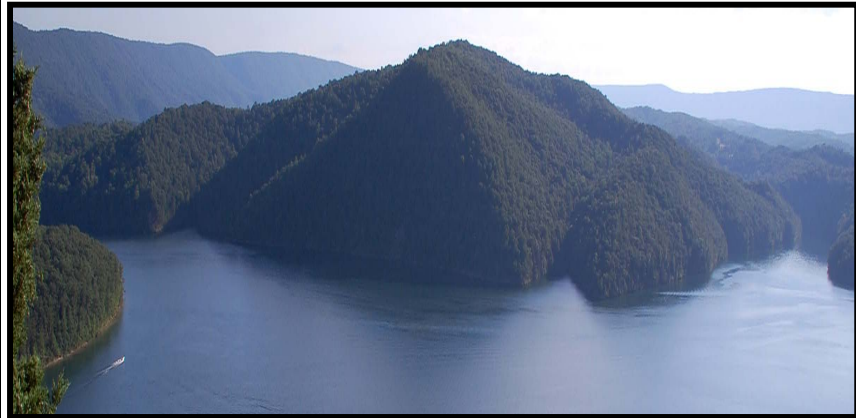


**UNITED STATES ARMY CORPS OF ENGINEERS
PITTSBURGH AND BALTIMORE DISTRICTS**



***AMENDMENT
TO***

FINAL ENVIRONMENTAL ASSESSMENT

**PENNSYLVANIA PIPELINE PROJECT
CROSSING FEDERALLY OWNED PROPERTIES**

**ADMINISTERED BY THE
U.S. ARMY CORPS OF ENGINEERS**

**AT
CONEMAUGH RIVER LAKE, LOYALHANNA LAKE AND
RAYSTOWN LAKE**

December 2016

***Amended by Baltimore District as to Raytown Lake
July 2017***

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APPENDIX

APPENDIX	TITLE
Appendix J	Environmental Assessment of Temporary Parking Area

LIST OF ACRONYMS

CFR	Code of Federal Regulations
dB	decibel(s)
dBA	A-weighted decibel
EA	Environmental Assessment
HDD	horizontal directional drill
Leq	equivalent sound level
NEPA	National Environmental Policy Act
OSHA	U.S. Occupational Health and Safety Administration
ROW	Right-of-way
SPLP	Sunoco Pipeline, Limited Partnership
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency

**Amendment to Final Environmental Assessment
Pennsylvania Pipeline Project
Crossing of United States Army Corps of Engineers' (USACE) property at
Raystown Lake**

1.0 INTRODUCTION AND PURPOSE OF AMENDMENT

In February 2017, the U.S. Army Corps of Engineers (USACE) completed a Final Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) evaluating a real estate easement agreement allowing Sunoco Pipeline, Limited Partnership (SPLP) to construct and operate two five (5) -mile natural gas liquids pipelines through USACE owned/administered properties at Loyalhanna Lake, Conemaugh River Lake, and Raystown Lake. The two pipelines would be aligned parallel to and adjacent to SPLP's existing rights-of-way (ROWs) and parallel to and adjacent other utility ROWs. The EA results and FONSI found that the Proposed Action would not have significant adverse impact to the environment, and therefore concluded that an Environmental Impact Statement was not necessary to implement the Proposed Action. The EA noted that the Preferred Alternative (the Project) would result in certain environmental impacts to USACE properties, but these impacts would be reduced with implementation of adequate mitigation.

The EA includes an impact minimization measure that construction would be avoided from mid-May to after Labor Day (September 4, 2017) weekend, or after the end of October (as USACE specifically assigned to certain areas of the property at Raystown Lake), to ensure that potential Project impacts to recreational uses are minimal.

However, due to a later than anticipated start, adverse weather conditions, and geologic conditions encountered during the horizontal directional drilling (HDD) process under Raystown Lake (which increased the length of time to complete the HDD process), construction could not be completed within this timeframe. The USACE is considering allowing some construction activities to continue beyond this timeframe during the summer season, with the objective of limiting an extended disturbance of recreational uses in the Seven Points Recreational Area. This is intended to allow SPLP to conclude all pipeline construction within the recreational area as expeditiously as possible during the remainder of 2017 and early 2018 calendar years. There is an advantage to completing the approved project as expeditiously as possible and terminating construction impacts on the area. Moreover, the Corps is willing to work with SPLP to meet the contractual deadlines, as stated by SPLC, for pipeline transportation service.

An amendment to the EA evaluates changes in the Project construction work schedule. Because the period of construction work (hours per day, days per week, seasonal time of year) has the potential to adversely affect certain resources addressed in the EA, USACE determined that it is prudent to amend the EA to address the relevant impact issues and ensure that impact minimization and mitigation measures are appropriate.

Section 2 introduces the change to the Proposed Action. Section 3 specifically defines the construction schedule changes, identifies the resources potentially impacted, and lists the specific impact minimization and mitigation measures that are proposed. Section 4 provides an

environmental impact assessment of specific potentially affected resources, as applicable. Section 5 provides conclusions related to the environmental impacts of the proposed schedule change and USACE's mission of providing for the public's recreation and enjoyment at Raystown Lake. The attached map (Figure 1) shows the Project area at Raytown Lake Seven Points Recreation Area, including construction progress as of May 16, 2017 (at which time construction had ceased, in accordance with previously agreed-upon timeframes).

2.0 AMENDED PROPOSED ACTION

This amendment to the EA changes the timeframe in which SPLP would complete certain construction activities for the 20-inch pipeline in the Seven Points Recreation Area of Raystown Lake¹. The changes extend the timeframe to allow certain limited construction activities to continue during specifically defined timeframes within the busy summer recreation season (i.e., generally defined as Memorial Day through Labor Day). Section 3.0 provides more detail on the specific changes to the construction schedule, by location and construction method.

