SUNOCO PIPELINE

An ENERGY TRANSFER Company

Pennsylvania Pipeline Project

Operations Plan

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Sunoco Pipeline
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Sinking Spring, PA 19608

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LIST OF APPENDICES

LIST OF ACRONYMS AND ABBREVIATIONS

ATON	Aids to Navigation
BMPs	best management practices
CCD	County Conservation District
CEI	Chief Environmental Inspector
CMs	Spread Construction Managers
DC	Document Controllers
ECC	Environmental Compliance Coordinator
ECP	Environmental Compliance Program
EIM	Environmental Inspection Manager
EIs	Environmental Inspectors
EPM	Environmental Project Manager
E&S	Erosion and Sediment
E&S Plans	Erosion and Sediment Control and Site Restoration Plans
E&SCs	Erosion and Sediment Controls
GE	Geotechnical Evaluations Lead
HDD	horizontal directional drill
IR Plan	Inadvertent Return Assessment, Preparedness, Prevention and Contingency Plan
IT	information technology
LEI	Lead Environmental Inspector
MOC	Management of Change
NPDES	National Pollutant Discharge Elimination System
NTP	Notice to Proceed
NTP Form	SPLP Pennsylvania Pipeline Project Chapter 105 Wetland and Water Crossing Notice to Proceed Form
PADCNR	Pennsylvania Department of Conservation and Natural Resources
PADEP	Pennsylvania Department of Environmental Protection
PAFBC	Pennsylvania Fish and Boat Commission
PCSM	Post-Construction Stormwater Management
PG	Professional Geologist
PGC	Pennsylvania Game Commission
PCS	Project Consulting Services
PM	Project Manager
PNDI	Pennsylvania Natural Diversity Inventory
PPC	Preparedness, Prevention and Contingency
PPC Plan	Preparedness, Prevention and Contingency Plan
PPP	Pennsylvania Pipeline Project
Procedures	Impact Avoidance, Minimization, and Mitigation Procedures
Project	Pennsylvania Pipeline Project
QC	quality control
SMs	Spread Project Managers
SPLP	Sunoco Pipeline LP
U.S.	United States
USFWS	United States Fish and Wildlife Service
Void Mitigation Plan	Void Mitigation Plan for Karst Terrain and Underground Mining
Water Supply Plan	Water Supply Assessment, Preparedness, Prevention and Contingency Plan

1.0 INTRODUCTION AND PURPOSE

Sunoco Pipeline LP (SPLP) is committed to ensuring the construction, restoration, and operation of the Pennsylvania Pipeline Project (PPP or Project) is conducted in a manner that is environmentally compliant and protects public safety, health, and welfare. Consistent with that commitment, this Operations Plan documents the measures and controls that SPLP and its contractors will implement to ensure that all conditions of all environmental permits will be followed at all times. To that end, the Operations Plan sets forth SPLP's organization, reporting, controls, and procedures for ensuring compliance and accountability with all environmental regulations, permits, and conditions during the construction and restoration phases of the PPP Project. SPLP will manage and implement this Operations Plan to ensure environmental compliance during all phases of construction and restoration of the Project via corporate oversight (Section 2.1); management team organization, roles, and responsibilities (Sections 2.2 – 2.4); contractual and co-permittee controls (Section 2.5); daily inspection, reporting, and compliance issue resolution process (Section 3.0); critical plan items, including incident reporting (Section 4.0); training (Section 5.0); and, environmental compliance documentation control, transmittal, access, and use (Section 6.0).

This Operations Plan references all mitigation plans, and all Project-specific environmental permits, conditions, and plans that form the environmental compliance requirements for the Project. In addition to federal, state, and local permits and conditions, this includes the following plans:

- Impact Avoidance, Minimization, and Mitigation Procedures (Procedures)
- Erosion and Sediment Control and Site Restoration Plan (E&S Plan)
- Prevention, Preparedness, and Contingency Plan (PPC Plan)
- Water Supply Assessment, Prevention, Preparedness and Contingency Plan (Water Supply Plan)
- Inadvertent Return Assessment, Prevention, Preparedness, and Contingency Plan (IR Plan)
- Void Mitigation Plan for Karst Terrain and Underground Mining (Void Mitigation Plan)
- Aids to Navigation (ATON) Plans
- Compensatory Mitigation PlanPennsylvania Department of Conservation and Natural Resources (PADCNR) Conservation Plan for Identified Species of Special Concern
- Pennsylvania Game Commission (PGC) Eastern Small-footed Bat Conservation Plan
- PGC Allegheny Woodrat Conservation Plan
- Pennsylvania Fish and Boat Commission (PAFBC) Timber Rattlesnake Conservation Plan
- United States (U.S.) Fish and Wildlife Service USFWS Bog Turtle Conservation Plan
- USFWS Northeastern Bulrush Conservation Plan
- USFWS Myotis Conservation Plan
- USFWS Migratory Bird Habitat Conservation Plan

- Post-Construction Stormwater Management (PCSM) Plan (part of E&S Plan)

Regarding spill prevention and preparedness, SPLP has developed four plans that accompany the E&S Plan that are designed to assess the potential impacts and provide for the protection of upland areas, waters of the Commonwealth and associated water resources from impacts due to Project activities. The overarching PPC Plan is designed to address release prevention in general, and potential impacts to surface waters and public and private water supplies in particular have been analyzed and addressed within two supplemental plans to the PPC Plan; the Water Supply Plan and the IR Plan. The Water Supply Plan provides for the assessment of the existing environment in terms of public and private water supplies in or along the Project areas and impacted waters, as well as the prevention and preparedness measures to be implemented to protect those supplies. The IR Plan outlines the preconstruction activities implemented to ensure sound geological features are included in the Horizontal Directional Drilling (HDD) profile, the measures to prevent impact, and the preparedness plan if an impact were to occur. In addition, a Void Mitigation Plan is provided as part of the E&S Plan and provides an assessment of potential impacts and avoidance and mitigation measures during open-cut and drilling procedures. The purpose of these plans is to protect water resources Project-wide. Attachment 12 of the Project's Chapter 105 Joint Permit Application includes these four plans.

2.0 ENVIRONMENTAL PERMIT COMPLIANCE TEAM SUPERVISION AND DIRECTION OF EIs AND CONTRACTORS

SPLP's Environmental Permit Compliance Team is an integrated framework designed to ensure environmental compliance with all environmental regulations, permits, and conditions during construction and restoration of the PPP Project and provides for accountability at all Project levels including SPLP executives, the SPLP Corporate Construction Compliance Team, an Environmental Compliance Program, (including Environmental Inspectors [EIs]), and SPLP contractors. The specific roles and responsibilities of each group within the Environmental Permit Compliance Team is described below.

2.1 Overall Corporate Executive Oversight

SPLP's Operations Plan includes a corporate oversight program to ensure environmental compliance and accountability with all environmental regulations, permits, and conditions during construction and restoration of the PPP Project. This program is designed to ensure direct, complete, and authoritative control of the construction contractor, methods, and schedule, including ensuring internal SPLP management approval and accountability and required agency approvals of any proposed modifications to Project permits and conditions. This corporate oversight program includes: 1) an environmental compliance team structure, organization, and contacts, 2) chain of command for construction management, compliance assessment and reporting, and project modification approval procedures, and 3) a construction management and contractor environmental compliance training program.

SPLP's **Executive Vice President, Jennifer Street**, has primary and overarching corporate responsibility and accountability for comprehensive environmental compliance. This includes responsibility to oversee and ensure the development, implementation, quality assurance/quality control, auditing, and continuous improvement of corporate environmental compliance programs, systems, and reporting protocols and requirements.

SPLP's **Senior Vice President-Construction, Chris Sonneborn**, has primary and overarching corporate responsibility and accountability for Project construction and compliance with engineering, design, construction, inspection, and commissioning plans and specifications of Project pipeline, station, and appurtenant facilities. This includes responsibility to oversee and ensure the development, implementation, quality assurance/quality control, auditing, and continuous improvement of corporate Project construction compliance programs, systems, and reporting protocols and requirements. This also includes the responsibility to ensure corporate integration of construction management and environmental compliance requirements.

SPLP's **Vice President-Emergency Response & Security, Gus Borkland**, has primary and overarching responsibility and accountability for day-to-day management and implementation of the corporate comprehensive environmental compliance program. This includes responsibility to oversee and ensure proper Project-specific implementation, quality assurance/quality control, auditing, and continuous improvement of the corporate environmental compliance programs, systems, and reporting protocols and requirements.

SPLP's **Executive Project Manager (EPM), Rick Smith**, is primarily responsible for leading and ensuring full corporate oversight, support, and accountability for the management and implementation of the construction, restoration, and placing in-service of the Project. This includes day-to-day management and integration of construction and environmental compliance requirements on the Project. This responsibility includes oversight to ensure day-to-day environmental compliance with all environmental regulations, permits, and conditions during construction and restoration of the Project, including management and implementation of this Operations Plan and associated commitments.

