0%	Fri 11/13/20	on 12/14/20	Fri 1/1/21	2187
2189	2014	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Tue 12/15/20	on 12/28/20	Fri 1/15/21	2188
2190	2014	AF Approval of Final 2020 Annual LTM Report	0 days	0%	Mon 12/28/20	on 12/28/20	Fri 1/15/21	2189
2191	2014	Submit Final Annual Report to Regulators; AF Approval of ERPIMS Upload	5 days	0%	Tue 12/29/20	Mon 1/4/21	Fri 1/22/21	2190
2192		**SC: CSS681: Apron 1 Area LCP-E9 (NYSDEC Spill #1501553)**	**1497 days**	**16%**	**Wed 7/29/15**	**Thu 4/22/21**	**Mon 12/21/20**	
2193		**Remedial Action**	**430 days**	**79%**	**Wed 6/29/16**	**Tue 2/20/18**	**Fri 9/8/17**	
2194		**Corrective Action Plan (CAP) for Pre-Design Investigation (PDI) & Remedial Action**	**347 days**	**100%**	**Wed 6/29/16**	**Thu 10/26/17**	**Tue 1/3/17**	
2195	2020	Prepare Working Copy of CAP	24 days	100%	Wed 6/29/16	Mon 8/1/16	Thu 7/28/16	906FS+15 days
2196	2020	AF Review of Working Copy of CAP	31 days	100%	Tue 8/2/16	Tue 9/13/16	Mon 8/29/16	2195
2197	2020	Resolve AF Comments on Working Copy of CAP	158 days	100%	Wed 9/14/16	Fri 4/21/17	Mon 9/12/16	2196
2198	2020	AF Approval of Draft Corrective Action Plan	0 days	100%	Fri 4/21/17	Fri 4/21/17	Mon 9/12/16	2197
2199	2020	Submit Draft CAP to Regulators	1 day	100%	Mon 4/24/17	Mon 4/24/17	Mon 9/19/16	2198
2200	2020	Regulator Review of CAP	44 days	100%	Mon 4/24/17	Fri 6/23/17	Fri 11/18/16	2199
2201	2020	RTC Regulator Comments on Draft CAP	5 days	100%	Mon 6/26/17	Fri 6/30/17	Fri 11/25/16	2200
2202	2020	Prepare Final CAP	28 days	100%	Mon 7/3/17	Wed 8/9/17	Fri 12/2/16	2201
2203	2020	Regulator Approval of Final CAP	34 days	100%	Mon 9/11/17	hu 10/26/17	Tue 1/3/17	2202FS+22 days
2204	**2020**	**Plume Delineation**	**87 days**	**4%**	**Mon 10/23/17**	**Tue 2/20/18**	**Thu 5/18/17**	
2205	2020	Mobilization	2 days	100%	Mon 10/23/17	ue 10/24/17	Fri 1/20/17	2203SS+10 days
2206	2020	Install Monitoring Wells	10 days	0%	Wed 10/25/17	Thu 11/9/17	Fri 3/3/17	2203,2205
2207	2020	Groundwater gaging and sampling	5 days	0%	Mon 11/13/17	Fri 11/17/17	Tue 2/14/17	2205SS+15 days
2208	2020	Offsite Analysis of Groundwater Samples	15 days	0%	Fri 11/10/17	hu 11/30/17	Fri 3/24/17	2206
2209	2020	Data Validation	15 days	0%	Fri 12/1/17	hu 12/21/17	Fri 4/14/17	2208
2210	2020	ERPIMS Submittal	1 day	0%	Tue 2/20/18	Tue 2/20/18	Thu 5/18/17	2207FS+66 days
2211	**2020**	**Remedial Optimization Field Implementation**	**65 days**	**0%**	**Mon 10/30/17**	**Fri 1/26/18**	**Fri 9/8/17**	
2212	2020	Mobilization	3 days	0%	Mon 10/30/17	Tue 12/5/17	Wed 3/29/17	2208
2213	2020	Complete Injections	5 days	0%	Mon 11/6/17	Fri 11/10/17	Fri 4/21/17	2212SS+5 days
2214	2021	Collect groundwater samples	2 days	0%	Wed 12/13/17	hu 12/14/17	Thu 7/27/17	2213FS+22 days



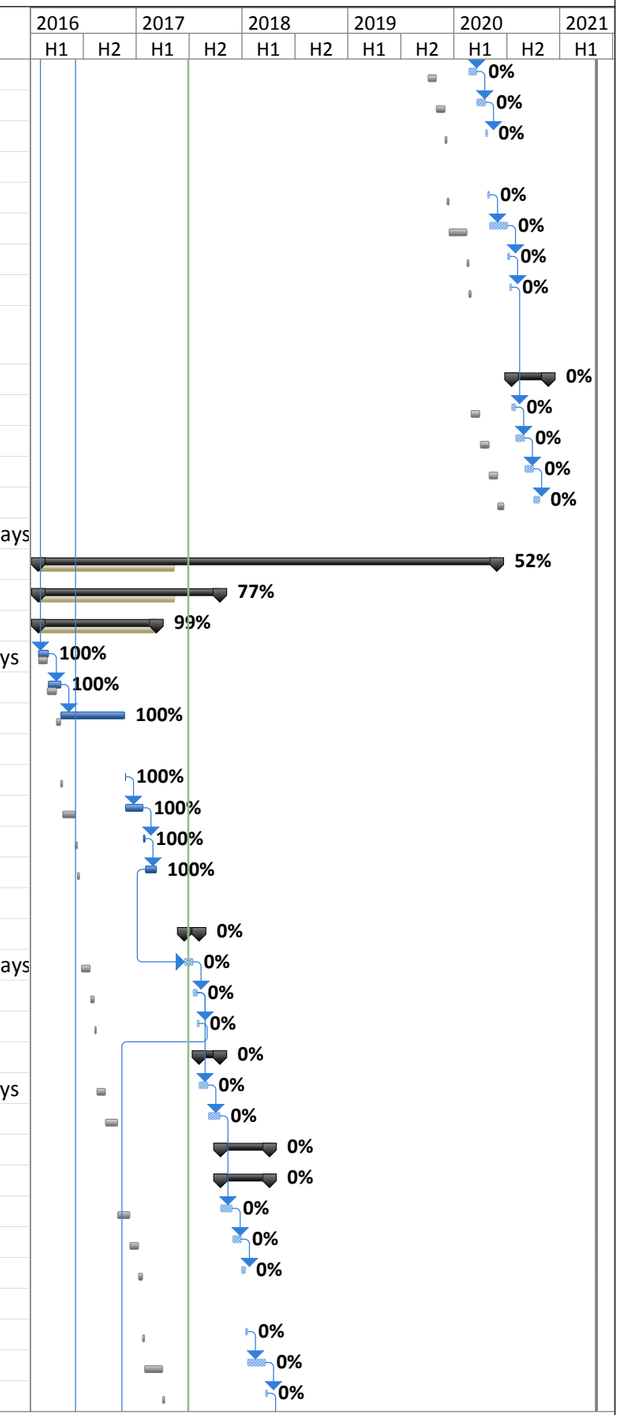
ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
2215	2021	Offsite Analysis of Groundwater Samples	15 days	0%	Fri 12/15/17	Thu 1/4/18	Thu 8/17/17	2214
2216	2021	Data Validation	15 days	0%	Fri 1/5/18	Thu 1/25/18	Thu 9/7/17	2215
2217	2021	ERPIMS Submittal	1 day	0%	Fri 1/26/18	Fri 1/26/18	Fri 9/8/17	2216
2218	**2021**	**RA-C**	**143 days**	**0%**	**Fri 1/26/18**	**Tue 8/14/18**	**Tue 3/27/18**	
2219	**2021**	**Construction Completion Report (CCR)**	**143 days**	**0%**	**Fri 1/26/18**	**Tue 8/14/18**	**Tue 3/27/18**	
2220	2021	Prepare Working Copy of CCR	30 days	0%	Fri 1/26/18	Thu 3/8/18	Thu 10/19/17	2216
2221	2021	AF Review of Working Copy of CCR	22 days	0%	Fri 3/9/18	Mon 4/9/18	Mon 11/20/17	2220
2222	2021	Resolve AF Comments on Working Copy of CCR	10 days	0%	Tue 4/10/18	Mon 4/23/18	Mon 12/4/17	2221
2223	2021	AF Approval of Draft CCR	0 days	0%	Mon 4/23/18	Mon 4/23/18	Mon 12/4/17	2222
2224	2021	Submit Draft Annual CCR to Regulators	5 days	0%	Tue 4/24/18	Mon 4/30/18	Mon 12/11/17	2223
2225	2021	Regulator Review of Draft CCR	44 days	0%	Tue 5/1/18	Fri 6/29/18	Fri 2/9/18	2224
2226	2021	RTC Regulator Comments on Draft CCR	5 days	0%	Mon 7/2/18	Fri 7/6/18	Fri 2/16/18	2225
2227	2021	Prepare Final CCR	5 days	0%	Mon 7/9/18	Fri 7/13/18	Fri 2/23/18	2226
2228	2021	Regulator Approval of Final CCR	0 days	0%	Tue 8/14/18	Tue 8/14/18	Tue 3/27/18	2227FS+22 days
2229		**RA-O**	**919 days**	**0%**	**Wed 7/29/15**	**Mon 2/4/19**	**Mon 9/17/18**	
2230		**Performance Groundwater Sampling and Well Inspections Year 1**	**919 days**	**0%**	**Wed 7/29/15**	**Mon 2/4/19**	**Mon 9/17/18**	
2231	2021	Groundwater gaging and Well inspection	2 days	0%	Mon 3/19/18	Tue 3/20/18	Tue 10/31/17	2214FS+66 days
2232	2021	Monthly O&M	250 days	0%	Wed 7/29/15	Tue 7/12/16	Wed 5/9/18	
2233	**2021**	**Q1 Groundwater Sampling**	**91 days**	**0%**	**Wed 3/21/18**	**Wed 7/25/18**	**Wed 3/7/18**	
2234	2021	Sampling	3 days	0%	Wed 3/21/18	Fri 3/23/18	Fri 11/3/17	2231
2235	2021	Offsite Analysis of Groundwater Samples	15 days	0%	Mon 3/26/18	Fri 4/13/18	Fri 11/24/17	2234
2236	2021	Data Validation	15 days	0%	Mon 4/16/18	Fri 5/4/18	Fri 12/15/17	2235