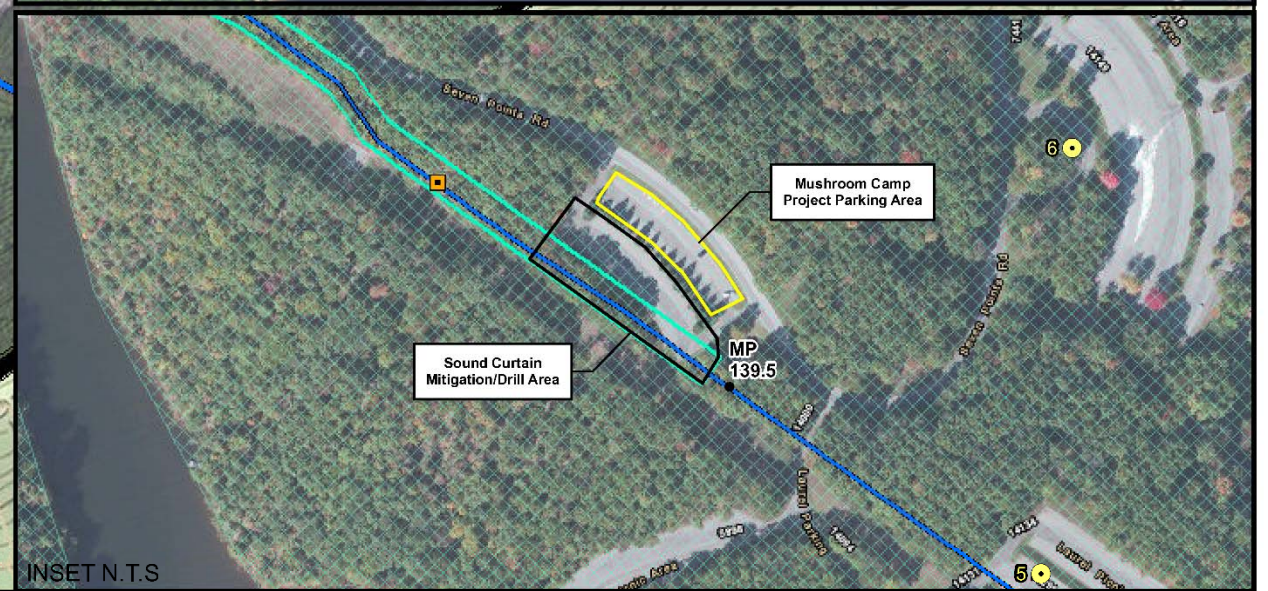
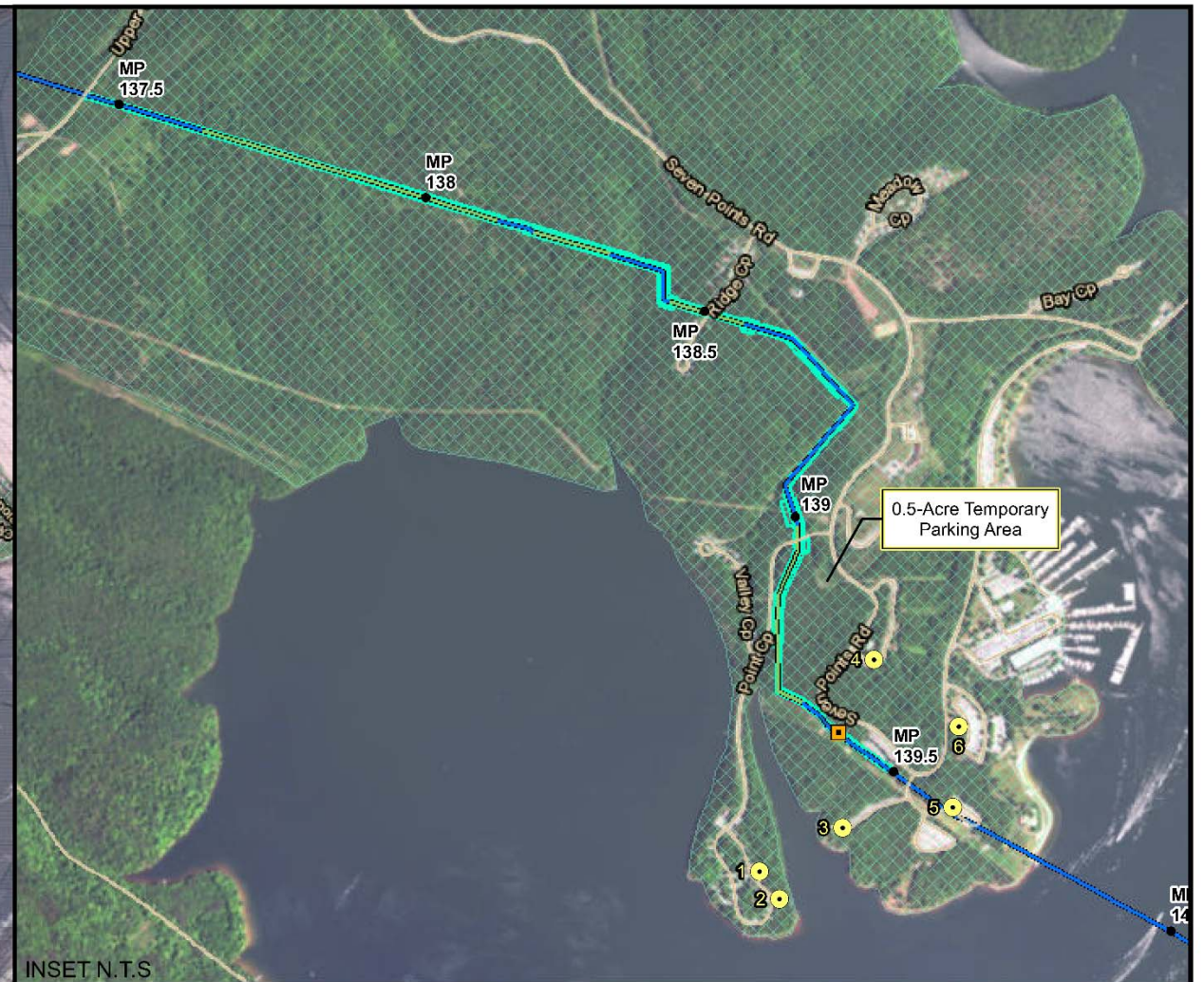
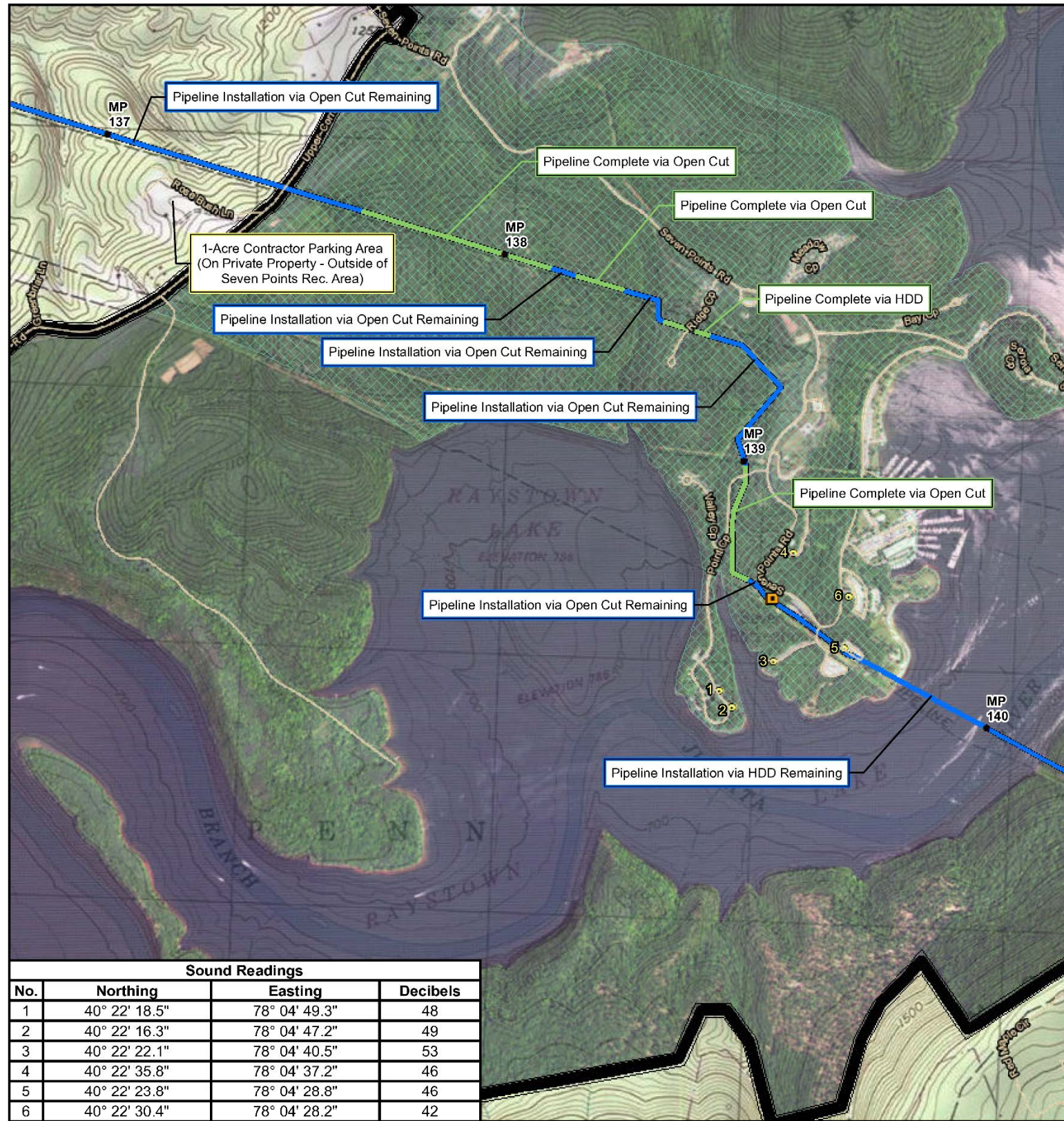
This is the only change to the Proposed Action. The permanent easement/lease area, temporary workspace, and remainder of the Project description remains unchanged.