SPLP's executive and project management team also exert corporate oversight and accountability via use of contractual controls of the construction contractors and subcontractors, including the requirement to comply with all applicable environmental laws, regulations, permits, and conditions, and co-permittee status of HDD construction contractors (see Section 2.4). SPLP also directs contractors and subcontractors to comply with environmental compliance training and inspection programs, project modification approval processes, and construction schedule controls. Any violation of these contractual provisions may constitute a breach of the construction contracts and potentially subjects the contractor to damages and/or cancellation of the contract, even if construction schedules are otherwise met.

2.2 Environmental Permit Compliance Team Organization

SPLP has developed a robust environmental compliance team structure and organization to implement this Operations Plan to ensure SPLP and construction contractor/subcontractor accountability and compliance with all environmental regulations, permits, and conditions during construction and restoration of the Project. This structure and organization is designed to ensure direct, complete, redundant, and authoritative control of the construction contractor, methods, and schedule, including ensuring internal SPLP management approval and accountability and required agency approvals of any proposed modifications to Project permits and conditions.

This includes the SPLP Corporate Construction Compliance Team and the supporting SPLP Environmental Compliance Program (ECP) Team focused on environmental training, inspection, monitoring, and permitting. The names, titles, and reporting chain-of-command for these environmental compliance teams are presented in the Project organization chart, provided as

Figure 1 (Appendix A). Appendix A also presents contact information for key members of the environmental compliance team.

SPLP Corporate Construction Compliance Team

As described in the Project Procedures, SPLP in-office and in-field management personnel (see Section 2.3) will supervise all aspects of construction, operation, and maintenance of the Project. Utility or "Craft" inspectors working on behalf of SPLP are staffed throughout all phases of construction to ensure the facilities are installed in accordance with SPLP, federal, state, and local specifications and standards.

Environmental Compliance Program Team

As described in the Project Procedures, supplemental and integral to the Corporate Construction Compliance Team, SPLP will implement a comprehensive ECP (see Section 2.4). The ECP encompasses highly integrated and essential program elements designed to ensure compliance with the requirements of the E&S Plan, permit conditions, and approved mitigation measures and commitments. Each of these elements is incorporated into the single integrated ECP organization structure and execution plan. The primary elements of the ECP are:

- Environmental training;
- Environmental inspection;
- Biological and cultural resource monitoring; and,
- Agency and Project team notification and documentation requirements.

In general, the environmental compliance team is organized as a tiered and integrated network of management, construction, and environmental professionals, each with primary roles and responsibilities to lead and implement the environmental compliance program represented by this Operations Plan. This organization supports the efficient identification; open, reliable, and consistent two-way communication; internal and agency reporting; and resolution of environmental compliance requirements and/or issues to a commensurate level of authority within the organizational chain-of-command. The primary roles and responsibilities of key team members are summarized in Section 2.3.

2.3 Corporate Construction Compliance Team Roles and Responsibilities

SPLP's designated and dedicated Project Manager (PM), Spread Project Managers (SMs), and Spread Construction Managers (CMs), work closely as an integrated team responsible for all aspects of the pipeline construction contractors/subcontractors, process, materials, logistics, and schedule across the Project (PM) or across their construction spread (SMs, CMs). In addition, SPLP's designated and dedicated Environmental Project Managers including the Geotechnical Evaluations Lead (GE) work closely as an integral part of the construction compliance team, and are primarily responsible for environmental permitting, inspection, reporting, and compliance. This SPLP management team has the full authority to manage and direct the work of the construction contractors/subcontractors, including compliance with and accountability for contract terms and conditions, construction management and schedule, and construction methods and procedures on a Project-wide and site-specific basis. In addition, they have the following primary environmental compliance responsibilities.

2.3.1 Project Manager (PM)

SPLP's designated and dedicated **Project Manager, Matt Gordon,** is primarily responsible for overseeing implementation of this Operations Plan and associated environmental compliance program across the entire Project. These responsibilities include, but are not necessarily limited to, review and approval oversight of SPLP's environmental compliance team organization and staffing, and training, inspection, reporting, and compliance program for the Project; review and approval oversight of construction contractors/subcontractors and associated processes for contractor/subcontractor accountability with environmental compliance, training, and inspection programs and commitments; and review and written/signed approval authority of potential project modifications and associated required environmental permits. The PM reports directly to the SPLP Executive Project Manager and executive management team.

2.3.2 Spread Project Managers (SMs)

SPLP has assigned a dedicated **Spread Project Manager** to each of the six construction spreads on the Project. Each SM is primarily responsible for environmental compliance on their assigned construction spread. These responsibilities include, but are not necessarily limited to, day-to-day oversight, management, and reporting of the environmental compliance program, including environmental compliance training and inspection, incident reporting, and initial review of potential project modifications. The SMs are primarily responsible for communicating and reinforcing with construction contractors/subcontractors their contractual and procedural requirements to ensure compliance and accountability with environmental permits, plans, and procedures. The SMs report directly to the PM to identify, review, coordinate, and resolve environmental compliance concerns on their assigned construction spread.

2.3.3 Spread Construction Managers (CMs)

SPLP has assigned one dedicated **Spread Construction Manager** to each of the six construction spreads on the Project. Each CM is primarily responsible for in-field environmental compliance management on their assigned construction spread. These responsibilities include, but are not necessarily limited to, day-to-day oversight, management, and reporting of the environmental compliance program, including SPLP and construction contractor/subcontractor environmental compliance training and inspection, incident reporting, and initial review of potential project modifications. The CMs are primarily responsible for in-field communication, coordination, and integration of environmental compliance programs and requirements with the construction contractor/subcontractor, including direction to ensure construction contractor/subcontractor communication and cooperation with the Chief, Lead, and staff Environmental Inspectors. The CMs also are responsible, in coordination with the Lead Environmental Inspectors (LEIs), to support coordination of County Conservation District (CCD)/Pennsylvania Department of Environmental Protection (PADEP) site visits and interactions with job site personnel. The CMs report directly to the SMs to identify, review, coordinate, and implement in-field resolution of environmental compliance concerns on their assigned construction spread.

2.3.4 Environmental Project Managers

SPLP has assigned three dedicated **Environmental Project Managers, Monica Styles, Chris Embry, and Larry Gremminger**, who serve as the conduit between the Corporate Construction Compliance Team and the Environmental Compliance Program Team. In this role, they are primarily responsible for overseeing implementation of this Operations Plan and associated environmental compliance program across the entire Project. These responsibilities include, but

are not necessarily limited to, managing the EIs, responding to requests for information from PADEP or the public concerning environmental compliance issues, responding to water supply complaints, overseeing response efforts and reporting for loss of returns and inadvertent returns. As described in Section 4.1, the Environmental Project Managers have "stop-work" authority, which is the authority to stop site-specific activities that violate the environmental permits or conditions.

2.3.5 Geotechnical Evaluations Lead (GE)

SPLP's designated and dedicated **Geotechnical Evaluations Lead, Larry Gremminger**, is primarily responsible for the general oversight of Construction Contractor performance with trenchless construction, which performance will be evaluated on its compliance with permit terms and conditions, construction drawings, technical specifications, PPC Plan requirements, and easement agreements. The GE is also available for consultation when karst/openings or groundwater seeps are encountered. Project Professional Geologists and EI's fall under the GE's direction when applicable for construction contractor performance.

2.4 Environmental Compliance Program Team

The ECP Team (see Figure 1) consists of a field component and an office-based component that works in unison to ensure compliance during the Project. The field component is managed by the Environmental Inspection Manager (EIM), and the office component is led by the Environmental Compliance Coordinator (ECC). The EIM leads a team of Chief, Lead, and staff Environmental Inspectors. The ECC is supported by various field and office based specialties. These positions are described below.

In general, the primary responsibilities of the ECP Team are to communicate, coordinate, facilitate, inspect, and report in-field construction contractor/subcontractor compliance with all environmental permits, plans, and procedures. Although the ECP Team members are not responsible for or authorized to manage or direct the work of the construction contractors/subcontractors, the ECP Team works closely with the SPLP construction management team (PM, SMs, CMs, SPLP Environmental Project Managers), and construction contractors/subcontractors to proactively facilitate in-field environmental compliance and identify, report, and resolve in-field environmental compliance issues. As described in Section 4.1, however, ECP Team environmental inspectors have "stop-work" authority, which is the authority to stop site-specific activities that violate the environmental permits or conditions.

The Project is staffed with a combination of full-time staff and environmental inspection personnel, many of whom have previously worked for the company on projects over the last few years, including projects in Pennsylvania. These personnel have previous high-profile, environmentally sensitive, pipeline environmental inspection experience; technical degrees; excellent working skills; and have completed projects effectively and successfully with minimal concerns.

The ECP field component consists of Chief Environmental Inspectors (CEIs), Lead Environmental Inspectors (LEIs), Environmental Inspectors (EIs), biological monitors, and professional consultants. SPLP also provides all cultural and biological monitoring, including specialized services that require certified monitors such as timber rattlesnake and bog turtle.

Chief Environmental Inspector

The CEIs are responsible for the oversight of environmental compliance and spend their time coordinating the environmental compliance of the Project and the EI staff, including any specialty biological and cultural monitors. The CEIs support the LEIs by: resolving conflict; scheduling inspection services; facilitating resolution of noncompliance issues; coordinating between the LEIs, the construction staff, and construction inspection staff; and coordinating with agencies as necessary. The CEIs must work closely with the SPLP SMs, Land Department, the contractors, and the inspection staff to ensure compliance with all permit conditions.