2237	2021	ERPIMS Submittal	22 days	0%	Tue 6/26/18	Wed 7/25/18	Wed 3/7/18	2234FS+66 days
2238	**2021**	**Q2 Groundwater Sampling**	**91 days**	**0%**	**Tue 6/26/18**	**ue 10/30/18**	**Tue 6/12/18**	
2239	2021	Sampling	3 days	0%	Tue 6/26/18	Thu 6/28/18	Thu 2/8/18	2234FS+66 days
2240	2021	Offsite Analysis of Groundwater Samples	15 days	0%	Fri 6/29/18	Thu 7/19/18	Thu 3/1/18	2239
2241	2021	Data Validation	15 days	0%	Fri 7/20/18	Thu 8/9/18	Thu 3/22/18	2240
2242	2021	ERPIMS Submittal	22 days	0%	Mon 10/1/18	ue 10/30/18	Tue 6/12/18	2239FS+66 days
2243	**2021**	**Q3 Groundwater Sampling**	**91 days**	**0%**	**Mon 10/1/18**	**Mon 2/4/19**	**Mon 9/17/18**	
2244	2021	Sampling	3 days	0%	Mon 10/1/18	Wed 10/3/18	Wed 5/16/18	2239FS+66 days
2245	2021	Offsite Analysis of Groundwater Samples	15 days	0%	Thu 10/4/18	ed 10/24/18	Wed 6/6/18	2244
2246	2021	Data Validation	15 days	0%	Thu 10/25/18	ed 11/14/18	Wed 6/27/18	2245
2247	2021	ERPIMS Submittal	22 days	0%	Fri 1/4/19	Mon 2/4/19	Mon 9/17/18	2244FS+66 days
2248		**Performance Groundwater Sampling and Well Inspections Year 2**	**860 days**	**0%**	**Wed 7/27/16**	**ue 11/12/19**	**Tue 6/25/19**	
2249	2022	Groundwater gaging and Well inspection	2 days	0%	Thu 9/27/18	Fri 9/28/18	Fri 5/11/18	2252SS-2 days
2250	2022	Monthly O&M	250 days	0%	Wed 7/27/16	Tue 7/11/17	Wed 5/8/19	2232FS+10 days
2251	**2022**	**Q1 Groundwater Sampling**	**99 days**	**0%**	**Mon 10/1/18**	**Thu 2/14/19**	**Thu 9/27/18**	
2252	2022	Sampling	3 days	0%	Mon 10/1/18	Wed 10/3/18	Wed 5/16/18	2239FS+66 days
2253	2022	Offsite Analysis of Groundwater Samples	15 days	0%	Fri 1/4/19	Thu 1/24/19	Thu 9/6/18	2244FS+66 days
2254	2022	Data Validation	15 days	0%	Fri 1/25/19	Thu 2/14/19	Thu 9/27/18	2253
2255	2022	ERPIMS Submittal	22 days	0%	Fri 1/4/19	Mon 2/4/19	Mon 9/17/18	2252FS+66 days
2256	**2022**	**Q2 Groundwater Sampling**	**91 days**	**0%**	**Fri 1/4/19**	**Fri 5/10/19**	**Fri 12/21/18**	
2257	2022	Sampling	3 days	0%	Fri 1/4/19	Tue 1/8/19	Tue 8/21/18	2252FS+66 days
2258	2022	Offsite Analysis of Groundwater Samples	15 days	0%	Wed 1/9/19	Tue 1/29/19	Tue 9/11/18	2257



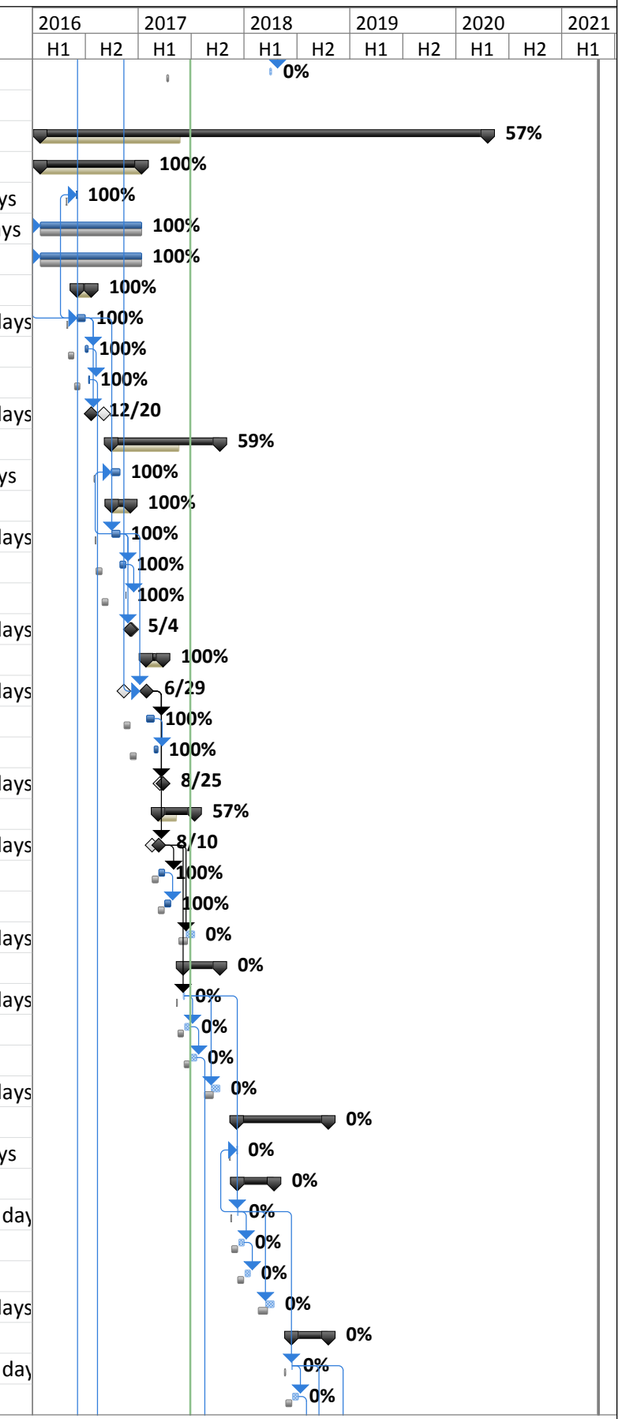
ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
2259	2022	Data Validation	15 days	0%	Wed 1/30/19	Tue 2/19/19	Tue 10/2/18	2258
2260	2022	ERPIMS Submittal	22 days	0%	Thu 4/11/19	Fri 5/10/19	Fri 12/21/18	2257FS+66 days
2261	**2022**	**Q3 Groundwater Sampling**	**91 days**	**0%**	**Thu 4/11/19**	**Thu 8/15/19**	**Thu 3/28/19**	
2262	2022	Sampling	3 days	0%	Thu 4/11/19	Mon 4/15/19	Mon 11/26/18	2257FS+66 days
2263	2022	Offsite Analysis of Groundwater Samples	15 days	0%	Tue 4/16/19	Mon 5/6/19	Mon 12/17/18	2262
2264	2022	Data Validation	15 days	0%	Tue 5/7/19	Mon 5/27/19	Mon 1/7/19	2263
2265	2022	ERPIMS Submittal	22 days	0%	Wed 7/17/19	Thu 8/15/19	Thu 3/28/19	2262FS+66 days
2266	**2022**	**Q4 Groundwater Sampling**	**91 days**	**0%**	**Tue 7/9/19**	**ue 11/12/19**	**Tue 6/25/19**	
2267	2022	Sampling	3 days	0%	Tue 7/9/19	Thu 7/11/19	Thu 2/21/19	2262FS+60 days
2268	2022	Offsite Analysis of Groundwater Samples	15 days	0%	Fri 7/12/19	Thu 8/1/19	Thu 3/14/19	2267
2269	2022	Data Validation	15 days	0%	Fri 8/2/19	Thu 8/22/19	Thu 4/4/19	2268
2270	2022	ERPIMS Submittal	22 days	0%	Mon 10/14/19	ue 11/12/19	Tue 6/25/19	2267FS+66 days
2272		**LTM**	**296 days**	**0%**	**Fri 8/23/19**	**Fri 10/9/20**	**Fri 5/22/20**	
2273		**Rebound Groundwater Sampling and Well Inspections Year 1**	**296 days**	**0%**	**Fri 8/23/19**	**Fri 10/9/20**	**Fri 5/22/20**	
2274	2022	Groundwater gaging and Well inspection	2 days	0%	Thu 9/12/19	Fri 9/13/19	Fri 4/26/19	2277SS-2 days
2275	2022	System Shutdown	1 day	0%	Fri 8/23/19	Fri 8/23/19	Fri 4/5/19	2269
2276	**2022**	**Q1 Groundwater Sampling**	**91 days**	**0%**	**Mon 9/16/19**	**Mon 1/20/20**	**Mon 9/2/19**	
2277	2022	Sampling	3 days	0%	Mon 9/16/19	Wed 9/18/19	Wed 5/1/19	2275FS+15 days
2278	2022	Offsite Analysis of Groundwater Samples	15 days	0%	Thu 9/19/19	Wed 10/9/19	Wed 5/22/19	2277
2279	2022	Data Validation	15 days	0%	Thu 10/10/19	ed 10/30/19	Wed 6/12/19	2278
2280	2023	ERPIMS Submittal	22 days	0%	Fri 12/20/19	Mon 1/20/20	Mon 9/2/19	2277FS+66 days
2281	**2023**	**Q2 Groundwater Sampling**	**91 days**	**0%**	**Thu 12/12/19**	**Thu 4/16/20**	**Thu 11/28/19**	
2282	2023	Sampling	3 days	0%	Thu 12/12/19	on 12/16/19	Mon 7/29/19	2277FS+60 days
2283	2023	Offsite Analysis of Groundwater Samples	15 days	0%	Tue 12/17/19	Mon 1/6/20	Mon 8/19/19	2282
2284	2023	Data Validation	15 days	0%	Tue 1/7/20	Mon 1/27/20	Mon 9/9/19	2283
2285	2023	ERPIMS Submittal	22 days	0%	Wed 3/18/20	Thu 4/16/20	Thu 11/28/19	2282FS+66 days
2286	**2023**	**Q3 Groundwater Sampling**	**87 days**	**0%**	**Tue 3/10/20**	**Wed 7/8/20**	**Wed 2/19/20**	
2287	2023	Sampling	3 days	0%	Tue 3/10/20	Thu 3/12/20	Thu 10/24/19	2282FS+60 days
2288	2023	Offsite Analysis of Groundwater Samples	15 days	0%	Fri 3/13/20	Thu 4/2/20	Thu 11/14/19	2287