Construction of the second (16-inch diameter) pipeline in the Seven Points Recreation Area would be delayed and would not be installed until after November 1, in accordance with the original EA. When construction of the 16-inch pipeline does occur, SPLP will abide by the previously noted seasonal timeframes and impact minimization measures as presented in the original EA and applicable Pennsylvania Department of Environmental Protection permits.

3.0 DESCRIPTION OF PROPOSED SCHEDULE CHANGES, OVERVIEW OF POTENTIAL IMPACT TOPICS, AND IMPACT MINIMIZATION/ MITIGATION MEASURES

Changes to the proposed construction work schedule could result in potential changes to USACE's previous impact analysis related to the following resources and sections of the EA: 3.7 – Recreation, 3.8 – Aesthetics, 3.10 – Noise, 3.11 – Transportation, and 3.12 – Health and Safety. The change in construction schedule does not change the impact of the Project on natural resources (including water and wetland resources, or wildlife/compliance with the Endangered Species Act), cultural resources/compliance with Section 106 of the National Historic Preservation Act or other resources that were previously assessed in the EA. To ensure that impacts to recreation, aesthetics, noise, transportation, and health and safety remain no more than minimal, this EA amendment expands the impact minimization and mitigation measures SPLP would implement during the extended timeframe of active construction.

¹ The Seven Points Recreation Area is the area of pipeline construction right-of-way extending from Upper Corners Road proceeding south and east to the main channel (western shore) of Raystown Lake in the vicinity of Seven Points Beach.



Sound Readings			
No.	Northing	Easting	Decibels
1	40° 22' 18.5"	78° 04' 49.3"	48
2	40° 22' 16.3"	78° 04' 47.2"	49
3	40° 22' 22.1"	78° 04' 40.5"	53
4	40° 22' 35.8"	78° 04' 37.2"	46
5	40° 22' 23.8"	78° 04' 28.8"	46
6	40° 22' 30.4"	78° 04' 28.2"	42

— Pipeline Installation Complete ● Sound Readings
— Pipeline Installation Remaining ■ Valve Site
— Workspace US COE Property
 Seven Points Recreational Area

**SUNOCO PIPELINE LP
ME2 - RAYSTOWN LAKE
OVERVIEW MAP**

1,500 750 0 Feet 1,500 3,000

N
W E
S

DRAWN BY:	MM
CHECKED BY:	MM
APPROVED BY:	MM
PROJECT:	
DATE:	6/12/2017
REV:	20170427 1117 OMS 005

FIGURE: 1 of 1

M M
MOTT
MACDONALD

PROPRIETARY
SUNOCO PIPELINE LP

DOCUMENTS COMPILED UTILIZING PUBLICLY AVAILABLE GIS RESOURCES AND MINIMAL ON THE GROUND RECONNAISSANCE

The 20-inch diameter pipeline crossing the Seven Points Recreation Area is being constructed in multiple segments: 1) one short HDD under the Ridge Camp Loop area, 2) several segments of conventional open cut/trenched construction (i.e., requiring trench excavation and backfilling), and 3) one long HDD under Raystown Lake.

SPLP completed the short HDD under the Ridge Camp Loop area and installed all except approximately 5,000 feet of the pipeline to be installed using conventional open cut/trenched construction methods by May 16, 2017. The long HDD under Raystown Lake was in progress, but encountered a technical difficulty as the mid-May construction deadline approached and was subsequently stopped, in compliance with the construction schedule limitations USACE had previously set.