The CEIs have extensive experience in environmental construction inspection and substantial industry-related environmental training. The CEIs have the experience, knowledge and ability to communicate with federal, state, county, and local environmental agency representatives and have excellent communication and documentation skills, with an emphasis in computer software usage. The CEIs have the capability to define, differentiate and delineate environmental resources.

Each CEI is responsible for the following:

- The CEIs report to the SPLP Environmental Manager and CMs and spend 100% of their time coordinating the environmental compliance of the Project and the EI staff, including the biological and archeological monitors as necessary. The CEIs are accountable for the oversight of all the in-field construction environmental compliance.
- The CEIs support the LEIs by resolving conflict, scheduling inspection services, facilitating resolution of noncompliance issues, coordinating between the LEI and the construction staff and construction inspection staff, and coordinating with agencies as necessary.
- The CEIs must work closely with the SPLP's Land Department, the Construction Contractors, and the inspection staff to facilitate environmental compliance with all permits.
- The CEIs work closely with the EIM and ECC (permit coordinators) are responsible for the coordination of the Management of Change (MOC) process.

Lead Environmental Inspector

One LEI is assigned and dedicated to each of the six construction spreads. The LEI is responsible for the inspection and monitoring of the day-to-day construction activities within their assigned spread and reports to both the Spread Construction Manager and the CEI. The LEI will attend any daily meetings that may be setup by the Spread Construction Manager, train new Construction Contractor personnel, and be involved in the inspection of compliance with environmental requirements and/or permit conditions specific to that Spread.

The LEIs are not required to have an environmental or biological college degree, but must have the capability to define, differentiate and delineate environmental resources. The LEI shall have extensive experience (5-10 years) of Environmental Construction Inspection and substantial industry-related environmental training. The LEI shall have the experience, knowledge and ability to communicate with federal, state and local environmental agency representatives and have excellent communication and documentation skills, with an emphasis in computer software usage. The LEI should have experience in the project area.

Each LEI is responsible for the following:

- The LEIs spend the majority of their time in the field involved in inspection of compliance with environmental requirements and/or permit conditions specific to that construction spread.
- The LEIs support the CEI by inspecting and compiling the daily environmental construction inspection reports for the Spread, which are forwarded to the CEI, Project team for that Spread, and the Document Coordinator for inclusion in the overall Project Environmental Reports.
- The LEIs direct and provide oversight and guidance to the team (consisting of one or more) EIs inspecting and working with the on-site Spread Construction Managers.
- The LEIs resolve, clarify, or assure necessary precautions are taken or permit conditions implemented by the Construction Inspection Team and Construction Contractor to maintain compliance with the applicable environmental requirements on the construction spread.
- The LEIs attend daily spread meetings and will have multiple reporting responsibilities to the Spread Construction Manager and CEI.
- The LEIs work closely with the CEI and are responsible for the initiation and implementation of the MOC process.
- The LEIs, in coordination with the CM, serves as the primary point of contact/liaison with, and facilitates oversight and coordination of, CCD/PADEP site visits to allow CCD/PADEP staff to interact and talk with job site personnel consistent with safety protocols.
- The LEIs work with the CCD/PADEP and other agency staff to establish a regular schedule for field inspection audits, or spot inspections, to monitor and facilitate inspection program and construction compliance with all permits.

Environmental Inspector

One or more staff EIs are assigned and dedicated to each of the six construction spreads. Each EI reports to and works with the LEI to which they are assigned. The EI is responsible for the inspection and monitoring of the day-to-day construction activities within their assigned construction spread. The EI spends 100% of their time in the field and if deemed necessary or applicable may or may not be required to attend the daily construction spread meetings set up by the Spread Construction Manager. The EI works with the various Craft Inspectors and the Construction Contractor to facilitate the maintenance of compliance with applicable environmental requirements specific to the ongoing activities. The staff EIs on each construction spread have "peer status" with all other activity inspectors and have "stop-work" authority, which is the authority to stop site-specific activities that violate the environmental permits or conditions.

Each EI is responsible for the following:

- The EI spends their time in the field and may attend the daily construction spread meetings set up by the Spread Construction Manager. The EI works with the various Construction Inspectors and the Construction Contractor to facilitate maintenance of compliance with applicable environmental requirements specific to the ongoing activities.

- The EI may participate in tailgate discussions, meetings, or necessary site specific training, and may oversee the completion of the overall Project Environmental Training of new Construction Contractor personnel.
- The EI shall be familiar with, understand and interpret permit conditions and requirements and be able to relay this information to the Construction Inspector and Construction Contractor to assure correct installation or implementation of construction materials or techniques to meet the permit conditions.
- The EI is responsible for inspecting and daily reporting to the LEI on the construction activities for which they are responsible.
- The EI should have an Environmental, Biological or Cultural Resource college degree (or relevant experience).
- The EI reviews all Project documents (right-of way descriptions, permits, alignment sheets, and relevant plans) for its construction spread prior to construction.
- The EI inspects activities daily to verify that Contractors are complying with the environmental conditions and mitigation measures, and applicable federal, state, and local permit requirements and landowner agreements.
- The EI identifies, documents, and oversees corrective actions, as necessary to bring an activity back in to compliance.
- The EI inspects that the limits of disturbance are properly marked before clearing begins.
- The EI verifies the location of signs and highly visible flagging marking the boundaries of sensitive resource areas along the construction work area such as waterbodies, wetlands, or areas with special requirements.
- The EI may coordinate with water and wetland resource agencies to assure the Project Procedures are properly implemented.
- The EI inspects and photo-documents sensitive areas and workspaces before, during, and after construction.
- The EI inspects and facilitates to ensure that construction activities occur within authorized work areas.
- The EI inspects the location of pumped water filter bags to ensure they are located in well-vegetated (grassy) areas, and discharge onto stable erosion resistant areas. Where this is not possible, a geotextile underlayment and flow path shall be provided.
- The EI facilitates to ensure that topsoil is stripped, stockpiled, and appropriately segregated (where required).
- The EI inspects the proper maintenance of all erosion and sediment controls (E&SCs). Inspections of E&SC features occurs daily, or at a minimum on a weekly basis and after precipitation events, and will be recorded on the appropriate inspection forms.
- The EI facilitates to ensure preventative and corrective maintenance work, including clean out, repair, replacement, regrading, reseeding, and remulching will be performed as soon as practical. If E&SCs fail to perform as expected, replacements or modifications of those installed will be implemented at the direction of the EI.
- The EI inspects the repair of all ineffective temporary erosion control measures within 24 hours of repair completion.

- The EI maintains a log showing dates that Erosion and Sediment (E&S) best management practices (BMPs) were inspected as well as any deficiencies found and the date they were corrected.
- The EI provides updated environmental training as new contracted personnel begin working on construction.
- The EI inspects that all trash is picked up and contained in an approved container for proper disposal.
- The EI facilitates to ensure that the Construction Contractor maintains an orderly storage of chemicals, supplies, and parts.
- The EI facilitates to ensure the Construction Contractor promptly removes any spillages to prevent discharge from site and proper disposal of spilled material.
- The EI facilitates to ensure the Contractor has the Project's PPC Plan on-site and understands its implementation.
- The EI works with the ECC to ensure the appropriate PPC Plan procedures are followed in regards to the unanticipated discovery of impacted soil.
- The EI helps to ensure all proper environmental notifications are made in accordance with the Project's PPC Plan.
- The EI performs routine monitoring to determine the general physical condition of the entire construction spread, including liquid levels in tanks, quality of site runoff, quality of any waste to be disposed of, etc.
- The EI facilitates to ensure that the Contractor conducts training for spill prevention and impact minimization.
- With the exception of certain water pump locations, the EI inspects to ensure sites for refueling and routine servicing of equipment and storage of fuels, lubricants, and any other materials that could potentially contaminate waterbodies and wetlands are located in upland locations at least 100 feet from the edge of the nearest waterbody and wetland.
- The EI facilitates to ensure that the Contractor maintains adequate supplies of suitable absorbent material and any other supplies and equipment necessary for the immediate containment and cleanup of releases.
- The EI inspects to ensure that back-up equipment is present at all dry pump bypass stream crossings.

Biological and Cultural Resource Monitors

Biological Monitors have experience with rattlesnake and bog turtle monitoring in Pennsylvania and are required to be on the qualified list of contractors, if one is maintained by the appropriate resource agency. Cultural Resource Monitors will be qualified based on the required standards maintained by the Pennsylvania Historical and Museum Commission. Monitors will:

- Be approved by Pennsylvania as monitors (as required).
- Be onsite when monitoring is required, including but not limited to, when construction activities are occurring, travel along access roads, and active construction activity at ancillary facilities.
- Be able to comply with the permit, agency determination letters, and Project Conservation Plan requirements as they pertain to handling, monitoring, and reporting.

Preconstruction, construction, and post-construction survey and monitoring for sensitive species as outlined within the final Pennsylvania Natural Diversity Inventory (PNDI) agency letters and approved conservation plans will be followed. SPLP and ECP personnel will be responsible to ensure only approved specialists conduct the monitoring or mitigation tasks in accordance with obtained clearances.