2289	2023	Data Validation	15 days	0%	Fri 4/3/20	Thu 4/23/20	Thu 12/5/19	2288
2290	2023	ERPIMS Submittal	22 days	0%	Tue 6/9/20	Wed 7/8/20	Wed 2/19/20	2287FS+62 days
2291	**2023**	**Q4 Groundwater Sampling**	**91 days**	**0%**	**Fri 6/5/20**	**Fri 10/9/20**	**Fri 5/22/20**	
2292	2023	Sampling	3 days	0%	Fri 6/5/20	Tue 6/9/20	Tue 1/21/20	2287FS+60 days
2293	2023	Offsite Analysis of Groundwater Samples	15 days	0%	Wed 6/10/20	Tue 6/30/20	Tue 2/11/20	2292
2294	2023	Data Validation	15 days	0%	Wed 7/1/20	Tue 7/21/20	Tue 3/3/20	2293
2295	2023	ERPIMS Submittal	22 days	0%	Thu 9/10/20	Fri 10/9/20	Fri 5/22/20	2292FS+66 days
2296		**Annual Performance Monitoring Report - Year 2017**	**57 days**	**0%**	**Fri 8/23/19**	**on 11/11/19**	**Mon 6/24/19**	
2297	2022	Prepare Working Copy of Annual Report	20 days	0%	Fri 8/23/19	Thu 9/19/19	Thu 5/2/19	2269
2298	2022	AF Review of Working Copy of Annual Report	22 days	0%	Fri 9/20/19	on 10/21/19	Mon 6/3/19	2297
2299	2022	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Tue 10/22/19	Mon 11/4/19	Mon 6/17/19	2298
2300	2022	AF Approval of Final 2017 Annual Performance Monitoring Report	0 days	0%	Mon 11/4/19	Mon 11/4/19	Mon 6/17/19	2299
2301	2022	Submit Final Annual Report to Regulators; AF Approval of ERPIMS Upload	5 days	0%	Tue 11/5/19	on 11/11/19	Mon 6/24/19	2300
2302		**Site Closeout**	**197 days**	**0%**	**Wed 7/22/20**	**Thu 4/22/21**	**Mon 12/21/20**	
2303	**2023**	**Spill Closure Report**	**128 days**	**0%**	**Wed 7/22/20**	**Fri 1/15/21**	**Fri 8/28/20**	



ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
2304	2023	Prepare Working Copy of Spill Closure Report	20 days	0%	Wed 7/22/20	Tue 8/18/20	Tue 3/31/20	2294
2305	2023	AF Review of Working Copy of Spill Closure Report	22 days	0%	Wed 8/19/20	Thu 9/17/20	Thu 4/30/20	2304
2306	2023	Resolve AF Comments on Working Copy of Spill Closure Report	5 days	0%	Fri 9/18/20	Thu 9/24/20	Thu 5/7/20	2305
2307	2023	AF Approval of Draft Spill Closure Report	0 days	0%	Thu 9/24/20	Thu 9/24/20	Thu 5/7/20	2306
2308	2023	Submit Draft RACR to Regulators	5 days	0%	Fri 9/25/20	Thu 10/1/20	Thu 5/14/20	2307
2309	2023	Regulator Review of Draft Spill Closure Report	44 days	0%	Fri 10/2/20	Wed 12/2/20	Wed 7/15/20	2308
2310	2024	RTC Regulator Comments on Draft Spill Closure Report	5 days	0%	Thu 12/3/20	Wed 12/9/20	Wed 7/22/20	2309
2311	2024	Prepare Final Spill Closure Report	5 days	0%	Thu 12/10/20	ed 12/16/20	Wed 7/29/20	2310
2312	2024	AF and Regulator Approval of Final Spill Closure Report; AF Approval of ERPIMS Upload	0 days	0%	Fri 1/15/21	Fri 1/15/21	Fri 8/28/20	2311FS+22 days
2313	**2024**	**Site Closeout and Well & System Decommissioning Report**	**91 days**	**0%**	**Thu 12/17/20**	**Thu 4/22/21**	**Mon 12/21/20**	
2314	2024	Decommission Wells and System	10 days	0%	Thu 12/17/20	ed 12/30/20	Fri 8/28/20	2311
2315	2024	Prepare Working Copy of Site Closeout and Well & System Decommissioning F	22 days	0%	Thu 12/31/20	Fri 1/29/21	Tue 9/29/20	2314
2316	2024	AF Review of Working Copy of Site Closeout and Well & System Decommissior	22 days	0%	Mon 2/1/21	Tue 3/2/21	Thu 10/29/20	2315
2317	2024	Resolve AF Comments on Working Copy of Site Closeout and Well & System R	15 days	0%	Wed 3/3/21	Tue 3/23/21	Thu 11/19/20	2316
2318	2024	AF Approval of Final Site Closeout and Well & System Decommissioning Repor	0 days	0%	Thu 4/22/21	Thu 4/22/21	Mon 12/21/20	2317FS+22 days
2319		**OES: SS067: Building 789 Type II Fuel system (NYSDEC Spill #9810713)**	**1130 days**	**52%**	**Tue 6/28/16**	**on 10/26/20**	**Thu 10/1/20**	
2320		**Free Product Delineation and Remedial Action**	**448 days**	**77%**	**Wed 6/29/16**	**Fri 3/16/18**	**Tue 3/28/17**	
2321	**2010**	**Corrective Action Plan**	**291 days**	**99%**	**Wed 6/29/16**	**Wed 8/9/17**	**Wed 11/16/16**	
2322	2010	Prepare Working Copy of CAP	24 days	100%	Wed 6/29/16	Mon 8/1/16	Thu 7/28/16	906FS+15 days
2323	2010	AF Review of Working Copy	31 days	100%	Tue 8/2/16	Tue 9/13/16	Mon 8/29/16	2322
2324	2010	Resolve AF Comments on Working Copy of CAP	158 days	100%	Wed 9/14/16	Fri 4/21/17	Mon 9/12/16	2323
2325	2010	AF Approval of Draft Corrective Action Plan	0 days	100%	Fri 4/21/17	Fri 4/21/17	Mon 9/12/16	2324
2326	2010	Submit Draft CAP to Regulators	1 day	100%	Mon 4/24/17	Mon 4/24/17	Mon 9/19/16	2325
2327	2010	Regulator Review of CAP	44 days	100%	Mon 4/24/17	Fri 6/23/17	Wed 11/2/16	2326
2328	2010	RTC Regulator Comments on Draft CAP	5 days	100%	Mon 6/26/17	Fri 6/30/17	Wed 11/9/16	2327
2329	2010	Prepare Final CAP	28 days	100%	Mon 7/3/17	Wed 8/9/17	Wed 11/16/16	2328
2330	2010	Regulator Approval of Final CAP	0 days	0%	Wed 8/9/17	Wed 8/9/17	Wed 11/16/16	2329
2331	**2010**	**Corrective Action Plan - Delineation**	**37 days**	**0%**	**Tue 11/14/17**	**Wed 1/3/18**	**Fri 1/13/17**	
2332	2010	Mobilization and Permitting (Dig and UIC)	22 days	0%	Tue 11/14/17	ed 12/13/17	Fri 12/23/16	2329SS+10 days