The following subsections (Sections 3.1 and 3.2) describe the specific construction schedule changes that are proposed for completion of the remainder of the Project in the Seven Points Recreation Area, and the specific measures proposed to minimize impacts and mitigate for unavoidable impacts. This information is organized and presented based on 1) areas where the pipeline will be installed using conventional open cut/trenched methods, and 2) the area where the pipeline will be installed under Raystown Lake using a long HDD (i.e., trenchless construction method). These are presented separately because the impacts and impact mitigation measures differ between the two methods of construction, and therefore, the allowed construction schedule for each construction method will differ.

An analysis of the potential environmental impacts associated with these schedule changes on specific resources is provided in Section 4. In particular, the analysis focuses on Recreation, Aesthetics, Noise, Transportation, and Health and Safety.

3.1. Conventional Open Cut/Trenched Construction Methods

For the segment of conventional open cut/trenched construction within Seven Points Recreation Area, SPLP completed installation of all except the block valve station, approximately 5,000 feet of pipeline between Upper Corners Road and the HDD site/Mushroom parking area, and the tie-in of the HDD section of the pipeline (on the western side of the lake) by May 16, 2017 (as shown on Figure 1).

The USACE is considering allowing, under certain circumstances, conventional open cut/trenched construction in the Seven Points Recreation Area between the end of Labor Day weekend (September 5, 2017) and the end of October, 2017, provided that certain provisions are followed:

Trenched construction work may resume in the Seven Points Recreation Area on September 5, 2017 and would be permitted to continue through November 1, 2017, provided the following impact avoidance, minimization, and mitigation measures are implemented:

- Conventional open cut/trenched construction would cease:
 - Every Friday, 3:00 pm through Monday, 8:00 am each weekend.

- Allowed Work Schedule from September 5 through November 1, 2017:
 - Monday to Thursday, 8:00 am – 7:00 pm;
 - Friday, 8:00 am – 3:00 pm;
- Miscellaneous construction materials and portable equipment would be moved to an offsite location on days when work is ceased/avoided.
- Laborers and equipment operators would be bused in from existing staging/yard areas off of Raystown Lake property (such as an existing staging area near the pipeline ROW on Upper Corners Road, shown on Figure 1), reducing construction-related traffic and occupation of parking space at Raystown Lake. Similarly, Inspectors would share vehicles to the extent practicable.
- Recreation trails would be reopened by 3:00 pm on Fridays for the weekend.
- Routine inspection of erosion and sediment control measures would be permitted on an *as needed* basis during “cease/avoid” times, and maintenance of such controls will be performed subject to USACE Operations Staff approval and SPLP’s state and federal environmental permit requirements.

From November 1, 2017 through May 1, 2018, work in the Seven Points Recreation Area may resume without daily restrictions, if needed. Construction during this time would not interfere with or significantly impact recreational users, because public use for recreation activities are minimal during this time.

An analysis of the environmental impacts associated with this schedule change and impact minimization/mitigation measures on specific potentially affected resources is provided in Section 4. Specifically, the analysis focuses on Recreation, Aesthetics, Noise, Transportation, and Health and Safety.

3.2. HDD Under Raystown Lake

The long HDD under Raystown Lake has been under construction, but due to the unanticipated greater density of the rock, that HDD was not able to be completed by May 16, 2017.

The USACE is considering allowing, under certain circumstances, HDD construction under Raystown Lake during specified times between Memorial Day and the end of Labor Day weekend, provided that certain provisions are followed:

SPLP would be permitted to continue work on the long HDD under Raystown Lake after Memorial Day 2017, *provided the following impact minimization and mitigation measures are implemented:*

- HDD progress and associated construction activities would cease:
 - The entire duration of the public notice/comment/licensing period for this EA Amendment;
 - From Friday 3:00 pm through Monday, 8:00 am each weekend;
 - July 4th/Independence Day weekend from Friday, June 30, 2017 at 3:00 pm through Wednesday, July 5, 2017 at 8:00 am.

- Labor Day weekend from Thursday, August 31, 2017 at 3:00 pm through Tuesday, September 5, 2017 at 8:00 am.
- Allowed Work Schedule (excluding the above-listed “cease/avoid” days): HDD progress and associated construction activities would be allowed:
 - Monday through Thursday, 24 hours per day; and,
 - Friday until 3:00 pm.
- Although no active HDD progress would occur during “cease/avoid” times, SPLP would rotate the drill (but not advance forward HDD progress) once daily during the cease/avoid days (a process requiring approximately 1 hour), at times acceptable to USACE. This process would reduce the risk of the down-hole equipment lodging in the hole due to inactivity, and minimize the risk of HDD failure.
- The currently in place 16-foot high heavy vinyl sound wall surrounding the HDD location (except for an approximately 14-foot gap on the northeast and northwest corners to allow for equipment and materials entry and exit) would be maintained until the completion of the HDD.
- Additional sound suppression measures were implemented as of May 3, 2017, and would be maintained until the completion of the HDD. This sound suppression includes additional sound absorption panels placed at individual equipment noise points inside and outside the noise curtain.
- Additional sound suppression measures may be added if necessary.
- Lighting for nighttime construction would be further adjusted if necessary to minimize illumination of areas outside of the construction workspace.
- No permanent lane closures would occur on Raystown Lake roads for summer HDD activities. Flaggers and escorts would be used for directing and supporting oversized vehicles.
- Water delivery trucks would avoid using the Mushroom parking lot, and instead would be offloaded at other areas allowing for larger turning radii (such as the overlook), to avoid conflict with recreational users of the Mushroom parking lot.
- To accommodate for the loss of half of the Mushroom parking lot (to stage the drill equipment) during the busy summer period, SPLP’s contractor would provide mitigation in the form of a temporary parking lot (location shown in Figure 1) for camper overflow for Raystown Lake guests/public use, which would be removed following completion of pipeline construction (unless otherwise approved and permitted by applicable authorities/regulatory agencies).²
- All workers for the HDD operation would be bused in from an offsite staging/yard area (such as an existing staging area near the pipeline ROW on Upper Corners Road, shown on Figure 1), and all construction support vehicles (pickup trucks) would park in the area inside the HDD sound barriers.

² This temporary parking lot is considered a separate Action from the SPLP Pennsylvania Pipeline Project for purposes of Project environmental permitting, but has been reviewed under the National Environmental Policy Act (NEPA) as a new addendum to the Final Environmental Assessment for this Project crossing USACE lands, called Appendix J, Assessment of Temporary Parking Area (June 2017).

- In the event that construction activities require boat access to Raystown Lake, SPLP would avoid using the courtesy dock at Raystown Lake and must find alternative access and storage locations.

An analysis of the environmental impacts associated with this schedule change and impact minimization/mitigation measures on specific potentially affected resources is provided in Section 4. Specifically, the analysis focuses on Recreation, Aesthetics, Noise, Transportation, and Health and Safety.