Professional Geologists

Each of the six construction spreads for the Project will field a licensed Professional Geologist (PG). The minimum requirements of the PG shall include the following:

- Current PG license in Pennsylvania.
- Experienced in the field of geology or hydrogeology.
- On the job training, provided by SPLP technical specialists, on general horizontal directional drilling (HDD) procedures; HDD best management practices; methods to monitor the HDD activities and progress; and procedures for analyzing Loss of Circulation (LOC) events.

The PGs primarily focus is on areas of trenchless construction activities (i.e., bores or HDDs), and are responsible for monitoring Construction Contractor performance during trenchless construction. Their direct responsibilities include documenting progress of the bore or HDD, subsurface characteristics as evidenced by cuttings and returns, tool and mud pressures, bore or HDD materials (water, bentonite) consumption to document potential LOC; and patrolling of the land surface over the bore or HDD to inspect for Inadvertent Returns (IR). The Construction Contractor performance will be evaluated on compliance with permit terms and conditions at the work location; construction design drawings; technical specifications; PPC Plan requirements; and easement agreements.

The PG immediately notifies the Geotechnical Evaluation Lead (GE) and LEI if the Construction Contractor fails to conform to these required standards, or if unexpected problems are encountered during performance of the work. In the event of an abrupt LOC or IR, the PG has the authority to stop the bore or HDD by direct notice to the on-site construction manager (Stop-work Authority). In such an event, the LEI mobilizes EIs to the site. The GE may mobilize to the work location to inspect the issue and review the construction performance data, or request a technical specialist to the location to inspect the event. The on-site inspection team (PG, EI, and GE) follows the inspection, reporting, and corrective action protocols specified in the IR Plan. HDD construction method incidents related to loss of drilling fluids in terms of loss of circulation or surface IRs will be reported and addressed under agreed upon process outlined in the IR Plan (see Section 4.3.2).

PGs are consulted when karst/openings or when groundwater seeps are encountered. SPLP has evaluated the potential for all wetlands to contain fragipan soils or other confining layers through an investigation of the United States Department of Agriculture soil series as well as field data collected during wetland delineations and functions and value assessments. A licensed PG will use these data to identify wetlands with the potential for restrictive layers. The PG will be present to evaluate each wetland that is found to have a potential confining layer during trenching. During trenching of these wetlands, the PG will advise on the segregation (e.g., triple ditching) of confining layers for proper restoration of subsurface conditions. At wetlands determined to require confining layer restoration, the PG will be on-site during subsurface soil backfilling to ensure proper soil layer restoration. PGs may advise on bentonite

or bentonite sandbag layering along the entire or portions of the trench line at the appropriate height if an identified confining layer cannot be segregated and/or restored properly.

2.5 Construction Contractors/Subcontractors

2.5.1 Contractual Provisions

As stated in Section 2.1, as part of its corporate oversight program, SPLP's executive and project management team uses contractual controls to ensure construction contractors and subcontractors comply with environmental laws, regulations, and permits. Specifically, all construction activities performed by contractors and subcontractors must be performed in accordance with all applicable environmental plans and permits. The environmental permits include, but are not necessarily limited to, the Chapter 105 Water Obstruction and Encroachment Permits and the Chapter 102 Erosion and Sediment (E&S) Permits issued by the Pennsylvania Department of Environmental Protection (PADEP) for the Project. The environmental plans (approved by PADEP as part of issuance of the permits) include, but are not necessarily limited to, the E&S Plan, Water Supply Plan, IR Plan, and Void Mitigation Plan. Furthermore, contractors and subcontractors are required to cross all streams and wetlands in accordance with the E&S Plan and the Chapter 105 permit restrictions. Any violation of these contractual provisions may constitute a breach of the construction contracts and potentially subjects the contractor to damages and/or cancellation of the contract, even if construction schedules are otherwise met.

2.5.2 Co-Permittee Status

As stated in Section 2.1, as part of its corporate oversight program, SPLP's executive and project management team have required prime HDD contractors to apply for and receive co-permittee status on the Chapter 102 permits in accordance with applicable regulations. Specifically, pursuant to the Chapter 102 permit program regulations (25 Pa. Code 102.5(h)), prime HDD construction contractors/operators who are not the initial permittee shall be co-permittees. For this Project, all prime HDD construction contractors are considered operators and therefore are required by regulation (and by extension the SPLP contract provisions referenced previously) to be co-permittees. All of SPLP's prime HDD construction contractors/operators on the Project have completed and submitted to PADEP a *Transferee/Co-Permittee Application for a General or Individual NPDES Permit for Stormwater Discharges Associated with Construction Activities* (Form 3150-PM-BWEW0228). Under co-permittee status, the prime HDD construction contractors/operators assume all responsibility, coverage and liability under the permit for any obligations, duties, responsibilities, and violations under the permit. Thus, under co-permittee status, the prime HDD construction contractors/operators have the same legal responsibility and requirement as SPLP to ensure compliance with applicable environmental laws, regulations, permits, and conditions.

3.0 DAILY INSPECTION, REPORTING, AND ISSUE RESOLUTION

SPLP's LEIs and EIs shall visually inspect the Project weekly at a minimum and within 24 hours of the conclusion of each measurable (0.1 inch) storm event throughout the duration of earth disturbance and until SPLP receive acknowledgement of the Notice of Termination from PADEP or an authorized conservation district. Visual inspections shall be documented on the Visual Inspection Report form and will be made available to PADEP or authorized agencies upon request.

A log showing dates that E&S BMPs were inspected as well as any deficiencies found and the date they were corrected is maintained onsite and at the time of inspection will be made available to authorized agencies.

In addition to record keeping and reporting required to ensure compliance with all environmental regulations, permits, and conditions, EIs generate daily reports documenting construction observations and inspection activities, including agency inspections and landowner contact, problem areas and incidents observed. The LEI compiles and reviews the EI daily reports and provides them to the Document Coordinator for distribution to the CEI, CM, and Corporate Construction Compliance Team.

4.0 IMPLEMENTATION OF CRITICAL PLAN ITEMS AND JOB SITE DIRECTION

4.1 Stop Work Authority

Any employee of SPLP, any contractor, and/or any subcontractor on each construction site has the responsibility and authority to stop work and report to Lead EIs and staff EIs site-specific activities that are not in compliance with the environmental permits or conditions.

The Lead EIs and staff EIs on each construction spread have "peer status" will all other activity inspectors. Lead EIs and staff EIs on each construction spread have "stop-work" authority, which is the authority to stop site-specific activities that violate the environmental permits or conditions. EIs are responsible for identifying, reporting, and re-inspecting to ensure implementation of corrective action for compliance issues.

In addition, the Lead EIs and staff EIs have authority to make "stop-work" recommendations to the CM who has overall "stop-work" authority, which is the authority to stop all construction and restoration activities across an entire Project construction spread. The Lead EI will discuss a potential "stop-work" action with the Chief EI and/or appropriate SPLP personnel (CM or SM) prior to construction shut down, and the Lead EI will notify the CM when a "stop-work" recommendation will be issued.

4.2 Formal Notice to Proceed for Regulated Resource Pipeline Crossings

SPLP has established a formal written notice to proceed (NTP) procedure that requires construction contractor/subcontractor acknowledgment and signature approval that it possesses and will comply with current environmental permits, plans, procedures, and conditions prior to initiation of construction of pipeline crossings of PADEP-regulated aquatic resources. The primary purpose of this NTP procedure is to ensure the pre-construction receipt, review, understanding, coordination, and planning, and construction phase use, of current SPLP and PADEP/agency-approved wetland and waterbody pipeline construction environmental permits, plans, procedures, and conditions.

The subject of this formal NTP procedure includes:

- Aquatic resource-specific pipeline construction crossings, meaning any PADEP agency regulated pipeline construction or restoration activity in or beneath a regulated wetland or stream, such as installation, maintenance, and removal of temporary BMPs, travel lanes, and equipment bridges, as well as the pipeline installation via open cut or trenchless construction methods (i.e., conventional bore and HDD construction methods).
- PADEP-regulated wetlands and streams pursuant to the Chapter 105 Water Obstruction and Encroachment Permit.

- Trenchless construction method (i.e., conventional bore and HDD construction methods) crossings of upland areas (i.e., roads, railroads, physical obstacles).
- All applicable federal, state, and local environmental permits, plans, procedures, and conditions.

This formal NTP procedure includes the following two-step process and associated actions prior to the initiation of pipeline construction:

- The SPLP CM, EI, and construction contractor/subcontractor conduct an in-office and/or on-site pre-construction coordination meeting to:
    - Confirm receipt and possession of current SPLP and regulatory agency approved engineering and environmental drawings, plans, procedures, permits, and conditions, including the PADEP-approved pipeline construction method.
    - Review and confirm understanding of current SPLP and regulatory agency approved engineering and environmental drawings, plans, procedures, permits, and conditions, including the PADEP-approved pipeline construction method.
    - Identify, discuss, and confirm that the construction contractor/subcontractor will comply with SPLP's contractual and policy expectations, which are to comply with all applicable and approved engineering and environmental drawings, plans, procedures, permits, and conditions.
    - Identify, discuss, and confirm a resource-specific construction plan and schedule, including consideration of current site-specific conditions, special resource protection requirements, and construction and restoration challenges unique to the site.
- Following completion of the pre-construction coordination meeting, a site- or resource-specific *SPLP Pennsylvania Pipeline Project Chapter 105 Wetland and Water Crossing Notice to Proceed* form (NTP Form) (Appendix D) will be reviewed and executed by written signature by:
    - The construction contractor/subcontractor responsible for the aquatic resource crossing;
    - The LEI or EI assigned to inspect the aquatic resource crossing; and
    - Then the CM, and a CM supervisor (the SPLP SM and/or PM), will countersign the NTP Form, which thereby formally releases the construction contractor/subcontractor to proceed with construction of pipeline crossing of the subject PADEP-regulated aquatic resource.