2333	2010	Delineation of Free Product	10 days	0%	Thu 12/14/17	ed 12/27/17	Fri 1/6/17	2332
2334	2010	Install new monitoring wells (if needed)	5 days	0%	Thu 12/28/17	Wed 1/3/18	Fri 1/13/17	2333
2335	**2010**	**Corrective Action Plan - Implementation**	**52 days**	**0%**	**Thu 1/4/18**	**Fri 3/16/18**	**Tue 3/28/17**	
2336	2010	Mobilization and Permitting (Dig and UIC)	22 days	0%	Thu 1/4/18	Fri 2/2/18	Tue 2/14/17	2333FS+5 days
2337	2010	Full Scale Implementation	30 days	0%	Mon 2/5/18	Fri 3/16/18	Tue 3/28/17	2336
2338	**2010**	**RA-C**	**121 days**	**0%**	**Mon 3/19/18**	**Mon 9/3/18**	**Wed 9/13/17**	
2339	**2010**	**Construction Completion Report (CCR)**	**121 days**	**0%**	**Mon 3/19/18**	**Mon 9/3/18**	**Wed 9/13/17**	
2340	2010	Prepare Working Copy of CCR	30 days	0%	Mon 3/19/18	Fri 4/27/18	Tue 5/9/17	2337
2341	2010	AF Review of Working Copy of CCR	22 days	0%	Mon 4/30/18	Tue 5/29/18	Thu 6/8/17	2340
2342	2010	Resolve AF Comments on Working Copy of CCR	10 days	0%	Wed 5/30/18	Tue 6/12/18	Thu 6/22/17	2341
2343	2010	AF Approval of Draft CCR	0 days	0%	Tue 6/12/18	Tue 6/12/18	Thu 6/22/17	2342
2344	2011	Submit Draft Annual CCR to Regulators	5 days	0%	Wed 6/13/18	Tue 6/19/18	Thu 6/29/17	2343
2345	2011	Regulator Review of Draft CCR	44 days	0%	Wed 6/20/18	Mon 8/20/18	Wed 8/30/17	2344
2346	2011	RTC Regulator Comments on Draft CCR	5 days	0%	Tue 8/21/18	Mon 8/27/18	Wed 9/6/17	2345

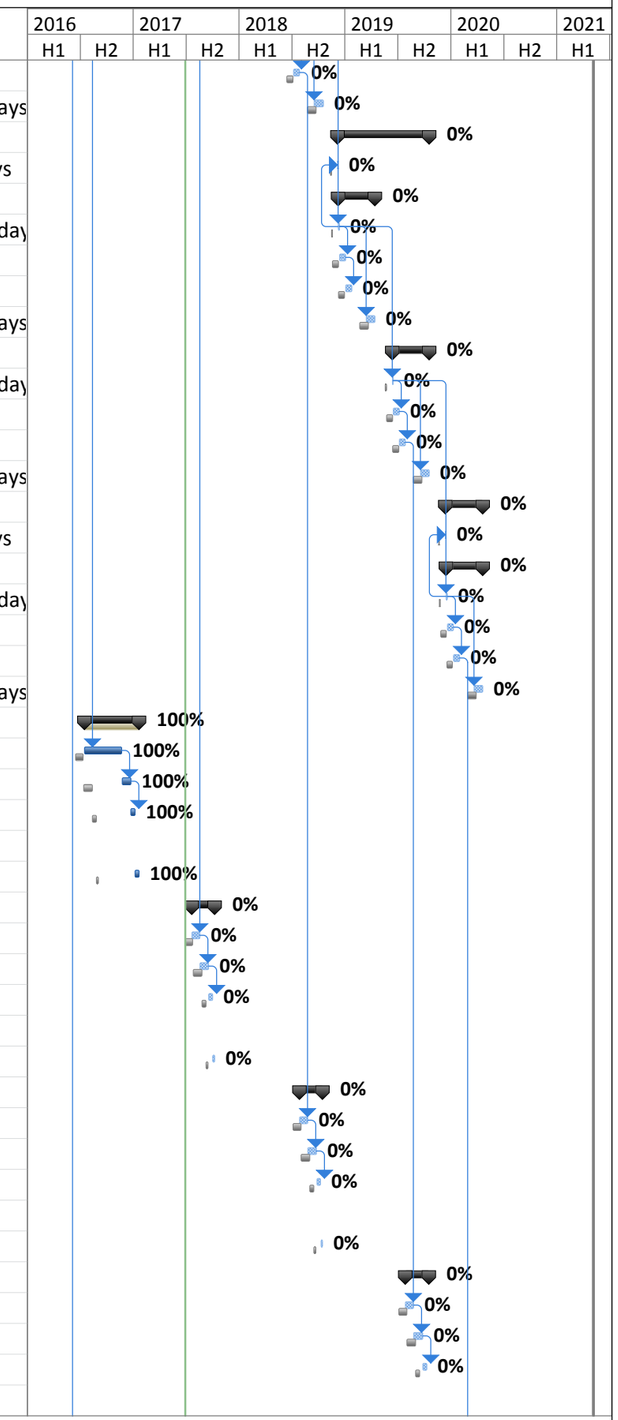


ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
2347	2011	Prepare Final CCR	5 days	0%	Tue 8/28/18	Mon 9/3/18	Wed 9/13/17	2346
2348	2011	Regulator Approval of Final CCR	0 days	0%	Mon 9/3/18	Mon 9/3/18	Wed 9/13/17	2347
2349		**RA-O**	**1104 days**	**57%**	**Tue 6/28/16**	**Fri 9/18/20**	**Wed 8/26/20**	
2350		**Performance Groundwater Sampling and Well Inspections Year 2016**	**250 days**	**100%**	**Tue 6/28/16**	**Mon 6/12/17**	**Mon 6/12/17**	
2351	2010	Groundwater gaging and Well inspection	2 days	100%	Mon 10/31/16	Tue 11/1/16	Tue 9/27/16	2355SS-2 days
2352	2010	Monthly ORP and DO Measurements	250 days	100%	Tue 6/28/16	Mon 6/12/17	Mon 6/12/17	906SS+15 days
2353	2010	Monthly O&M	250 days	100%	Tue 6/28/16	Mon 6/12/17	Mon 6/12/17	2352SS
2354	**2010**	**Q4-2016 Groundwater Sampling**	**35 days**	**100%**	**Wed 11/2/16**	**ue 12/20/16**	**Wed 2/1/17**	
2355	2010	Sampling	20 days	100%	Wed 11/2/16	ue 11/29/16	Fri 9/30/16	2352SS+66 days
2356	2010	Offsite Analysis of Groundwater Samples	8 days	100%	Wed 11/30/16	Fri 12/9/16	Fri 10/21/16	2355
2357	2010	Data Validation	3 days	100%	Mon 12/12/16	ed 12/14/16	Fri 11/11/16	2356
2358	2010	ERPIMS Submittal	0 days	100%	Tue 12/20/16	ue 12/20/16	Wed 2/1/17	2355FS+66 days
2359	**2010**	**Performance Groundwater Sampling and Well Inspections Year 2017**	**269 days**	**59%**	**Tue 2/28/17**	**Fri 3/9/18**	**Wed 2/14/18**	
2360	2010	Groundwater gaging and Well inspection	22 days	100%	Tue 2/28/17	Wed 3/29/17	Mon 1/2/17	2362SS-2 days
2361	**2010**	**Q1 2017 Groundwater Sampling**	**46 days**	**100%**	**Thu 3/2/17**	**Thu 5/4/17**	**Tue 5/9/17**	
2362	2010	Sampling	20 days	100%	Thu 3/2/17	Wed 3/29/17	Thu 1/5/17	2355FS+66 days
2363	2010	Offsite Analysis of Groundwater Samples	14 days	100%	Thu 3/30/17	Tue 4/18/17	Thu 1/26/17	2362
2364	2010	Data Validation	1 day	100%	Wed 4/19/17	Wed 4/19/17	Thu 2/16/17	2363
2365	2010	ERPIMS Submittal	0 days	100%	Thu 5/4/17	Thu 5/4/17	Tue 5/9/17	2362FS+66 days
2366	**2010**	**Q2 2017 Groundwater Sampling**	**43 days**	**100%**	**Wed 6/28/17**	**Fri 8/25/17**	**Mon 8/14/17**	
2367	2010	Sampling	0 days	100%	Wed 6/28/17	Thu 6/29/17	Wed 4/12/17	2362FS+66 days
2368	2010	Offsite Analysis of Groundwater Samples	18 days	100%	Fri 6/30/17	Tue 7/25/17	Wed 5/3/17	2367
2369	2010	Data Validation	9 days	100%	Wed 7/26/17	Mon 8/7/17	Wed 5/24/17	2368
2370	2010	ERPIMS Submittal	0 days	100%	Fri 8/25/17	Fri 8/25/17	Mon 8/14/17	2367FS+66 days
2371	**2011**	**Q3 2017 Groundwater Sampling**	**90 days**	**57%**	**Wed 8/9/17**	**ue 12/12/17**	**Fri 11/17/17**	
2372	2011	Sampling	0 days	100%	Wed 8/9/17	Thu 8/10/17	Tue 7/18/17	2367FS+66 days
2373	2011	Offsite Analysis of Groundwater Samples	14 days	100%	Fri 8/11/17	Wed 8/30/17	Tue 8/8/17	2372
2374	2011	Data Validation	15 days	100%	Thu 8/31/17	Wed 9/20/17	Tue 8/29/17	2373
2375	2011	ERPIMS Submittal	22 days	0%	Mon 11/13/17	ue 12/12/17	Fri 11/17/17	2372FS+66 days
2376	**2011**	**Q4 2017 Groundwater Sampling**	**91 days**	**0%**	**Fri 11/3/17**	**Fri 3/9/18**	**Wed 2/14/18**	
2377	2011	Sampling	3 days	0%	Fri 11/3/17	Tue 11/7/17	Fri 10/13/17	2372FS+60 days
2378	2011	Offsite Analysis of Groundwater Samples	15 days	0%	Wed 11/8/17	ue 11/28/17	Fri 11/3/17	2377
2379	2011	Data Validation	15 days	0%	Wed 11/29/17	ue 12/19/17	Fri 11/24/17	2378
2380	2011	ERPIMS Submittal	22 days	0%	Thu 2/8/18	Fri 3/9/18	Wed 2/14/18	2377FS+66 days
2381	**2011**	**Performance Groundwater Sampling and Well Inspections Year 2018**	**226 days**	**0%**	**Mon 5/7/18**	**Mon 3/18/19**	**Thu 2/21/19**	
