

Comment-Response Document
Site Characterization Work Plan – Revised June 27, 2025
eFACTS PF No. 881609; eFACTS Activity No. 60986
Twin Oaks – Newark 14”-Diameter Pipeline – Upper Makefield Township, Bucks County

Sunoco Pipeline LP (“SPLP”) provides this comment-response document for the public comments that SPLP received for the revised Site Characterization Work Plan (“SCWP”) that SPLP submitted to the Department on June 27, 2025, in accordance with paragraph 2.b.i of the Department’s March 6, 2025 Administrative Order (the “Order”). Public comments were received through the dedicated email address, uppermakefieldact2@energytransfer.com, via U.S. Mail, or were submitted directly to PADEP and transmitted to SPLP, and are provided verbatim below, together with SPLP’s response to each comment.

#	Commenter	Public Comment	SPLP Response
1.	Mt. Eyre Task Force	<p>To Whom It May Concern,</p> <p>In response to the revised site characterization work plan from 6/27 the Mt. Eyre Task Force (<i>a group of 30+ residents in the Mt. Eyre neighborhood</i>) requests that the plan be modified to take into consideration the requests outlined below which are intended to help ensure implementation of more transparent communication, and better remediation.</p> <p>To date, Energy Transfer and Sunoco (“ET”) have not met the community’s expectations in acting with a sense of urgency to remediate the situation, and the continued lack of transparency and limited information being shared only continues to raise concerns about our property, and the health, safety and wellbeing of our families. Therefore, the following items are requested to be addressed in connection with the Site Characterization Work Plan:</p> <p>List of Requests to be Included in Site Characterization Work Plan (“SCWP”):</p>	<p>As an initial matter, SPLP again notes that nearly every participant or member in the “Mt. Eyre Task Force” is represented by the law firm Berger Montague, which has commenced litigation against SPLP on behalf of certain residents in Upper Makefield Township.</p> <p>SPLP disputes the allegations in this introductory comment that SPLP is not “acting with a sense of urgency” or that there has been a “lack of transparency and limited information being shared.” SPLP continues to be transparent and forthcoming with its remedial efforts. The interim remedial actions, site characterization, and other field activities that SPLP has taken to date have been summarized in multiple submissions to the Department, including, but not limited to, the response to the Notice of Violation (3/5/25), Interim Remedial Action Plan (3/19/25, rev. 4/16/25), the Response to the Administrative Order (3/31/25), the Vapor Intrusion Progress Report (6/14/25, rev. 4/2/25), Remedial Action Progress Report (6/12/25), and the Site Characterization Work Plan (4/18/25, rev.</p>

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		<p>6/27/25), all of which are publicly available on PADEP’s website and on SPLP’s dedicated incident response website: (https://uppermakefield.incidentupdates.com/) that SPLP established to provide information to the public. SPLP has also made hard copies of certain of these documents available at the Upper Makefield Township building. SPLP has also participated in and hosted numerous public meetings to share information with the community, to address comments and obtain feedback from the community. Finally, to expedite remedial activities in the field, SPLP notes that it has frequently taken action, with PADEP’s concurrence, while waiting for PADEP’s formal review and approval of submittals.</p> <p>Responses to the specific substantive comments, as numbered, are provided below.</p>
Mt. Eyre Task Force	<p>1. An update/report on the volume of jet fuel that was leaked to better inform the remediation process.</p> <ul style="list-style-type: none"> ○ It has been communicated during public meetings that a great deal of data has been collected over the past 7 months since the leak was first reported in January of 2025, and that ET was doing an in-depth analysis of this data. ○ Therefore, we believe that ET should now have a deeper understanding of how much jet fuel has leaked/was lost since January (and before) and we respectfully request that ET share this information with the community, and include it within the SCWP. <p>This update should go beyond the “conservative estimate,” as quoted by Matt Gordon, that was provided to residents in</p>	<p>As stated in SPLP’s response to the Department’s Notice of Violation (3/5/25), on February 2, 2025, within 48 hours of the initial notification made to the National Response Center (“NRC”), SPLP revised the release volume to an estimated 156 barrels, based on the observed leak rate once the soil surrounding the pipeline was removed. SPLP has continued to collect and evaluate data since that time and has not identified any information that would warrant revising the estimated release volume.</p> <p>More importantly, SPLP notes that the current focus is on characterizing, delineating, and remediating the impacts caused by that release to meet PADEP’s unrestricted residential Statewide Health Standard Medium Specific Concentrations (“SHS MSCs”). Demonstrating that the</p>