4.3 Reporting of Environmental Incidents

4.3.1 E&S, PSCM, and PPC Best Management Practice Incidents

Where E&S, PCSM or PPC BMPs are found by anyone at the job site to be inoperative or ineffective at any time, and have an off-LOD or resource impact, the environmental incidents are immediately reported to the EIs who then relay information concerning the incident to the ECP Team and the CCD by phone and email within 24 hours of the incident. Within 5 business days, the Environmental Project Manager submits a written Noncompliance Report to the CCD.

Any time SPLP becomes aware of any incident causing or threatening pollution as described in 25 Pa. Code § 91.33 (relating to incidents causing or threatening pollution), SPLP's Environmental Project Manager immediately (i.e., within 2 hours), but no later than within 24 hours, contacts PADEP or the agency with jurisdiction over the activity by phone or personal contact, and follows-

up by submitting a written Noncompliance Report within five (5) days of the initial contact. The Noncompliance Reports will include the following information:

- Any conditions on the project site which may endanger public health, safety or the environment, or involve incidents which cause or threaten pollution;
- The period of the noncompliance including exact dates and times and/or anticipated time when the activity will return to compliance;
- Steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance; and
- The dates or schedule of dates, and identifying remedies for correcting noncompliance conditions

An immediate response by the contractor to the incident is expected and the EI will re-inspect and document corrective actions taken to address the incident. All noncompliance reports will be updated to document corrective actions and provided to the Corporate Construction Compliance Team and the CM.

A flowchart summarizing Incident Report procedures for incidents related to E&S, PCSM or PPC BMPs is provided in Figure 2 (Appendix B).

4.3.2 HDD Inadvertent Return Incidents

HDD incidents related to loss of drilling fluids in terms of loss of circulation or surface IRs will be reported under the agreed upon process outlined in the IR Plan. In addition, as required by the Corrected Stipulated Order issued by the Environmental Hearing Board, dated August 10, 2017. SPLP has evaluated HDD construction method design, management, implementation, inspection, and reporting, at specific sites and identified additional measures to further reduce the risk of future incidents related to loss of drilling fluids in terms of loss of circulation or surface IRs and submitted the reevaluation reports to PADEP for review and approval. To the extent applicable, SPLP will employ the HDD best management practices identified in the approved reevaluation reports at all HDD sites to reduce the risk of future IRs.

PGs will be consulted when IRs occur while HDD activities are taking place.

PGs will also be consulted in the field to identify additional measures for preventing and/or minimizing groundwater flowback. During any IR incident, PGs will confirm the risks to private and public water supplies and communicate any additional risks to the LEI.

4.3.3 HDD Special Water Supply Procedures

Prior to the start of any HDD operations in a particular location, SPLP will offer all landowners with a private water supply source located within 450 feet from the HDD alignment an alternative temporary water supply (e.g., water buffalo with potable water adequate for purposed served) that will be installed and maintained, at SPLP's expense, for the entire period of the HDD operations. Installations shall be approved as required with local zoning/building ordinances.

If a landowner who had not previously been connected to a temporary water supply reports a complaint of an impact to his or her water supply, SPLP will immediately respond to the complaint and provide the landowner with bottled drinking water. If the complaint occurs on a Monday-Saturday, an alternative temporary water supply (e.g., water buffalo) will be provided to the landowner within 24 hours. If the complaint occurs on a Sunday or a holiday, or if an alternative temporary water supply cannot otherwise be provided within 24 hours, SPLP will offer the landowner temporary accommodations, at SPLP's expense, until such time as a temporary

alternative water supply can be installed. Temporary alternative water supply will be provided at SPLP's expense until SPLP restores or replaces the impacted water supply to the satisfaction of the property owner.

For each landowner with a private water supply located within 450 feet from the HDD alignment, SPLP will offer to collect water supply samples, before during and after HDD operations at SPLP's expense. Sampling shall address quantity (yield) and quality of the existing source. Once available, sampling results shall be made available to the Department within 24 hours of a request by the Department for the results. If any impact to a private water supply attributable to pipeline construction is identified after post-construction sampling, SPLP will restore or replace the impacted water supply to the satisfaction of the private water supply owner.

4.4 Project Modification Review and Approval Process

4.4.1 Management of Change (MOC) Process

SPLP is committed to ensuring environmental compliance with all applicable federal, state, and local laws, regulations, permits, and conditions. As part of this commitment, SPLP will manage and implement a MOC Process to ensure any potential or proposed modifications are identified, reviewed, assessed, internally approved, and submitted to and approved by the applicable agencies as a modification or amendment to existing permits and conditions. The MOC Process involves an integrated and detailed evaluation of any potential or proposed modifications to the permitted Project (i.e., E&S Plan, E&SCs, construction methods, limits of disturbance) or activities that may violate Project permits and conditions. The MOC Process will consider opportunities to modify the permitted Project to further avoid and minimize potential environmental impacts, while simultaneously considering potential construction and operational constraints presented by affected landowners, existing land uses, infrastructure obstacles, and other factors affecting use of existing technology, cost, and logistics. Figure 3 presents a flowchart summarizing the primary process, decision tree, and responsible parties that implement the MOC Process.

The MOC Process will be initiated on a site-specific basis as opportunities or constraints are raised by an Integrated Project Team. The Integrated Project Team consists of representatives from SPLP project management (PM, SMs, CMs, Environmental Project Managers/GE), engineering, construction contractors, land/right-of-way, and environmental specialists (ECC, EIM). Any member of the Integrated Project Team that identifies an opportunity or constraint along the Project as permitted will raise the subject issue to the rest of the team for consideration of a potential modification (i.e., additional limit of disturbance, minor route variation, expansion or contraction of trenchless construction method, change in construction method). Thus, any type of opportunity or constraint – practicability, constructability, engineering design, landowner concerns, land use, environmental impacts, or any other relevant concern – could initiate the MOC Process.

Upon initiation of the MOC Process, each member of the Integrated Project Team will be engaged and solicited for input on the subject modification under consideration. The Integrated Project Team will then work together to review, consider, and provide subject matter expertise regarding the feasibility and practicability of the potential modification with regard to each area of expertise – design requirements, land constraints, constructability constraints, environmental resources, existing technology, cost, and logistics. Approval from each member of the Integrated Project Team, including environmental, are required in order to adopt the suggested modification, and

applicable agency approvals are requested and obtained prior to initiating construction of the permit modification.

4.4.2 Agency Modification Approval Process

Once adopted by the Integrated Project Team, SPLP will request applicable agency approval of a permit modification request, and obtain any required authorizations prior to initiating construction of the modification. Figure 3 also presents the County Conservation District (CCD) and PADEP agency approval process for a proposed permit modification to the Project. There are two levels of Project modification and approval requests, Level 1 Modifications and Level 2 Modifications, as described below.

Level 1 Modifications and CCD Approval

Level 1 Modifications are those that typically require CCD approval, but do not typically require PADEP approval. Such modifications include, but are not necessarily limited to, requests for:

- Additional limit of disturbance (LOD) in uplands;
- Minor changes in best management practices (BMPs) in uplands.

Once internally approved by SPLP senior management (EPM, PM, and/or Environmental Project Manager/GE), the EI is authorized to request CCD approval for the Level 1 Modification. Based on consultation with the authorized CCD personnel, an approval request may take the form of a verbal or email request, and submittal of redlined changes on, or formally revised, applicable E&S Plans and engineering drawings (if applicable). The authorized CCD personnel review the proposed modification plans, and either approve the request or elevate the request to PADEP for review, comment, or approval.

Level 2 Modifications and PADEP Approval

Level 2 Modifications are those that typically require PADEP approval, or are elevated by the CCD for PADEP approval. Such modifications include, but are not necessarily limited to, requests for:

- Additional LOD in wetlands, streams, and floodways;
- Any changes in BMPs in wetlands, streams and floodways;
- Change in construction method in wetlands, streams, and floodways; and
- Change in construction method from open cut to a trenchless construction method (i.e., conventional bore and HDD construction methods) or trenchless construction method to open cut in uplands.

Once internally approved by SPLP senior management (EPM, PM, and/or Environmental Project Manager/GE), SPLP authorizes the SPLP Environmental Project Manager or ECC to request PADEP approval for the Level 2 Modification. Based on consultation with the authorized PADEP personnel, an approval request may take the form of an email and/or hard copy request, and submittal of formally revised applicable E&S Plans and engineering drawings (if applicable). The authorized PADEP personnel review the proposed modification plans, and, subject to any PADEP comments, requests for clarification or submission of additional information or application forms, either approve or deny the request.