4.0 ASSESSMENT OF IMPACTS ON RELEVANT RESOURCES

Continuation of construction in the Raystown Lake Seven Points Recreation Area during the busy summer recreation season without additional mitigation measures could result in a more than minimal impact to public recreational uses. Potential impacts that the recreating public in Seven Points Recreation Area may experience could include: noise emitted by the drilling and construction activities, visual/aesthetic effects from the presence of the active HDD equipment and construction work area, increased traffic due to construction vehicles and delivery trucks (water and supplies), limitations to public parking due to the HDD equipment set up in the Mushroom parking area, and potential public safety concerns due to construction activities within an active recreational area. This section addresses each of these issues, focusing on Recreation, Aesthetics, Noise, Transportation, and Health and Safety.

4.1. Recreation

As noted in the original EA (in Section 3.7 – Recreation), Raystown Lake provides a variety of recreational uses for visitors including camping, hiking, biking, swimming, fishing, hunting and boating opportunities. Raystown Lake includes the Seven Points Recreation Area, with campgrounds, trails, a beach, and a full service marina. Within the Project ROW at Raystown Lake, Ridge Camp is a popular destination and busy campground during the summer season, usually between Memorial Day through Labor Day weekend. Additionally, Point Camp (near the Project ROW) and the entire Seven Points Recreation Area is popular from April 1 through the end of October. The Allegrippis Trail (a mountain bike trail), also would be crossed by the Project ROW at several locations.

4.1.1. *Conventional Open / Trenched Pipeline Construction*

The Seven Points Area experiences high guest reservation/occupancy rates for camping and daytime recreation from mid-May through Labor Day. This high level of use extends to the campsites, the trails, the beach and marina, boat launch, and transportation (traffic on roadways and parking in the parking lots). Allowing SPLP to continue to install the remaining approximately 5,000 feet of pipeline using conventional/open cut construction and continue construction of the block valve station between mid-May and Labor Day would result in potentially significant adverse impacts and present an “area conflict” with the recreating public. These potential impacts would be experienced in the form of:

- increased construction noise from the many pieces of construction equipment required for this method of construction;
- visual/aesthetic effects from the presence of active ROW construction work for a distance of 0.95 mile;
- increased traffic on Raystown Lake roadways (from worker vehicles, fuel trucks, welding support vehicles, and other supply delivery trucks) which would compete with bicyclers, walkers, and public recreationalist's vehicles;
- public safety concerns associated with construction activities, large heavy equipment, and increased construction traffic within close proximity to public use/recreation areas; and,
- diversion of Raystown Lake's park rangers from their primary responsibilities to coordinate logistics of recreation activities with pipeline construction, which detracts from their time/ability to provide the high level of attention to recreation needs and service that guests have come to expect.

USACE believes that these impacts on recreation, if they occur during the most active part of the recreation season, cannot be adequately mitigated by any reasonably available means. Therefore, conventional/open trench construction will not be permitted in the Seven Points Recreation Area between Memorial Day and the end of Labor Day weekend.

However, after the Labor Day holiday, guest reservations/occupancy rates for camping and daytime recreation in the Seven Points Area are reduced, especially during the regular business week / non-weekend periods. Among other things, reduced numbers of campers allow Raystown Lake staff more flexibility in placing campers at camp locations further away from the ROW construction work areas.

USACE believes that the conventional open cut/trenched construction measures can be conducted after Labor Day weekend through November 1 without major adverse impacts on recreation if certain measures are implemented, including:

- Limiting conventional/open trench construction work schedule to:
 - Monday to Thursday, 8:00 am – 7:00 pm;
 - Friday, 8:00 am – 3:00 pm;
 - (Cease/avoid work from Friday 3:00 pm through Sunday each weekend).
- On days when work is ceased/avoided, miscellaneous construction materials and portable equipment will be removed from near vicinity to public access and secured for safety.
- Transporting laborers and equipment operators to the Seven Points Recreation Area on buses to reduce construction-related traffic and occupation of parking space.
- Reopening recreation trails by 3:00 pm on Fridays for the weekends.

From November 1, 2017 through April 1, 2018, conventional open cut/trenched construction work in the Seven Points Recreation Area would not significantly impact or interfere with recreational uses because public use for recreation activities are reduced during this time.

4.1.2. HDD Construction Under Raystown Lake

As noted above, the Seven Points Recreation Area experiences high guest reservation/occupancy rates for camping and daytime recreation from mid-May through Labor Day. This high level of use extends to the campsites, the trails, the beach and marina, boat launch, and transportation (traffic on roadways and parking in the parking lots). Because the HDD activities are confined to a limited workspace area within the Mushroom parking area, USACE is considering allowing SPLP to continue with the HDD of the long segment under Raystown Lake during a restricted time within the busy recreational season (as proposed in detail in Section 3.2). This could result in significant impacts to recreation (including the recreating public), if no mitigation measures were implemented. These potential impacts would be experienced in the form of:

- elevated background noise from operation of the drill rig, which would typically operate all day, up to 24 hours per day;
- visual/aesthetic effects from the presence of an approximately 0.4-acre active HDD construction site within a heavily used public recreation area;
- light pollution into campsite areas from nighttime drilling activities;
- displacement of approximately 0.4 acre of guest parking by the HDD workspace occupying half of the Mushroom parking area;
- increased traffic on Raystown Lake roadways for deliveries (e.g., water, fuel, other supplies) to the HDD site, which would compete with bicyclers, walkers, and public users' vehicles;
- diversion of Raystown Lake's park rangers from their primary responsibilities to coordinate logistics of recreation activities with pipeline construction, which detracts from their time/ability to provide the high level of attention to recreation needs and service that guests have come to expect.

USACE believes that these impacts can be adequately minimized and mitigated, provided SPLP also implements several measures, as listed in Section 3.2. These measures would reduce and minimize impacts to a less than significant level, as follows:

- HDD progress and associated construction activities would cease and avoid the busiest times for recreational use at Raystown Lake, including the entire duration of the public notice/comment/licensing period for this EA Amendment, July 4th/Independence Day weekend, Labor Day weekend, and every weekend from Friday 3:00 pm through Monday 8:00 am. HDD progress would be allowed starting Monday through Friday early afternoon during the week, which are periods of reduced recreation use.
- During the "cease/avoid" times, SPLP would need to rotate the drill (but not advance forward HDD progress) once daily, which would be scheduled at times acceptable to USACE (in consideration of daily recreation activities), and would only require 1 hour per day. Based on the infrequency and short duration of this process, USACE believes this would not be intrusive to public users.
- Existing sound suppression measures have been effective to date at minimizing noise from the HDD (see Section 4.3). Additional sound suppression measures would be added if USACE or noise level monitoring deems necessary.