2382	2011	Groundwater gaging and Well inspection	2 days	0%	Mon 5/7/18	Tue 5/8/18	Fri 4/13/18	2384SS-2 days
2383	**2011**	**2018 Semi-Annual Groundwater Sampling**	**91 days**	**0%**	**Wed 5/9/18**	**Wed 9/12/18**	**Mon 8/20/18**	
2384	2011	Sampling	3 days	0%	Wed 5/9/18	Fri 5/11/18	Wed 4/18/18	2377FS+130 day
2385	2011	Offsite Analysis of Groundwater Samples	15 days	0%	Mon 5/14/18	Fri 6/1/18	Wed 5/9/18	2384
2386	2011	Data Validation	15 days	0%	Mon 6/4/18	Fri 6/22/18	Wed 5/30/18	2385
2387	2011	ERPIMS Submittal	22 days	0%	Tue 8/14/18	Wed 9/12/18	Mon 8/20/18	2384FS+66 days
2388		**2018 Semi-Annual Groundwater Sampling**	**91 days**	**0%**	**Mon 11/12/18**	**Mon 3/18/19**	**Thu 2/21/19**	
2389	2012	Sampling	3 days	0%	Mon 11/12/18	ed 11/14/18	Mon 10/22/18	2384FS+130 day
2390	2012	Offsite Analysis of Groundwater Samples	15 days	0%	Thu 11/15/18	Wed 12/5/18	Mon 11/12/18	2389

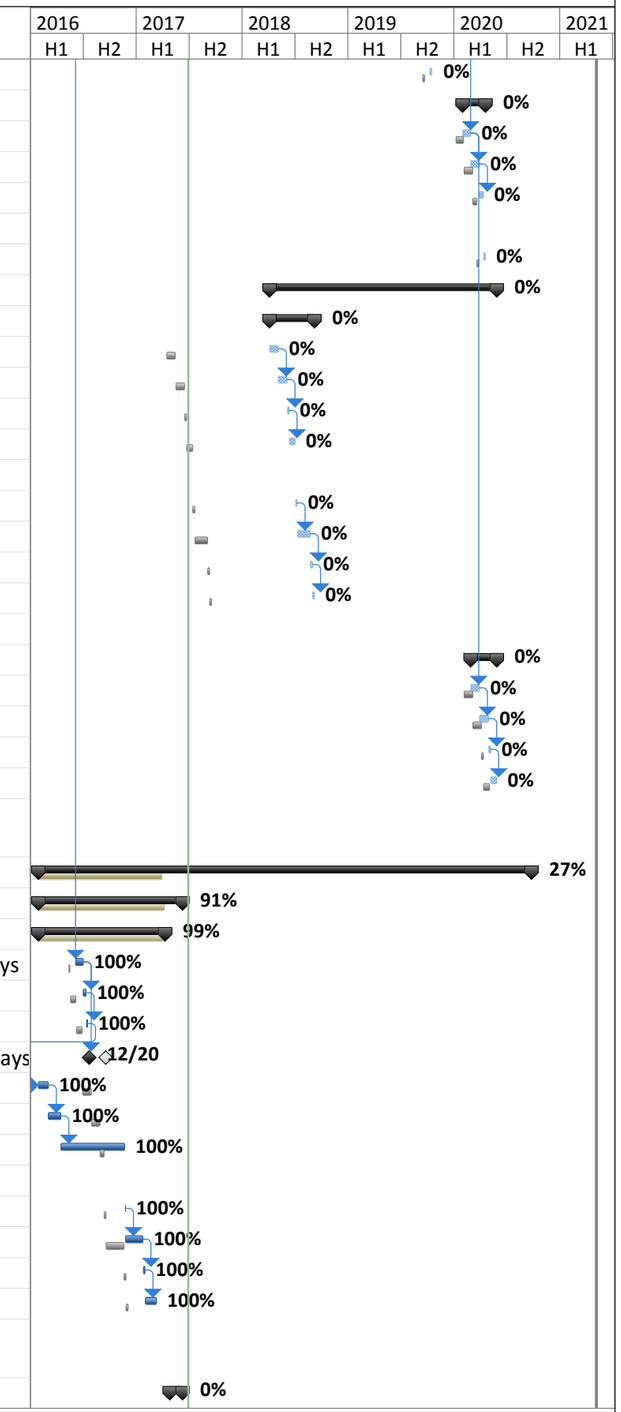


Appendix E. Project Schedule

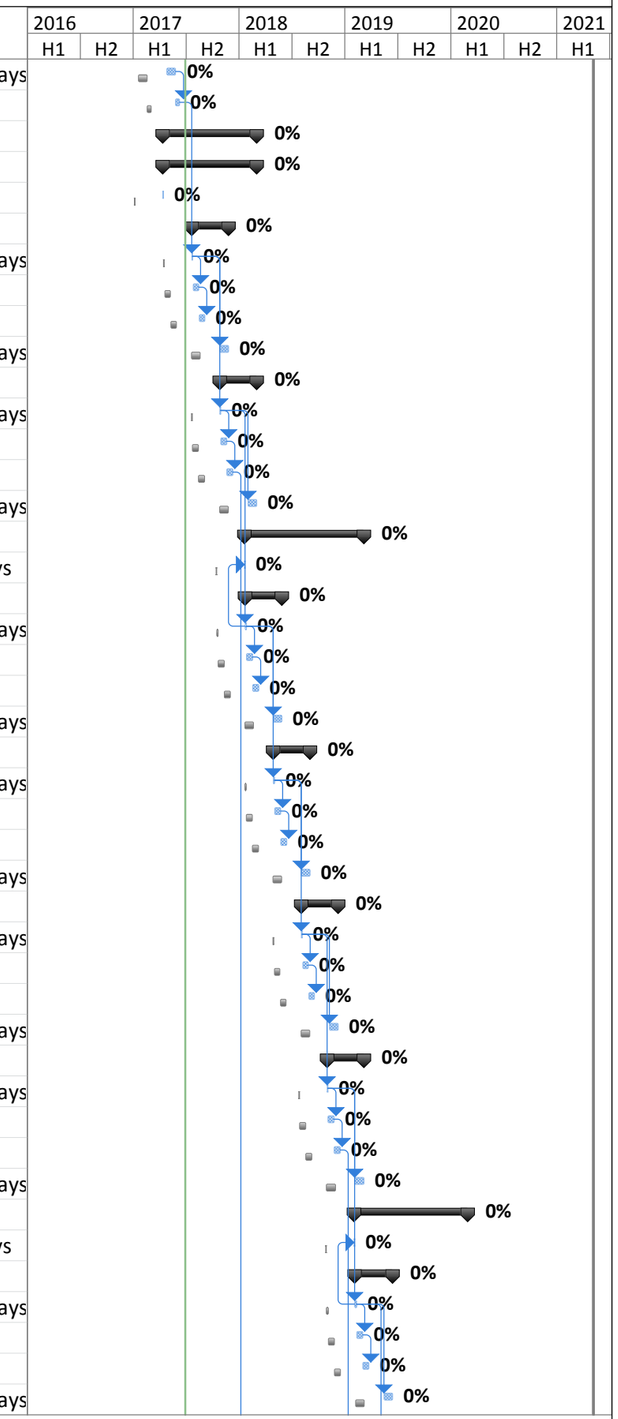
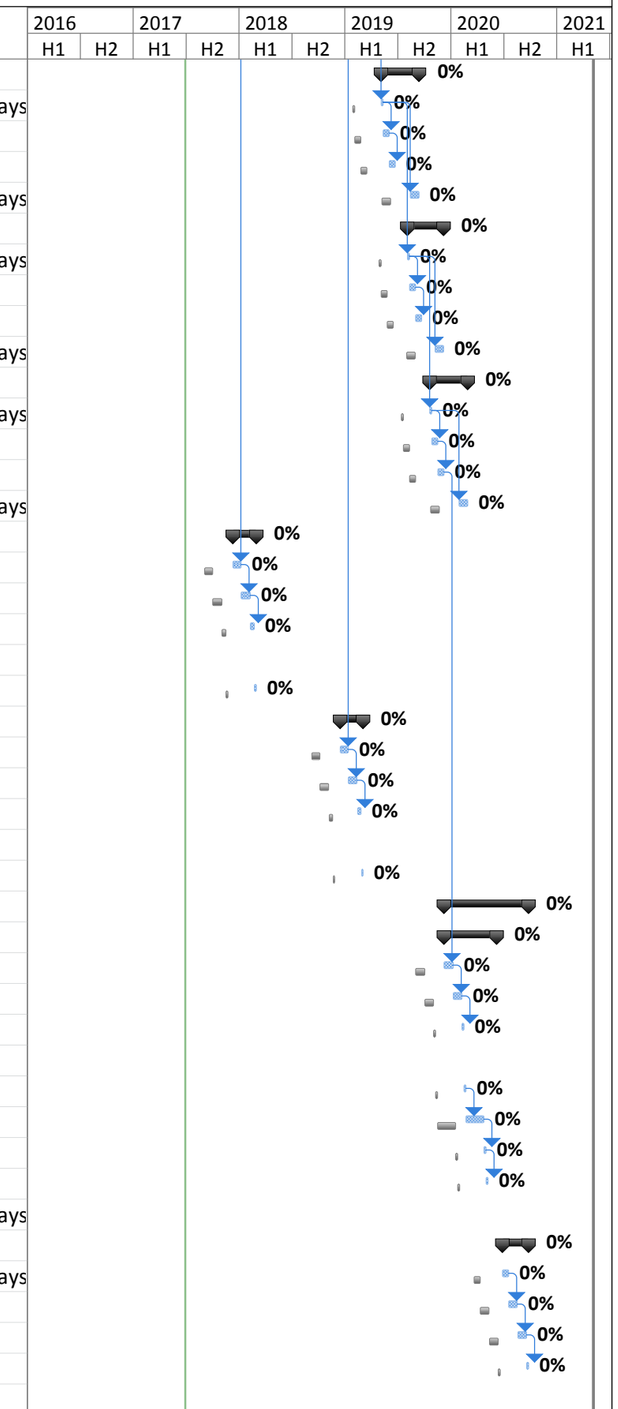
ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
2391	2012	Data Validation	15 days	0%	Thu 12/6/18	ed 12/26/18	Mon 12/3/18	2390
2392	2012	ERPIMS Submittal	22 days	0%	Fri 2/15/19	Mon 3/18/19	Thu 2/21/19	2389FS+66 days
2393	**2012**	**Performance Groundwater Sampling and Well Inspections Year 2019**	**226 days**	**0%**	**Tue 5/7/19**	**Tue 3/17/20**	**Fri 2/21/20**	
2394	2012	Groundwater gaging and Well inspection	2 days	0%	Tue 5/7/19	Wed 5/8/19	Mon 4/15/19	2396SS-2 days
2395	**2012**	**2019 Semi-Annual Groundwater Sampling**	**91 days**	**0%**	**Thu 5/9/19**	**Thu 9/12/19**	**Tue 8/20/19**	
2396	2012	Sampling	3 days	0%	Thu 5/9/19	Mon 5/13/19	Thu 4/18/19	2389FS+125 day
2397	2012	Offsite Analysis of Groundwater Samples	15 days	0%	Tue 5/14/19	Mon 6/3/19	Thu 5/9/19	2396
2398	2012	Data Validation	15 days	0%	Tue 6/4/19	Mon 6/24/19	Thu 5/30/19	2397
2399	2012	ERPIMS Submittal	22 days	0%	Wed 8/14/19	Thu 9/12/19	Tue 8/20/19	2396FS+66 days
2400	**2013**	**2019 Semi-Annual Groundwater Sampling**	**91 days**	**0%**	**Tue 11/12/19**	**Tue 3/17/20**	**Fri 2/21/20**	
2401	2013	Sampling	3 days	0%	Tue 11/12/19	hu 11/14/19	Tue 10/22/19	2396FS+130 day
2402	2013	Offsite Analysis of Groundwater Samples	15 days	0%	Fri 11/15/19	Thu 12/5/19	Tue 11/12/19	2401
2403	2013	Data Validation	15 days	0%	Fri 12/6/19	hu 12/26/19	Tue 12/3/19	2402
2404	2013	ERPIMS Submittal	22 days	0%	Mon 2/17/20	Tue 3/17/20	Fri 2/21/20	2401FS+66 days
2405	**2013**	**Performance Groundwater Sampling and Well Inspections Year 2020**	**93 days**	**0%**	**Wed 5/13/20**	**Fri 9/18/20**	**Wed 8/26/20**	
2406	2013	Groundwater gaging and Well inspection	2 days	0%	Wed 5/13/20	Thu 5/14/20	Tue 4/21/20	2408SS-2 days
2407	**2013**	**Annual Groundwater Sampling-2020**	**91 days**	**0%**	**Fri 5/15/20**	**Fri 9/18/20**	**Wed 8/26/20**	
2408	2013	Sampling	3 days	0%	Fri 5/15/20	Tue 5/19/20	Fri 4/24/20	2401FS+130 day
2409	2013	Offsite Analysis of Groundwater Samples	15 days	0%	Wed 5/20/20	Tue 6/9/20	Fri 5/15/20	2408
2410	2013	Data Validation	15 days	0%	Wed 6/10/20	Tue 6/30/20	Fri 6/5/20	2409
2411	2013	ERPIMS Submittal	22 days	0%	Thu 8/20/20	Fri 9/18/20	Wed 8/26/20	2408FS+66 days
2412	**2010**	**Annual Performance Monitoring Report - Year 2016**	**134 days**	**100%**	**Thu 12/15/16**	**Tue 6/20/17**	**Tue 1/31/17**	
2413	2010	Prepare Working Copy of Annual Report	92 days	100%	Thu 12/15/16	Fri 4/21/17	Fri 12/9/16	2357
2414	2010	AF Review of Working Copy of Annual Report	22 days	100%	Mon 4/24/17	Tue 5/23/17	Tue 1/10/17	2413
2415	2010	Resolve AF Comments on Working Copy of Annual Report	10 days	100%	Wed 5/24/17	Tue 6/6/17	Tue 1/24/17	2414
2416	2010	AF Approval of Final 2016 Annual Performance Monitoring Report	0 days	100%	Tue 6/6/17	Tue 6/6/17	Tue 1/24/17	2415
2417	2010	Submit Final Annual Report to Regulators;AF Approval of ERPIMS	10 days	100%	Wed 6/7/17	Tue 6/20/17	Tue 1/31/17	2416
2418	**2011**	**Annual Performance Monitoring Report - Year 2017**	**57 days**	**0%**	**Wed 12/20/17**	**Thu 3/8/18**	**Tue 2/13/18**	
2419	2011	Prepare Working Copy of Annual Report	20 days	0%	Wed 12/20/17	Tue 1/16/18	Fri 12/22/17	2379
2420	2011	AF Review of Working Copy of Annual Report	22 days	0%	Wed 1/17/18	Thu 2/15/18	Tue 1/23/18	2419
2421	2011	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Fri 2/16/18	Thu 3/1/18	Tue 2/6/18	2420
2422	2011	AF Approval o Final 2017 Annual Performance Monitoring Report	0 days	0%	Thu 3/1/18	Thu 3/1/18	Tue 2/6/18	2421
2423	2011	Submit Final Annual Report to Regulators;AF Approval of ERPIMS	5 days	0%	Fri 3/2/18	Thu 3/8/18	Tue 2/13/18	2422
2424	**2012**	**Annual Performance Monitoring Report - Year 2018**	**57 days**	**0%**	**Thu 12/27/18**	**Fri 3/15/19**	**Wed 2/20/19**	
2425	2012	Prepare Working Copy of Annual Report	20 days	0%	Thu 12/27/18	Wed 1/23/19	Mon 12/31/18	2391