SPLP Internal Approval Notification and Issuance for Construction

As presented in Figure 3, once a proposed permit modification has received all required agency approvals, the ECC notifies the engineering project manager, who in turn notifies the SharePoint DC to process the modification via the notification and document control process. Authorized SPLP, ECP, and construction contractor/subcontractor office and field personnel are issued an email notification that the permit modification has been approved and is being issued for construction, and are provided a SharePoint link to the electronic file of the approved revised engineering drawings and environmental permits, plans, and procedures. Approved revised electronic files also are uploaded to the SharePoint site in the appropriate library (see Section 6.3). Prior to initiation of construction of the revised plans on a given construction spread, the SM, CM, EI, and construction contractor/subcontract have a pre-construction meeting to discuss and ensure understanding of the approved revised plan issued for construction.

5.0 ENVIRONMENTAL COMPLIANCE TRAINING PROGRAM

5.1 Pre-Construction Training

Prior to the start of initial construction SPLP executed, and prior to the re-start of construction SPLP will execute, two levels of environmental compliance training for all supervisor and construction contractor personnel:

- **Supervisor Training** – Conduct the environmental training for SPLP, Construction Contractor, and Environmental Inspection leads prior to commencement of construction activities; and,
- **Construction Contractor Personnel Training** – Provide daily environmental training to new Construction Contractor personnel on each Spread, each morning, and before each new member begins work.

Training involves the presentation of all pertinent environmental restrictions to Project personnel. This has been in the form of a formal, pre-prepared presentation that includes a discussion of the environmental conditions, site-specific permit and condition requirements, such as limits of disturbance, E&S Plan and E&SCs, and any special resource-specific, monitoring, and timing requirements, restrictions, and notifications required for the Project. The training outlines the major environmental restrictions and provides the location of all environmental permits, conditions, guidance, and plans. Contact and notification procedures are reviewed in detail. All aspects of the construction sequence are reviewed and relevant restrictions discussed. SPLP requires all personnel entering the workspaces on the Project to attend this formal training.

5.2 Construction Training

During the construction and restoration phases of the Project, SPLP executes two types of site-specific environmental compliance coordination and review meetings with SPLP and construction contractor/subcontractor supervisor personnel:

- **Morning Environmental Compliance Coordination Meetings –** Prior to initiation of construction activities each morning, the SPLP CEI, LEI, and/or EI conducts a morning meeting to coordinate site-specific planned construction and restoration activities for the day. The purpose of this daily meeting is to ensure the construction management and inspection personnel are aware of, and will ensure compliance, with Project-wide plans and procedures (including the PPC Plan); site-specific permit and condition requirements, such as limits of disturbance, E&S Plan and E&SCs, and any special resource-specific, monitoring, and timing requirements; and identify, review, discuss, and plan to address site-specific compliance challenges (i.e., workspace, geologic, soil, resource, topographic, construction timing, seasonal or fluctuating weather conditions).
- **Daily/Weekly Environmental Compliance Coordination Reviews –** On a periodic basis (typically daily but no less than weekly), the SPLP CEI, LEI, and/or EI conduct an environmental compliance meeting to review site-specific status, progress, and compliance of construction and restoration activities with site-specific permit and condition requirements, such as limits of disturbance, E&S Plan and E&SCs, and any special resource-specific, monitoring, and timing requirements, The purpose of this periodic review meeting is to ensure the construction management and inspection personnel understand their respective roles, responsibilities, and accountability to direct work, have properly executed and ensured compliance, and/or to review, coordinate, and take corrective action to ensure compliance, with Project-wide plans and procedures (including the PPC Plan), and site-specific permit and condition requirements, such as limits of disturbance, E&S Plan and E&SCs, and any special resource-specific, monitoring, and timing requirements. These reviews are performed daily or weekly, commensurate with site-specific level and duration of construction or restoration activities.

6.0 DOCUMENTATION AT JOB SITE

6.1 Responsibility for On Site Permit Use and Compliance

It is the responsibility of each authorized SPLP, environmental compliance team, and construction contractor personnel to acquire, review, and use current environmental compliance documents on-site. In addition, SPLP provides corporate oversight (Section 2.1); management team organization, direction, and control (Sections 2.2 – 2.4); contractual and co-permittee controls

(Section 2.5); daily inspection, reporting, and compliance issue resolution process (Section 3.0); critical plan items, including incident reporting (Section 4.0); training (Section 5.0); and, environmental compliance documentation control, transmittal, access, and use (Section 6.0) to ensure use of current permits, plans, and procedures, and day-to-day compliance with permit terms and conditions.

6.2 Permits, Plans, and Procedures

Applicable environmental permits, plans, and procedures are located at the construction job site for the Project, and are available for access, use, and review by the environmental compliance and construction team at all times. Hard copies of environmental permits, plans, and procedures are housed at the primary spread offices/contractor yards for each of the six construction spreads, and available to construction contractor management and personnel. Additional copies also are provided to each of the key SPLP environmental compliance team members, including the SPLP Spread Project Managers; Spread Construction Managers; and Chief, Lead, and Environmental Inspectors; and Professional Geologists for use in review and inspection to ensure site-specific compliance with all environmental permits and conditions.

As discussed in Section 6.3, additionally, all documents pertaining to the Project are housed in a dedicated SharePoint site and are managed via strict document control procedures. The ECC, in coordination with the SharePoint Document Controllers (DC), ensures each revision to an environmental permit, plan, or procedure is updated, uploaded, and organized in the Environmental Permit Binders folder on the SharePoint site. To ensure knowledge and availability of current environmental compliance documents, the DC issues an email notification to the authorized SPLP, environmental compliance team, and construction contractor personnel when any revision to the environmental permits, plans, procedures, and associated engineering drawings, alignment sheets, and E&S Plan is approved, issued, and uploaded on the SharePoint site. The SharePoint site main library is readily-accessible to all authorized SPLP, environmental compliance team, and construction contractor personnel through internet link, and all current documents are available for access, downloading, and printing to update hard copy documents at the job site at all times.

The documents available at the job site, as well as via the central SharePoint repository for the Project, include copies of all Project-wide and Spread-specific federal, state, and local environmental permits and conditions, as well as the following plans, which form the environmental compliance requirements for the Project:

- Impact Avoidance, Minimization, and Mitigation Procedures (Procedures)
- Erosion and Sediment Control and Site Restoration Plan (E&S Plan)
- Prevention, Preparedness, and Contingency Plan (PPC Plan)
- Water Supply Assessment, Prevention, Preparedness and Contingency Plan (Water Supply Plan)
- Inadvertent Return Assessment, Prevention, Preparedness, and Contingency Plan (IR Plan)
- Void Mitigation Plan for Karst Terrain and Underground Mining (Void Mitigation Plan)
- Aids to Navigation (ATON) Plans
- Compensatory Mitigation Plan

- PADCNR Conservation Plan for Identified Species of Special Concern
- PGC Eastern Small-footed Bat Conservation Plan
- PGC Allegheny Woodrat Conservation Plan
- PAFBC Timber Rattlesnake Conservation Plan
- USFWS Bog Turtle Conservation Plan
- USFWS Northeastern Bulrush Conservation Plan
- USFWS Myotis Conservation Plan
- USFWS Migratory Bird Habitat Conservation Plan
- Post-Construction Stormwater Management (PCSM) Plan (part of E&S Plan)

6.3 Central Recordkeeping and Document Control Procedures

SPLP has a strict recordkeeping and document control procedure to ensure the accurate documentation, revision control, and readily-available access to current engineering design and environmental compliance documents. The purpose of this document control procedure is to facilitate use by the environmental compliance team to ensure Project compliance with current engineering design, as well as all environmental laws, regulations, permits, and conditions.

- **Document Control –** The document control procedure is managed and executed by assigned and dedicated DC. The DC are responsible for all aspects of controlling, tracking, and maintaining project documents during the design and construction of the Project. The DC examine documents, such as drawings and specifications, to verify completeness and accuracy of data. The DC also confer with document originators or engineering liaison personnel to resolve discrepancies, and comply with required changes to documents.
- **SharePoint Site –** All documents pertaining to the Project are housed in a dedicated SharePoint site, and each library within SharePoint site has special permissions applied to and administrated by SharePoint IT personnel. The main library is readily-accessible to all authorized environmental compliance construction personnel through internet link.
- **Environmental Permits, Plans, and Procedures –** All current environmental permits, plans, and procedures are uploaded and maintained on the SharePoint site by the ECC in coordination with the DC. The ECC ensures each revision to a permit, plan, or procedure is updated, uploaded, and organized in the Environmental Permit Binders folder on the SharePoint site. The DC issues an email notification to the appropriate SPLP, construction contractor, and environmental compliance team personnel when any revision to the environmental permits, plans, procedures, and associated engineering drawings, alignment sheets, and E&S Plan is issued.
- **Engineering Drawing Process –** The DC receive notice that a package is ready to be transmitted. The DC perform quality control (QC) of the documents and either sends the document back to the engineer for correction or uploads the documents and builds the transmittal. Folders are organized under the SharePoint main library for all station and block valve issued only drawings, and the transmittal library. When a document has been revised, and has passed the QC process, it is then uploaded to SharePoint and designated with the updated revision number. After the drawing has been uploaded, a transmittal is then created with a link to the documents and to the library.