- The location of the HDD workspace is visually screened by existing trees and by natural topography from most vantage points. Based on this and other considerations (see Section 4.2), USACE has determined the visual/aesthetic impact would be minimal.
- To date, USACE believes that SPLP's nighttime lighting has been adjusted effectively such that light pollution into campsite areas has been minimized.
- To accommodate for the displacement of approximately 0.4 acre of guest parking in the Mushroom parking area, SPLP's contractor will provide mitigation in the form of a temporary parking lot for camper overflow for Raystown Lake guests/public use (see Section 4.4).
- In addition to stopping HDD work during the busiest times (i.e., each summer weekend from Friday afternoon to Monday morning), several other measures would be in place to limit construction-related traffic (see Section 4.4).
- Regarding the potential diversion of Raystown Lake's park rangers from their primary responsibilities to coordinate logistics of construction and recreation, due to the limited extent of the HDD operation and workspace, and the other impact minimization and mitigation measures (e.g., related to traffic, parking, noise, and avoidance of weekend work), USACE believes that this impact would be minimal.

With the incorporation of these measures, USACE has determined that impacts to public recreation as a result of HDD activities within the busy summer recreation season would be minimized to a level that is less than significant.

4.2. Aesthetics

As noted in the original EA (in Section 3.8 – Aesthetics), the Project ROW at Raystown Lake is in a designated recreational area in a setting with rolling to steep hills, and ridges and valleys within Pennsylvania. A mixture of scenery provides various panoramic views of forested and undeveloped land and waters that have been sustained for various recreational and open space uses. Visibility of the Project ROW is dependent upon the topography and one's location within USACE properties, as most of the Project ROW is within maintained grassy areas (i.e., along existing maintained ROWs) and between tall trees / forest edges. Several designated scenic overlooks are located within the Raystown Lake property; however, the Project workspace is not visible from most of these areas.

4.2.1. Conventional Open / Trenched Pipeline Construction

The Project ROW crosses under the Ridge Camp campsite area, and crosses or is visible from park roads including, Point Camp Road, Seven Points Loop, and the Mushroom parking area. Because conventional open cut/trenched construction of the pipeline along the Project ROW is either complete or would be prohibited until after Labor Day weekend, visual/aesthetic impacts from this type of work in these areas would be avoided.

4.2.2. HDD Construction Under Raystown Lake

The location of the HDD workspace in the Seven Points Recreation Area (on the west side of Raystown Lake) is visually screened by existing trees and by natural topography from most

vantage points. With the exception of vantage points immediately adjacent to the workspace in the Mushroom parking area and along a short section of Seven Points Road, the HDD workspace is not clearly visible from other well-used locations in the park. Further, the workspace is “fenced in” by 16-foot tall sound walls, which further shields the construction workspace and equipment from public view. Based on these factors, visual impacts of the HDD operations during the busy summer season would be minor.

4.3. Noise

As noted in the original EA, the Project ROW at Raystown Lake is located primarily within an existing utility corridor surrounded by forested lands within the designated public recreation area. Due to the surrounding forest cover, noise levels in the area are generally low with dense forest vegetation providing noise buffers in the Project area. Sensitive noise receptors (e.g., recreationalists) may be found within these recreation areas at any given time of the day; thus, the Project would be required to ensure that existing noise levels are preserved to the extent feasible to ensure that the recreational users are not adversely affected.

The nearest sensitive noise receptors identified within or near the Project ROW in the Seven Points Recreation Area are campground areas, including Ridge Camp (traversed by the ROW near milepost [MP] 138.5), Valley Camp (approximately 200 feet west of the ROW near MP 139.2), and Point Camp (approximately 1,400 feet/0.25 mile southwest of the HDD work site) (see Figure 1). A designated picnic area is located approximately 400 feet south of the HDD work site. Further away, the beach and Raystown Lake Visitor’s Center with outdoor arena are approximately 1,075 feet/0.20 mile east and 2,390 feet/0.45 mile north of the HDD site, respectively.

4.3.1. *Conventional Open / Trenched Pipeline Construction*

Conventional open/trenched construction along the pipeline ROW would be prohibited in the Seven Points Recreation Area between Memorial Day and the end of Labor Day weekend, thereby avoiding increased noise production from numerous construction equipment and workers along the remaining 5,000 feet of ROW during the busiest time of the summer season. After Labor Day weekend, Raystown Lake guest reservations are typically reduced during the week, and focus mainly on weekends. USACE believes that if conventional open cut/trenched construction were limited to only Monday through Thursday, 8:00 am – 7:00 pm and Friday, 8:00 am – 3:00 pm, and construction ceases on weekends until November 1, noise impacts from conventional open cut/trenched construction in the Seven Points Recreation Area would be minor.

4.3.2. *HDD Construction Under Raystown Lake*

Based on unforeseen circumstances and the nature of the geologic material which resulted in the increased duration of the HDD process, SPLP has requested permission to continue drilling and installation of the 20-inch pipeline at the long HDD crossing under Raystown Lake during the busy summer season. Based on USACE’s concerns about noise from the HDD and its effects on recreationalists, SPLP previously implemented several noise abatement measures for the HDD site.

On April 28, 2017, SPLP performed field measurements of sound levels in the vicinity of the HDD site while drilling operations were in progress, to determine where the HDD sound transmission had the greatest effect on sensitive receptors at ground level. The results are included in Table 1. Based on the results, SPLP determined that the additional sound suppression measures “focus” on reducing noise levels at the sensitive receptor sample locations. After taking field measurements on April 28, SPLP supplemented the existing sound suppression measures at the HDD site; then on May 3, 2017, again measured the sound levels at the locations of sensitive receptors. As shown in Table 1 and depicted on Figure 1, the additional sound suppression results measured on May 3, 2017 reduced the sound levels by up to 4 decibels (dB).

Table 1. Noise Levels at Nearby Noise Sensitive Areas During Project HDD Activities, West Side of Raystown Lake

Location ¹	Field Measured Sound Level April 28, 2017 ² (Enclosed/With 1 st Round of Sound Suppression Measures) (dB)	Field Measured Sound Level May 3, 2017 ³ (Enclosed/With 2 nd Round Improvements to Sound Suppression Measures) (dB)
Point Camp #1 (1,400 ft)	52	48
Point Camp #2 (1,500 ft)	53	49
Picnic Area #3	56	53
Seven Points Road #4	46	46
Parking Area #5	46	46
Parking Area #6	43	42

Notes:

- 1 – “#” represents sample location on Figure 1. “(xxxx ft)” represents distance in feet from HDD site.
- 2 – Actual sound levels were field-measured using a 3M Soundpro sound level meter, set on full octave band measurement. Daytime/Nighttime readings were taken on April 28, 2017, at multiple locations, to identify near source sound levels and noise receptor readings at sample locations #1, 2, and 3 shown on Figure 1. Nighttime readings were taken after 9:00 pm, 10-15 minutes duration at each point to ensure capture of full activity levels.
- 3 – Actual sound levels were field-measured using a 3M Soundpro sound level meter, set on full octave band measurement. Daytime/Nighttime readings were taken on May 3, 2017 at receptor locations as shown on Figure 1, after installation of additional sound suppression measures. Nighttime readings were taken after 9:00 pm, 10-15 minutes duration at each point.