2426	2012	AF Review of Working Copy of Annual Report	22 days	0%	Thu 1/24/19	Fri 2/22/19	Wed 1/30/19	2425
2427	2012	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Mon 2/25/19	Fri 3/8/19	Wed 2/13/19	2426
2428	2012	AF Approval of Final 2018 Annual Performance Monitoring Report	0 days	0%	Fri 3/8/19	Fri 3/8/19	Wed 2/13/19	2427
2429	2012	Submit Final Annual Report to Regulators; AF Approval of ERPIMS	5 days	0%	Mon 3/11/19	Fri 3/15/19	Wed 2/20/19	2428
2430	**2013**	**Annual Performance Monitoring Report - Year 2019**	**57 days**	**0%**	**Fri 12/27/19**	**Mon 3/16/20**	**Thu 2/20/20**	
2431	2013	Prepare Working Copy of Annual Report	20 days	0%	Fri 12/27/19	Thu 1/23/20	Tue 12/31/19	2403
2432	2013	AF Review of Working Copy of Annual Report	22 days	0%	Fri 1/24/20	Mon 2/24/20	Thu 1/30/20	2431
2433	2013	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Tue 2/25/20	Mon 3/9/20	Thu 2/13/20	2432
2434	2013	AF Approval of Final 2019 Annual Performance Monitoring Report	0 days	0%	Mon 3/9/20	Mon 3/9/20	Thu 2/13/20	2433



ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
2435	2013	Submit Final Annual Report to Regulators; AF Approval of ERPIMS	5 days	0%	Tue 3/10/20	Mon 3/16/20	Thu 2/20/20	2434
2436	**2014**	**Annual Performance Monitoring Report - Year 2020**	**57 days**	**0%**	**Wed 7/1/20**	**Thu 9/17/20**	**Tue 8/25/20**	
2437	2014	Prepare Working Copy of Annual Report	20 days	0%	Wed 7/1/20	Tue 7/28/20	Fri 7/3/20	2410
2438	2014	AF Review of Working Copy of Annual Report	22 days	0%	Wed 7/29/20	Thu 8/27/20	Tue 8/4/20	2437
2439	2014	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Fri 8/28/20	Thu 9/10/20	Tue 8/18/20	2438
2440	2014	AF Approval of Final 2020 Annual Performance Monitoring Report	0 days	0%	Thu 9/10/20	Thu 9/10/20	Tue 8/18/20	2439
2441	2014	Submit Final Annual Report to Regulators; AF Approval of ERPIMS	5 days	0%	Fri 9/11/20	Thu 9/17/20	Tue 8/25/20	2440
2442		**Optimization**	**560 days**	**0%**	**Tue 9/4/18**	**on 10/26/20**	**Thu 10/1/20**	
2443	**2011**	**Optimization Plan**	**111 days**	**0%**	**Tue 9/4/18**	**Tue 2/5/19**	**Thu 2/15/18**	
2444	2011	Prepare Working Copy of Optimization Plan	22 days	0%	Tue 9/4/18	Wed 10/3/18	Fri 10/13/17	2348
2445	2011	Air Force Review of Working Copy	22 days	0%	Thu 10/4/18	Fri 11/2/18	Tue 11/14/17	2444
2446	2011	Resolve AF Comments on Working Copy AF	5 days	0%	Mon 11/5/18	Fri 11/9/18	Tue 11/21/17	2445
2447	2011	AF Review and Approval of RTCs	15 days	0%	Mon 11/12/18	Fri 11/30/18	Tue 12/12/17	2446
2448	2011	AF Approval of Draft Optimization Plan	0 days	0%	Fri 11/30/18	Fri 11/30/18	Tue 12/12/17	2447
2449	2011	Submit Draft Optimization Plan to Regulators	5 days	0%	Mon 12/3/18	Fri 12/7/18	Tue 12/19/17	2448
2450	2011	Regulator Review of Draft Optimization Plan	32 days	0%	Mon 12/10/18	Tue 1/22/19	Thu 2/1/18	2449
2451	2011	Resolve Regulator Comments on Draft Optimization Plan	5 days	0%	Wed 1/23/19	Tue 1/29/19	Thu 2/8/18	2450
2452	2011	Prepare Final Optimization Plan	5 days	0%	Wed 1/30/19	Tue 2/5/19	Thu 2/15/18	2451
2453	2011	AF Approval of Final Optimization Plan	0 days	0%	Tue 2/5/19	Tue 2/5/19	Thu 2/15/18	2452
2454		**OES Report**	**64 days**	**0%**	**Wed 7/29/20**	**on 10/26/20**	**Thu 10/1/20**	
2455	2014	Prepare Working Copy of OES Report	22 days	0%	Wed 7/29/20	Thu 8/27/20	Tue 8/4/20	2437
2456	2014	Air Force Review of Working Copy	22 days	0%	Fri 8/28/20	Mon 9/28/20	Thu 9/3/20	2455
2457	2014	Resolve AF Comments on Working Copy AF	5 days	0%	Tue 9/29/20	Mon 10/5/20	Thu 9/10/20	2456
2458	2014	AF Review and Approval of RTCs	15 days	0%	Tue 10/6/20	on 10/26/20	Thu 10/1/20	2457
2459	2014	AF Approval of Final OES Report; Distribute Report to Regulators-Achieve OES	0 days	0%	Mon 10/26/20	Mon 10/26/20	Thu 10/1/20	2458
2460		**SC: CSS682: Building 785 Pipeline (NYSDEC Spill #1408594)**	**1215 days**	**27%**	**Wed 6/29/16**	**Tue 2/23/21**	**Tue 11/17/20**	
2461	**2020**	**Remedial Action**	**355 days**	**91%**	**Wed 6/29/16**	**Tue 11/7/17**	**Tue 8/1/17**	
2462	**2020**	**Corrective Action Plan Amendment (if required)**	**313 days**	**99%**	**Wed 6/29/16**	**Fri 9/8/17**	**Fri 6/2/17**	
2463	2020	Sampling	18 days	100%	Fri 11/4/16	ue 11/29/16	Fri 10/14/16	906FS+90 days
2464	2020	Offsite Analysis of Groundwater Samples	8 days	100%	Wed 11/30/16	Fri 12/9/16	Fri 11/4/16	2463
2465	2020	Data Validation	3 days	100%	Mon 12/12/16	ed 12/14/16	Fri 11/25/16	2464
2466	2020	ERPIMS Submittal	0 days	100%	Tue 12/20/16	ue 12/20/16	Wed 2/15/17	2463FS+66 days
2467	2020	Prepare Working Copy of CAP Amendment	24 days	100%	Wed 6/29/16	Mon 8/1/16	Tue 12/27/16	2465
2468	2020	AF Review of Working Copy of CAP Amendment	31 days	100%	Tue 8/2/16	Tue 9/13/16	Thu 1/26/17	2467
2469	2020	Resolve AF Comments on Working Copy of CAP Amendment	158 days	100%	Wed 9/14/16	Fri 4/21/17	Thu 2/9/17	2468
2470	2020	AF Approval of Draft Corrective Action Plan Amendment (if required)	0 days	100%	Fri 4/21/17	Fri 4/21/17	Thu 2/9/17	2469