- **Permit Modification Document Control Process –** For any proposed Project design modification, the engineering project manager develops and sends the proposed design revision to the mapping department, which creates the revised drawing and submits the engineering manager for review and approval. Once approved, the engineering project manager sends the final revised drawing as a PDF file to the DC to upload to "Crossing Pending Agency Approval Transfer Library." After the upload, a transmittal is generated and sent to SPLP Environmental Project Managers/GE for review and approval. Once approved by SPLP, the transmittal is uploaded to the Transmittal Library and SPLP approval filed in the Approval Emails Library.
- **Construction Progress Tracking –** The document control SharePoint site also serves as the central repository for tracking construction progress. The progress of each construction activity is tracked in the field by the Utility Inspectors via completion of Construction Forms. On a daily basis, Utility Inspectors complete and submit all Construction Forms to Project Consulting Services (PCS), who is responsible for compiling and uploading all forms to the SharePoint site. Hard copies of all Construction Forms also are maintained in the field by the Utility Inspectors. Construction Forms are organized and uploaded by each of the six construction spreads. The following presents the list of the Constructions Forms that are used to track pipeline construction progress for this Project (there are analogous forms for station construction):

    - D02.01 Daily Construction Log_PL.xlsx
    - D02.02 Backfill_PL.xlsx
    - D02.03 Cleanup_PL.xlsx
    - D02.04 Clearing_Grading_PL.xlsx
    - D02.05 Tie In_PL.xlsx
    - D02.06 Lowering In_PL.xlsx
    - D02.07 Bending_Laying_PL.xlsx
    - D02.09a EI Environmental Form_PL.xlsx
    - D02.09b Utility Environmental Form_PL.xlsx
    - D02.10 Foreign Utility Crossing_PL.xlsx
    - D02.12 Pot Hole_PL.xlsx
    - D02.13 Reclamation Restoration Daily_PL.xlsx
    - D02.14 Road Railroad Crossing_PL.xlsx
    - D02.15 Tie for Road Bore_PL.xlsx
    - D02.16 Stringing_PL.xlsx
    - D02.17 Ditching Trenching_PL.xlsx
    - D02.18 Welding Inspector Daily Report_PL.xlsx
    - D02.19 Photo Log_PL.xlsx
    - D06.01 Weld Compliance Report_PL.xlsx
    - D06.02 Chief Welding Inspector Daily _PL.xlsx
    - D06.03 Senior Welding Inspector's Report_PL.xlsx
    - D06.05 Weld Repair_PL.xlsx
    - D06.07 Mainline Weld Map_PL.xlsx
    - D06.08 HDD Weld Map_PL.xlsx
    - D06.09 Bores -Tie In Weld Map_PL.xlsx
    - D08.01 Coating Inspection_PL.xlsx
    - D14.02 Maintenance Record - Pipeline Form Sun43218.docx
    - _Station_BV_Construction_Docs_Guide.xlsx

6.4 WebMap Viewer and Document Interface

In addition to conventional engineering design and environmental compliance document development, management, and control procedures (see Sections 6.1, 6.2, and 6.3), SPLP uses WebMap as a supplemental tool to ensure readily-available access and use of current documents issued for construction and compliance on the Project. WebMap is an internet based map viewer and document interface that allows SPLP construction management, environmental compliance, and construction contractor and subcontractor team users to easily view project related features, such as the current pipeline route, limits of disturbance of the construction right-of-way, survey line work, property parcels, and all other features in one location without having to download, store, or manage large datasets and multiple files and drawings typically associated with pipeline projects.

The WebMap functions as a centralized data management system or dashboard for all project information by providing a direct link to documents and drawings available on the project SharePoint site. The WebMap significantly minimizes the risk of the SPLP construction management, environmental compliance, and construction contractor and subcontractor team using out of date information with real time server updates and direct hyperlinks to the latest versions of drawing and documents on SharePoint. Approved edits are made on the secure WebMap server and the associated drawings are then revised and uploaded to SharePoint. Users can quickly view the changes in the WebMap viewer, access the newly revised drawings via the SharePoint links, and monitor the progress of pre-construction and construction activity in real time without delays in transmittal and delivery of drawings.

SPLP project team users easily access the WebMap from an internet browser on a desktop, laptop, or any mobile device such as smart phones and tablets, allowing users the ability and freedom to access and view the project data from anywhere with an internet connection. The interactive geo-location tool enables users to pin-point their real-world location in relation to the project. Many users utilize the geo-location function while working on-site at the Project.

All data stored on the WebMap server is available as layers that can be turned on and off. The layers are selectable which enables the user to access stored attribute data associated within each feature, such as land owner information pertaining to a specific parcel or the individual restrictions of environmentally sensitive areas. The WebMap viewer is not limited to a set scale, it can be viewed as an overall project at once or can be zoomed in to a level of detail not available on alignment sheets. During construction of the Project, the WebMap service is being used daily for planning meetings, annotating and printing handouts for field crews, on-site referencing and geo-location, and real time document access and printing for inspections and audits.

SPLP project team users are required to attend formal training of the WebMap tool, and use of the WebMap is protected with user specific login credentials. All data is hosted on secured servers located in a hardened data center.

Available WebMap data layers include the following:

- Pipeline Layers
    - Pipeline Centerlines
    - Milepost Markers
- Centerline Stationing
- ROW Layers
    - Permanent ROW, Temporary ROW and ATWS, Temporary Access Roads

    - Limits of Disturbance and Extra Spoil Workspace
    - Restrictions
- Block Valve Sites and Stations
    - Block Valve Sites and Permanent Access Roads
    - Station Sites and Permanent Access Roads, Station Piping
- Construction Method Layers
    - HDD, Bores, Open Cut with Crossing Pipe and Matted Wetlands
- Crossing Data Layers
    - Existing Pipelines, Roads
- Environmental Layers
    - Wetlands, Streams, Mining Areas, Timing Restrictions and Exclusion Areas
- Parcel Boundary Layer
    - Parcel ID, Landowner Name
- Municipal Boundary Layer
- Alignment Sheets
- Road Usage and Maintenance Agreements (RUMA)
- Contours
- Aerial Imagery

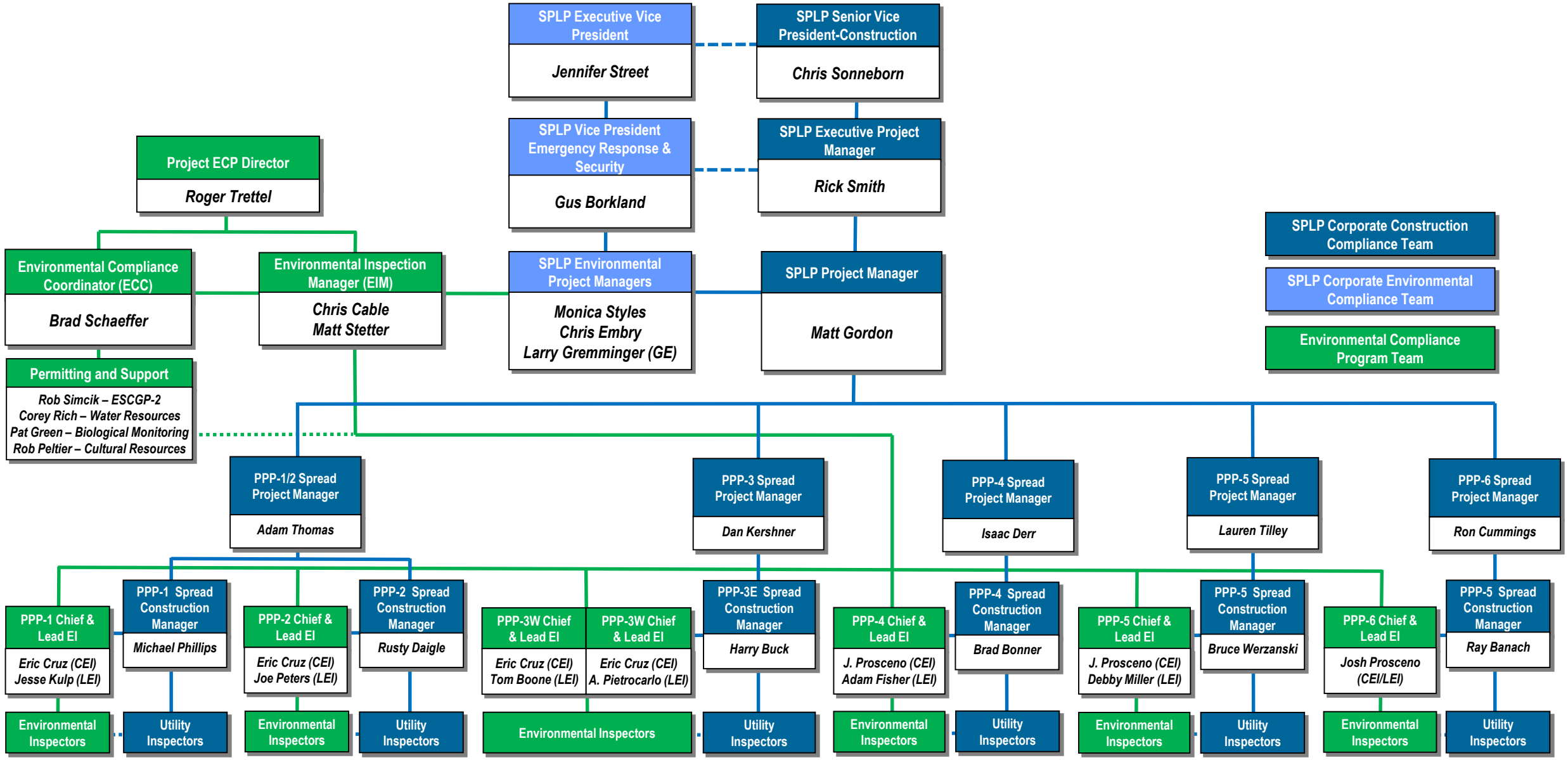
APPENDIX A

Environmental Compliance Team Organization and Contacts

Figure 1. SPLP PPP Corporate Construction and Environmental Compliance Program Team Organization