The U.S. Environmental Protection Agency (USEPA) has determined that outdoor median noise levels exceeding day-night sound level (Ldn) of 55 A-weighted decibels (dBA) is considered intrusive noise³. This determination is based on the sound levels that allow relaxed normal voice conversation outdoors when distance between talker and listener is 10 feet or less. Sound measurement of 55 dBA Ldn is equivalent to a continuous equivalent sound level (Leq) of 48.6 dBA. Actual sound measurements taken on May 3, 2017, at six locations ranging from 600 to approximately 1,700 feet of the HDD site (drill entry) were all less than 55 dBA Ldn, and actually ranged from 2 to 13 decibels lower than 55 dBA Leq. All except two measurements were less

³ USEPA publications *Community Noise* (USEPA 1971) and *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety* (USEPA 1974).

than the 48.6-dBA threshold. One of the two locations measured above the 48.6-dBA threshold is a picnic site and would not be occupied at night. The other location measured above 48.6-dBA is at a camping location, but was measured at only 0.4 dBA above the threshold level.

Based on the field sound survey results, the sound suppression measures have been effective in reducing the HDD sound levels in most areas to less than intrusive effect levels, as defined by the USEPA. The relative lack of a wide “visual availability” of the HDD site to visitors and vantage points in the park further reduces the noticeability of sound coming from the HDD operation to the majority of Raystown Lake visitors.

Nevertheless, USACE believes that the HDD operation 24 hours per day during the periods of greatest visitorship in the Seven Points Recreation Area would result in an unacceptable noise impact. However, USACE believes these impacts would be reduced to minimal if HDD progress and associated construction activities would cease and avoid the busiest times for recreational use at Raystown Lake (including Dirt Fest, Memorial Day weekend, the entire duration of the public notice/comment period for this EA Amendment, July 4th/Independence Day weekend, Labor Day weekend, and every weekend from Friday 3:00 pm through Sunday). HDD progress would be allowed starting Monday at 8:00 am through Friday at 3:00 pm during the week, which are periods of reduced visitorship and recreation use. USACE would continue to monitor sound levels and visitor feedback, and USACE would require SPLP to install additional sound suppression measures if necessary.

During the “cease/avoid” times, SPLP would need to rotate the drill (but not advance forward HDD progress) once daily, which would be scheduled at times acceptable to USACE (in consideration of daily recreation activities), and would only require 1 hour per day. Based on the infrequency and short duration of this process, USACE believes this would not cause unacceptable noise impacts.

4.4. Transportation

As noted in the original EA, the use of various roads at Raystown Lake would be required for construction of the pipeline, including Ridge Camp Road, Seven Points Camp Road, Point Camp Road, and Seven Points Loop. Construction activities (for both conventional open cut/trenched construction and the HDD operation) would result in traffic associated with worker transportation to the work areas; delivery of equipment, fuel, pipe, and other materials/supplies; water deliveries to the HDD site, and other traffic. If this increased traffic occurs during the busy summer season, it would have the potential to impede recreationalists’ use of the roads for vehicle and bicycle traffic and pedestrian use.

4.4.1. *Conventional Open / Trenched Pipeline Construction*

Even if workers were bused in with fewer vehicles, the traffic associated with the 5,000 feet of conventional open cut/trenched pipeline construction would be greater than the traffic needed to support the HDD operation; it would require more daily deliveries of fuel, pipe, welding support vehicles, and would be spread out along the 0.95-mile ROW area remaining in the park. Even with SPLP’s close coordination with USACE regarding traffic control and road safety measures,

and even if workers were bused in, the volume of construction-related traffic required for conventional open cut/trenched construction during the busiest time of the summer period would be too great to avoid traffic disruption impacts. Therefore, installation of the 5,000 feet of conventional open cut/trenched pipeline construction in the Seven Points Recreation Area would be prohibited between Memorial Day and the end of Labor Day weekend.

However, after the Labor Day holiday, visitor traffic in the Seven Points Area is reduced, especially during the regular business week/non-weekend periods. USACE believes that the conventional open cut/trenched construction of the 5,000 feet of pipeline remaining to be installed, can be conducted after Labor Day weekend through November 1 without major adverse impacts on traffic if certain measures are implemented, including: busing laborers and equipment operators to the Seven Points Recreation Area construction locations from an offsite location (to reduce construction-related traffic and occupation of parking space), and limiting construction to only Monday through Thursday, 8:00 am – 7:00 pm and Friday, 8:00 am – 3:00 pm (no construction on weekends until after November 1).

4.4.2. HDD Construction Under Raystown Lake

For the segment of the pipeline to be installed using HDD under Raystown Lake, SPLP has requested permission to continue this activity, 24 hours per day during the busy summer season, to avoid failure of achieving its contractually-required in-service date for the pipeline. This would result in increased traffic within the Seven Points Recreation Area and also would require the HDD equipment, materials, and workspace to occupy one-half of the Mushroom parking area during the busy summer season.

Traffic related to equipment, material, and worker deliveries to the HDD site would vary depending on the day and phase of the HDD, but generally would include the delivery item types and approximate frequency as presented in Table 2.