2471	2020	Submit Draft CAP Amendment to Regulators	1 day	100%	Mon 4/24/17	Mon 4/24/17	Thu 2/16/17	2470
2472	2020	Regulator Review of CAP Amendment	44 days	100%	Mon 4/24/17	Fri 6/23/17	Wed 4/19/17	2471
2473	2020	RTC Regulator Comments on Draft CAP Amendment	5 days	100%	Mon 6/26/17	Fri 6/30/17	Wed 4/26/17	2472
2474	2020	Prepare Final CAP Amendment	28 days	100%	Mon 7/3/17	Wed 8/9/17	Wed 5/3/17	2473
2475	2020	Regulator Approval of Final Corrective Action Plan Amendment (if required)	0 days	0%	Fri 9/8/17	Fri 9/8/17	Fri 6/2/17	2474FS+22 days
2476	**2020**	**Remedial Optimization Field Implementation**	**32 days**	**0%**	**Mon 9/25/17**	**Tue 11/7/17**	**Tue 8/1/17**	



ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
2477	2020	Mobilization, Permitting (Dig and UIC)	22 days	0%	Mon 9/25/17	ue 10/24/17	Tue 7/18/17	2475SS+10 days
2478	2020	Follow-on ISCO Injection, if needed	10 days	0%	Wed 10/25/17	Tue 11/7/17	Tue 8/1/17	2477,2475
2479	**2020**	**RA-O**	**232 days**	**0%**	**Mon 9/11/17**	**Tue 7/31/18**	**Tue 4/24/18**	
2480	**2020**	**Performance Groundwater Sampling and Well Inspections Year 2017**	**232 days**	**0%**	**Mon 9/11/17**	**Tue 7/31/18**	**Tue 4/24/18**	
2481	2020	Groundwater gaging and Well inspection	2 days	0%	Mon 9/11/17	Tue 9/12/17	Tue 6/6/17	2475
2482	**2021**	**Q1-2017 Groundwater Sampling**	**91 days**	**0%**	**Wed 12/20/17**	**Ved 4/25/18**	**Wed 1/17/18**	
2483	2021	Sampling	3 days	0%	Wed 12/20/17	Fri 12/22/17	Fri 9/15/17	2478FS+30 days
2484	2021	Offsite Analysis of Groundwater Samples	15 days	0%	Mon 12/25/17	Fri 1/12/18	Fri 10/6/17	2483
2485	2021	Data Validation	15 days	0%	Mon 1/15/18	Fri 2/2/18	Fri 10/27/17	2484
2486	2021	ERPIMS Submittal	22 days	0%	Tue 3/27/18	Ved 4/25/18	Wed 1/17/18	2483FS+66 days
2487	**2021**	**Q2-2017 Groundwater Sampling**	**91 days**	**0%**	**Tue 3/27/18**	**Tue 7/31/18**	**Tue 4/24/18**	
2488	2021	Sampling	3 days	0%	Tue 3/27/18	Thu 3/29/18	Thu 12/21/17	2483FS+66 days
2489	2021	Offsite Analysis of Groundwater Samples	15 days	0%	Fri 3/30/18	Thu 4/19/18	Thu 1/11/18	2488
2490	2021	Data Validation	15 days	0%	Fri 4/20/18	Thu 5/10/18	Thu 2/1/18	2489
2491	2021	ERPIMS Submittal	22 days	0%	Mon 7/2/18	Tue 7/31/18	Tue 4/24/18	2488FS+66 days
2492	**2021**	**Performance Groundwater Sampling and Well Inspections Year 2018**	**294 days**	**0%**	**Wed 6/20/18**	**Mon 8/5/19**	**Mon 4/29/19**	
2493	2021	Groundwater gaging and Well inspection	2 days	0%	Wed 6/20/18	Thu 6/21/18	Thu 3/15/18	2495SS-2 days
2494	**2021**	**Q1 -2018 Groundwater Sampling**	**91 days**	**0%**	**Fri 6/22/18**	**Fri 10/26/18**	**Fri 7/20/18**	
2495	2021	Sampling	3 days	0%	Fri 6/22/18	Tue 6/26/18	Tue 3/20/18	2488FS+60 days
2496	2021	Offsite Analysis of Groundwater Samples	15 days	0%	Wed 6/27/18	Tue 7/17/18	Tue 4/10/18	2495
2497	2021	Data Validation	15 days	0%	Wed 7/18/18	Tue 8/7/18	Tue 5/1/18	2496
2498	2021	ERPIMS Submittal	22 days	0%	Thu 9/27/18	Fri 10/26/18	Fri 7/20/18	2495FS+66 days
2499	**2021**	**Q2-2018 Groundwater Sampling**	**91 days**	**0%**	**Thu 9/27/18**	**Thu 1/31/19**	**Thu 10/25/18**	
2500	2021	Sampling	3 days	0%	Thu 9/27/18	Mon 10/1/18	Mon 6/25/18	2495FS+66 days
2501	2021	Offsite Analysis of Groundwater Samples	15 days	0%	Tue 10/2/18	on 10/22/18	Mon 7/16/18	2500
2502	2022	Data Validation	15 days	0%	Tue 10/23/18	on 11/12/18	Mon 8/6/18	2501
2503	2022	ERPIMS Submittal	22 days	0%	Wed 1/2/19	Thu 1/31/19	Thu 10/25/18	2500FS+66 days
2504	**2022**	**Q3-2018 Groundwater Sampling**	**91 days**	**0%**	**Wed 1/2/19**	**Wed 5/8/19**	**Wed 1/30/19**	
2505	2022	Sampling	3 days	0%	Wed 1/2/19	Fri 1/4/19	Fri 9/28/18	2500FS+66 days
2506	2022	Offsite Analysis of Groundwater Samples	15 days	0%	Mon 1/7/19	Fri 1/25/19	Fri 10/19/18	2505
2507	2022	Data Validation	15 days	0%	Mon 1/28/19	Fri 2/15/19	Fri 11/9/18	2506
2508	2022	ERPIMS Submittal	22 days	0%	Tue 4/9/19	Wed 5/8/19	Wed 1/30/19	2505FS+66 days
2509	**2022**	**Q4-2018 Groundwater Sampling**	**91 days**	**0%**	**Mon 4/1/19**	**Mon 8/5/19**	**Mon 4/29/19**	
2510	2022	Sampling	3 days	0%	Mon 4/1/19	Wed 4/3/19	Wed 12/26/18	2505FS+60 days
2511	2022	Offsite Analysis of Groundwater Samples	15 days	0%	Thu 4/4/19	Ved 4/24/19	Wed 1/16/19	2510
2512	2022	Data Validation	15 days	0%	Thu 4/25/19	Ved 5/15/19	Wed 2/6/19	2511
2513	2022	ERPIMS Submittal	22 days	0%	Fri 7/5/19	Mon 8/5/19	Mon 4/29/19	2510FS+66 days
2514	**2022**	**Rebound Groundwater Sampling and Well Inspections Year 2019**	**280 days**	**0%**	**Wed 7/3/19**	**Tue 7/28/20**	**Tue 4/21/20**	
2515	2022	Groundwater gaging and Well inspection	2 days	0%	Wed 7/3/19	Thu 7/4/19	Thu 3/28/19	2517SS-2 days
2516	**2022**	**Q1-2019 Groundwater Sampling**	**93 days**	**0%**	**Fri 7/5/19**	**ue 11/12/19**	**Tue 8/6/19**	
2517	2022	Sampling	5 days	0%	Fri 7/5/19	Thu 7/11/19	Thu 4/4/19	2510FS+66 days
2518	2022	Offsite Analysis of Groundwater Samples	15 days	0%	Fri 7/12/19	Thu 8/1/19	Thu 4/25/19	2517
2519	2022	Data Validation	15 days	0%	Fri 8/2/19	Thu 8/22/19	Thu 5/16/19	2518