Contact Information for Key Environmental Construction Compliance Team Members

Figure 1. SPLP PPP Construction and Environmental Compliance Team Organization



CONTACT INFORMATION FOR

KEY ENVIRONMENTAL CONSTRUCTION COMPLIANCE TEAM MEMBERS

Separately Provided to the Department

APPENDIX B

Figure 2. PPP Environmental Incident Agency Notification Process

Figure 2. PPP Environmental Incident Agency Notification Process

**Incidents related to loss of drilling fluids in terms of loss of circulation or surface inadvertent returns, as well as water supply complaints will be reported and remediated under processes outlined within the IR and Water Supply PPC Plans.

APPENDIX C

Figure 3. PPP Management of Change (MOC) Process

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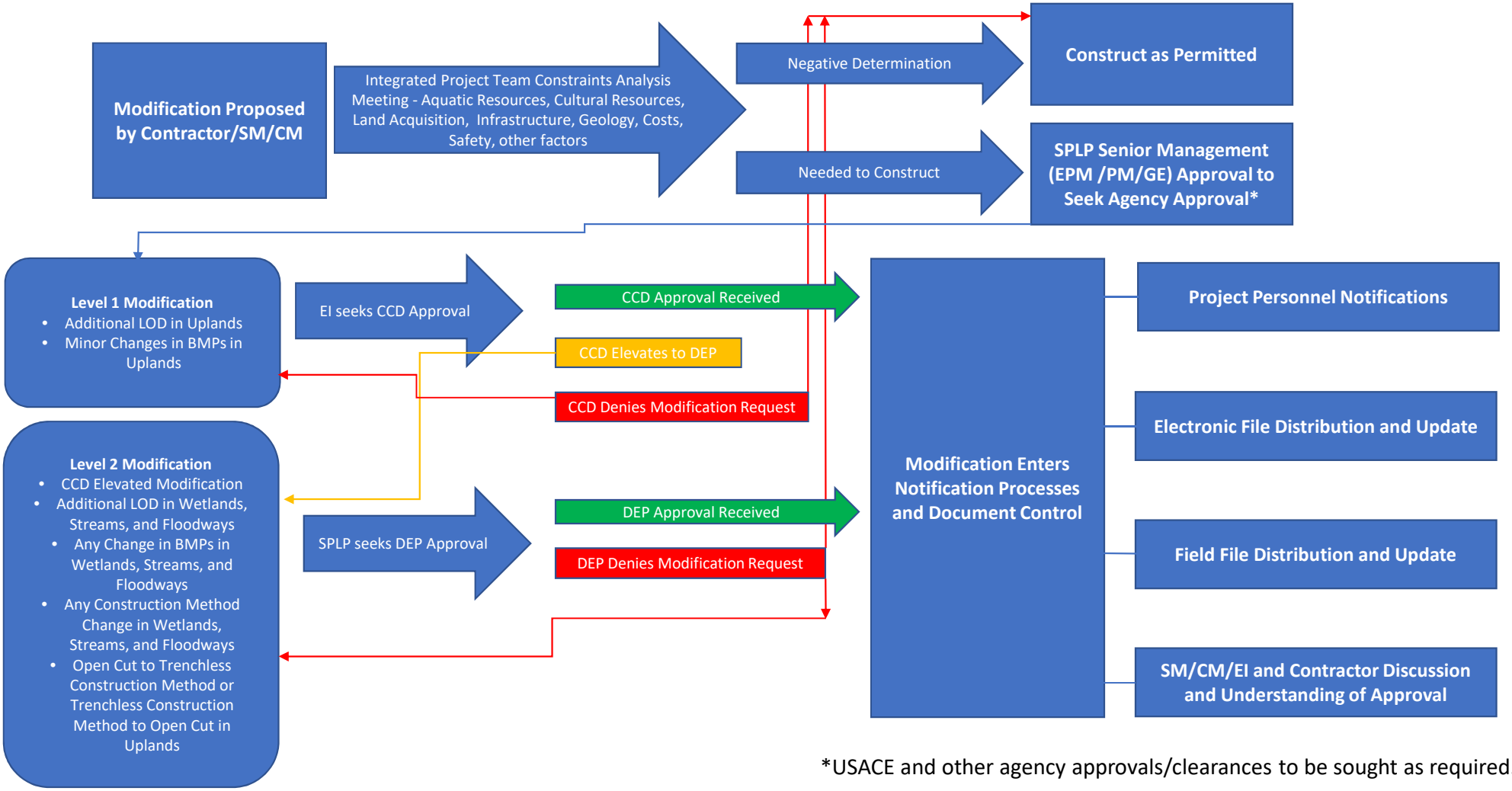

*USACE and other agency approvals/clearances to be sought as required.

Appendix D

SPLP Pennsylvania Pipeline Project
Chapter 105 Wetland and Water Crossing and
Trenchless Upland Crossing Notice to Proceed Form

Sunoco Pipeline L.P.

SPLP PENNSYLVANIA PIPELINE PROJECT

CHAPTER 105 WETLAND AND WATERCROSSING AND TRENCHLESS UPLAND CROSSING NOTICE TO PROCEED FORM

SPREAD:		**COUNTY:**		**MUNICIPALITY:**	
STREAM ID(s):		**WETLAND ID(s):**		**ROAD NAME(s):**	
HDD PLAN REF #		**BORE PLAN REF #**		**E&S SHEET NO(s):**	
MAINLINE CONTRACTOR:		**HDD/BORE CONTRACTOR:**		**OTHER CONTRACTOR:**	
DEP PERMIT Nos. (102 AND/OR 105):		**USACE PERMIT NO.:**		**MOD REF NO.:**	
		PERMITTED CROSSING METHOD:		**TIMING RESTRICTION(S):**	

NTP COMPLIANCE CHECKLIST

102 and 105 Permits and Modifications On-site and Reviewed	**YES**	**NO**	**NA**	**Notes:**
Applicable PPC Plans On-site and Reviewed	**YES**	**NO**	**NA**	**Notes:**
E&S Plan On-site and Reviewed (e.g., planned matches permitted)	**YES**	**NO**	**NA**	**Notes:**
HDD/Bore/Special Crossing Drawings On-site and Reviewed (e.g., planned matches permitted)	**YES**	**NO**	**NA**	**Notes:**
HDD/Bore Prior Notifications Complete (e.g., GreenPort/Landowner)	**YES**	**NO**	**NA**	**Notes:**
Pre-construction On-site Meeting with Contractor(s)/Construction Spread Manager, and Environmental Inspector Held	**YES**	**NO**	**NA**	**Notes:**

CONTRACTOR SIGNATURE(S)

By signing below, you acknowledge that this crossing is subject to PADEP and/or USACE authorizations and other requirements listed above, as applicable. By signing below you acknowledge that the crossing will be installed and the area restored in accordance with all approved plans and all PADEP, USACE, and all other agency authorizations.

	Company Name	Name	Title	Signature	Date
Mainline Contractor 1					
HDD Contractor 2					
Contractor 3					

ENVIRONMENTAL COMPLIANCE PROGRAM SIGNATURE(S)

By signing below, you acknowledge that the Contractor(s) and Construction Spread Manager have held an on-site preconstruction meeting where the requirements of the PADEP, USACE, and other agency approvals for the crossing were reviewed and discussed. By signing below you acknowledge your understanding of the requirements of all the approved plans and all PADEP, USACE, and other agency authorizations.

	Company Name	Name	Title	Signature	Date
Environmental Compliance Rep1					
Environmental Compliance Rep2					
Environmental Compliance Rep2					

SPLP MANAGEMENT NTP SIGNATURE(S)

By signing below, you acknowledge that the Contractor(s), Construction Spread Manager, and Environmental Compliance Program have held an on-site preconstruction meeting where the requirements of the PADEP, USACE, and other agency approvals for the crossing were reviewed and discussed. By signing below you provide the contractor notice-to-proceed with the referenced crossing(s).

	Company Name	Name	Title	Signature	Date
Spread Construction Manager					
SPLP Spread Project Manager or Project Manager					