Table 2. Estimated Traffic from Equipment and Material Deliveries to HDD Site at Raystown Lake

Delivery Item	Number, Type	Per Time Unit	Purpose
HDD Rig/Power plant/ Mud Pump/ Drill Stem Delivery	10-15 tractor trailer loads	One-time event to deliver / one-time event to remove	Required to remobilize the HDD equipment back to the drill site.
Crew Member Delivery	2 to 4 vans or crew- cab trucks	Per work shift (x 2 shifts per 24-hour work day)	Transport crew members to HDD work site.
Crew Member Delivery	2 to 4 vans or crew- cab trucks	Per non-work day	Required to turn the drill for 1 hour during non-HDD work days.
Fuel delivery	2 fuel trucks	Per work day	To refuel the equipment within the sound wall containment
Water storage tanks	8 storage tanks	One-time event to deliver / one-time event to remove	Fulfill water storage needs for duration of HDD
Water delivery	38 truckloads initially	One-time event to start HDD	Required to re-initiate HDD activities
Water delivery	48 truckloads (maximum)	Per shift (x 2 shifts per 24- hour period)	Required to continue HDD activities

Delivery Item	Number, Type	Per Time Unit	Purpose
Drill cutting removal	2 to 4 roll-off box trucks	Per work day (until cutting removal is no longer required)	Required to remove drill cuttings from site
Admixture Deliveries	1 tractor trailer load	Per shift (x 2 shifts per 24-hour period)	Drilling mud delivery
Vacuum trucks	2 to 4 vacuum trucks	Every 3 to 6 work days	Drilling mud control and removal
Additional/Miscellaneous Deliveries	1 to 2	Per work day	Miscellaneous Deliveries

To address potential traffic impact issues and mitigate for the HDD occupation of the Mushroom parking area, the following impact minimization and mitigation measures would be implemented for the HDD activity related to traffic:

- HDD progress and associated construction activities would cease and avoid the busiest times for recreational use at Raystown Lake (including Dirt Fest, Memorial Day, and July 4th/Independence Day weekends, the entire duration of the public notice/comment/licensing period for this EA Amendment, and every weekend from Friday 3:00 pm through Sunday). HDD progress would be allowed Monday through Friday afternoon during the week, which are periods of reduced visitorship and traffic.
- SPLP would continue to coordinate with USACE on traffic related concerns on a weekly basis or more frequently as needed.
- Crew members would be transported to the HDD location in the Seven Points Recreation Area via car pool using vans or crew-cab trucks⁴. All construction support vehicles would park in the area inside the HDD sound barriers or remain on call off-site.
- No permanent lane closures would occur on Raystown Lake roads for summer HDD activities.
- Flaggers and escorts would be used for directing and supporting oversized vehicles.
- Water delivery trucks would avoid using the Mushroom parking lot, and instead would be offloaded at other areas allowing for larger turning radii (such as the overlook), to avoid conflict with recreational users of the Mushroom parking lot.
- To accommodate for the loss of half of the Mushroom parking lot (to stage the drill equipment) during the busy summer period, SPLP's contractor would provide mitigation in the form of a temporary parking lot for camper overflow for Raystown Lake guests/public use, which would be removed following completion of pipeline construction (unless otherwise approved and permitted by applicable authorities/regulatory agencies). The lot would be at least as large as the occupied space, and located approximately 1,400 feet north of the portion of the Mushroom parking area occupied by HDD workspace.⁵

⁴ Crews would work two 12-hour shifts as permitted, and shift changes would occur over a 1- to 2-hour overlap between the hours of 5am – 7am and 5pm – 7pm. The number of people per shift would total approximately 16 at the entry side (west side of lake), and 6 at the exit side (east side of lake).

⁵ This temporary parking lot is considered a separate Action SPLP Pennsylvania Pipeline Project for purposes of Project environmental permitting, but has been reviewed under NEPA as a new addendum to the Final Environmental Assessment for this Project crossing USACE lands, called Appendix J, Assessment of Temporary Parking Area (June 2017).

- Access roads used during construction would be allowed to revert, or be restored to, pre-construction conditions and resume normal operations/use.
- SPLP would avoid using the courtesy dock at Raystown Lake and must find alternative access and storage locations if boat access to the lake is needed.

Based on the nature and extent of traffic that would result from allowing HDD construction work during the summer season, along with the proposed impact minimization and mitigation measures, USACE believes that traffic impacts to the Seven Points Area of Raystown Lake would be reduced to a temporary, less than significant level.

4.5. Health and Safety

The Health and Safety section in the original EA addressed the U.S. Department of Transportation (USDOT) regulations at 49 Code of Federal Regulations (CFR) Part 195 (Transportation of Hazardous Liquids by Pipeline) designed to ensure adequate protection of the public from hazardous liquids pipeline failures. The original EA also addressed Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks. Although no residences, schools, or childcare facilities are located on-site or in proximity to the Project's construction area; the Project does cross recreational facilities that are open to the public and are utilized by children during the summer season. The original EA also noted that construction activities would comply with the U.S. Occupational Health and Safety Administration (OSHA) requirements for safety during construction activities.

4.5.1. Conventional Open / Trenched Pipeline Construction

Allowance of the conventional open cut/trenched construction along the remaining 5,000 feet of pipeline at Seven Points Recreation Area during the busiest time of the summer recreation season would potentially put members of the recreating public at a higher risk of injury, as a result of potential accident or encounter with construction equipment on the ROW, or increased construction traffic on the roads. However, after the Labor Day holiday, visitor attendance in the Seven Points Area is reduced, especially during the regular business week/non-weekend periods. USACE believes that the conventional open cut/trenched construction of the remaining 5,000 feet of pipeline can be conducted after Labor Day weekend through November 1 without major adverse impacts on public safety, provided that the measures already proposed to be implemented for traffic safety (Section 4.4) are implemented.

4.5.2. HDD Construction Under Raystown Lake

The HDD activities, if allowed to occur during the busy summer season between Memorial Day and Labor Day, would be almost completely contained behind 16-foot-high sound walls in relatively remote area within the Seven Points Recreation Area. This area would be secured and monitored by onsite workers during active work periods, up to 24 hours per day. On days when no work occurs, the site will be completely secured (with locks and/or security guards) and inaccessible to the public. As a result of these measures and the traffic safety measures noted for HDD in Section 4.4, USACE believes that the health and safety of its recreating guests will not be inappropriately compromised if HDD work is allowed during the newly scheduled time periods.

5.0 CONCLUSION

Based on the modifications to the Project construction schedule, SPLP's implementation of the specific provisions and impact minimization and mitigation measures presented in this Amendment to the EA, and other such measures already included in the EA, USACE concludes that adverse impacts to public recreation, noise, visual/aesthetic resources, traffic (including public parking) and public safety at Raystown Lake would be temporary and minor/less than significant. Accordingly, the conclusions of the original EA and FONSI remain unchanged. We further conclude that the specific provisions and impact minimization/mitigation measures presented in this Amendment to the EA will not interfere with the USACE's mission of providing for the public's recreation and enjoyment at Raystown Lake.

If public recreationalists at Raystown Lake have any specific concerns or complaints about the Project construction activities, they can contact the Raystown Lake Operations Staff at the Raystown Lake Administrative Building, or call Mr. Nick Krupa, Raystown Lake Operations Manager, at (814) 658-6801.

APPENDIX J.

Environmental Assessment of Temporary Parking Area

→ ***Insert Appendix J – EA of Temporary Parking Area, when Final.***