2520	2023	ERPIMS Submittal	22 days	0%	Mon 10/14/19	ue 11/12/19	Tue 8/6/19	2517FS+66 days



ID	CLIN	Description	Duration	% Complete	Start	Finish	Baseline Finish	Predecessors
2521	**2023**	**Q2-2019 Groundwater Sampling**	**93 days**	**0%**	**Fri 10/4/19**	**Tue 2/11/20**	**Tue 11/5/19**	
2522	2023	Sampling	5 days	0%	Fri 10/4/19	hu 10/10/19	Thu 7/4/19	2517FS+60 days
2523	2023	Offsite Analysis of Groundwater Samples	15 days	0%	Fri 10/11/19	hu 10/31/19	Thu 7/25/19	2522
2524	2023	Data Validation	15 days	0%	Fri 11/1/19	hu 11/21/19	Thu 8/15/19	2523
2525	2023	ERPIMS Submittal	22 days	0%	Mon 1/13/20	Tue 2/11/20	Tue 11/5/19	2522FS+66 days
2526	**2023**	**Q3-2019 Groundwater Sampling**	**89 days**	**0%**	**Fri 1/3/20**	**Wed 5/6/20**	**Wed 1/29/20**	
2527	2023	Sampling	5 days	0%	Fri 1/3/20	Thu 1/9/20	Thu 10/3/19	2522FS+60 days
2528	2023	Offsite Analysis of Groundwater Samples	15 days	0%	Fri 1/10/20	Thu 1/30/20	Thu 10/24/19	2527
2529	2023	Data Validation	15 days	0%	Fri 1/31/20	Thu 2/20/20	Thu 11/14/19	2528
2530	2023	ERPIMS Submittal	22 days	0%	Tue 4/7/20	Wed 5/6/20	Wed 1/29/20	2527FS+62 days
2531	**2023**	**Q4-2019 Groundwater Sampling**	**93 days**	**0%**	**Fri 3/20/20**	**Tue 7/28/20**	**Tue 4/21/20**	
2532	2023	Sampling	5 days	0%	Fri 3/20/20	Thu 3/26/20	Thu 12/19/19	2527FS+50 days
2533	2023	Offsite Analysis of Groundwater Samples	15 days	0%	Fri 3/27/20	Thu 4/16/20	Thu 1/9/20	2532
2534	2023	Data Validation	15 days	0%	Fri 4/17/20	Thu 5/7/20	Thu 1/30/20	2533
2535	2023	ERPIMS Submittal	22 days	0%	Mon 6/29/20	Tue 7/28/20	Tue 4/21/20	2532FS+66 days
2536		**Annual Performance Monitoring Report - Year 2017**	**57 days**	**0%**	**Fri 5/11/18**	**Mon 7/30/18**	**Mon 4/23/18**	
2537	2021	Prepare Working Copy of Annual Report	20 days	0%	Fri 5/11/18	Thu 6/7/18	Thu 3/1/18	2490
2538	2021	AF Review of Working Copy of Annual Report	22 days	0%	Fri 6/8/18	Mon 7/9/18	Mon 4/2/18	2537
2539	2021	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Tue 7/10/18	Mon 7/23/18	Mon 4/16/18	2538
2540	2021	AF Approval of Final 2017 Annual Performance Monitoring Report	0 days	0%	Mon 7/23/18	Mon 7/23/18	Mon 4/16/18	2539
2541	2021	Submit Final Annual Report to Regulators; AF Approval of ERPIMS Submittal	5 days	0%	Tue 7/24/18	Mon 7/30/18	Mon 4/23/18	2540
2542		**Annual Performance Monitoring Report - Year 2018**	**57 days**	**0%**	**Thu 5/16/19**	**Fri 8/2/19**	**Fri 4/26/19**	
2543	2022	Prepare Working Copy of Annual Report	20 days	0%	Thu 5/16/19	Wed 6/12/19	Wed 3/6/19	2512
2544	2022	AF Review of Working Copy of Annual Report	22 days	0%	Thu 6/13/19	Fri 7/12/19	Fri 4/5/19	2543
2545	2022	Resolve AF Comments on Working Copy of Annual Report	10 days	0%	Mon 7/15/19	Fri 7/26/19	Fri 4/19/19	2544
2546	2022	AF Approval of Final 2018 Annual Performance Monitoring Report	0 days	0%	Fri 7/26/19	Fri 7/26/19	Fri 4/19/19	2545
2547	2022	Submit Final Annual Report to Regulators; AF Approval of ERPIMS Submittal	5 days	0%	Mon 7/29/19	Fri 8/2/19	Fri 4/26/19	2546
2548		**Site Closeout**	**208 days**	**0%**	**Fri 5/8/20**	**Tue 2/23/21**	**Tue 11/17/20**	
2549		**Spill Closure Report**	**130 days**	**0%**	**Fri 5/8/20**	**Thu 11/5/20**	**Thu 7/30/20**	
2550	2023	Prepare Working Copy of Spill Closure	22 days	0%	Fri 5/8/20	Mon 6/8/20	Mon 3/2/20	2534
2551	2023	AF Review of Working Copy of Spill Closure	22 days	0%	Tue 6/9/20	Wed 7/8/20	Wed 4/1/20	2550
2552	2023	Resolve AF Comments on Working Copy of Spill Closure	5 days	0%	Thu 7/9/20	Wed 7/15/20	Wed 4/8/20	2551
2553	2023	AF Approval of Draft Spill Closure	0 days	0%	Wed 7/15/20	Wed 7/15/20	Wed 4/8/20	2552
2554	2023	Submit Draft Spill Closure to Regulators	5 days	0%	Thu 7/16/20	Wed 7/22/20	Wed 4/15/20	2553
2555	2023	Regulator Review of Draft Spill Closure	44 days	0%	Thu 7/23/20	Tue 9/22/20	Tue 6/16/20	2554
2556	2023	RTC Regulator Comments on Draft Spill Closure	5 days	0%	Wed 9/23/20	Tue 9/29/20	Tue 6/23/20	2555
2557	2024	Prepare Final Spill Closure	5 days	0%	Wed 9/30/20	Tue 10/6/20	Tue 6/30/20	2556
2558	2024	AF and Regulator Approval of Final Spill Closure; AF Approval of ERPIMS Uploa	0 days	0%	Thu 11/5/20	Thu 11/5/20	Thu 7/30/20	2557FS+22 days
2559		**Site Closeout and Well Decommissioning Report**	**64 days**	**0%**	**Thu 11/26/20**	**Tue 2/23/21**	**Tue 11/17/20**	
2560	2024	Decommission Wells	15 days	0%	Thu 11/26/20	ed 12/16/20	Wed 9/9/20	2558FS+14 days
2561	2024	Prepare Working Copy of Site Closeout and Well Decommissioning Report	22 days	0%	Thu 12/17/20	Fri 1/15/21	Fri 10/9/20	2560
2562	2024	AF Review of Working Copy of Site Closeout and Well Decommissioning Repor	22 days	0%	Mon 1/18/21	Tue 2/16/21	Tue 11/10/20	2561
2563	2024	Resolve AF Comments on Working Copy of Site Closeout and Well Decommiss	5 days	0%	Wed 2/17/21	Tue 2/23/21	Tue 11/17/20	2562
2564	2024	AF Approval of Final Site Closeout and Well Decommissioning Report; Distribu	0 days	0%	Tue 2/23/21	Tue 2/23/21	Tue 11/17/20	2563