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	<p>February 2025 of 156 barrels (6,552 gallons). At the time, ET noted that this was merely an estimate created within 48 hours of the leak’s discovery and that the actual amount of product lost needed to be analyzed. Yet for the last 7 months this number has not been publicly amended. With the 7 months of data ET has collected, we think a detailed, in-depth announcement of how much fuel ET now estimates that was lost is more than warranted and important to a proper full site characterization work plan.</p>	<p>impacts have been characterized, delineated, and remediated to meet the SHS MSCs is the end goal, and the estimated amount of product released is not a determining factor as to whether the end goal has been met.</p>
Mt. Eyre Task Force	<p>2. An updated, detailed map of the known current contamination highlighting what properties are known to be contaminated both currently and historically, including residences that have J values of VOCs or any VOCs in the Upper Makefield area that also includes Lead even if contamination was measured below a health standard.</p> <ul style="list-style-type: none"> ○ Residents closely monitor the DEP Summary progress report that is posted on Upper Makefield Township’s site and it is requested that the map of the contaminations listed in section 1.e.ii of this document be plotted out and overlaid on a map of the residential neighborhood to clearly delineate the known extent of contamination (using the most up-to-date data), which we believe can only serve to better inform the remediation process. 	<p>As noted in the Comment-Response Document for the comments received on SPLP’s original submittal of the Site Characterization Work Plan, unredacted maps and figures were provided to PADEP so that it can conduct a fulsome and thorough review of SPLP’s submittals. However, it is not appropriate to disclose information about the condition of private property publicly, and SPLP and PADEP typically do not, and should not, do so.</p>
Mt. Eyre Task Force	<p>3. An update/report on how much jet fuel has been recovered via the remediation process and from what exact locations to better inform the remediation process.</p> <ul style="list-style-type: none"> ○ The community believes that it has a right to know which properties have been recovering fuel and which wells have also been sources of recovery. This 	<p>SPLP refers to its response to item 2 above. SPLP is conducting a thorough investigation and remediation of the impacts of the release under PADEP’s oversight and in compliance with PADEP’s directives and requests. SPLP also notes that it has been providing information about the amount of product recovered at each specific location as part</p>

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	includes, but should not be limited to, monitoring wells, residential wells, and recovery from the soil. We should have full transparency regarding the amounts recovered and methods utilized so the community can understand and better trust that ET is delivering on their promise to make a good faith effort to clean up their disaster.	of its daily reports to PADEP, and is also providing that information to the Township on a weekly basis. A summary of SPLP’s product recovery efforts will be included in the Interim Site Characterization Report that will be made available by SPLP on or before September 2, 2025.
Mt. Eyre Task Force	<p>4. Likewise, we believe that the SCWP should consider all water supply well sample results with observed contamination, regardless of whether they exceed the Statewide Health Standard (“SHS”), to inform the Groundwater Characterization. [Site Characterization Work Plan Section 3.4]</p> <ul style="list-style-type: none"> ○ The SHS Medium-Specific Concentrations (“MSCs”) are informed by toxicology. Limiting groundwater characterization based on MSCs may ignore key data from recently identified contamination below the SHS threshold. This recent data may (and likely will) inform both the plume estimate and monitoring well strategy. 	The Site Characterization Work Plan was developed, and the placement of recovery and monitoring wells were selected, using all of the available sample results, and was therefore not limited to wells with results above the SHSs. As stated in the Site Characterization Work Plan, these wells are the initial steps in an iterative remedial process and future data will inform each of the next steps in that process.
Mt. Eyre Task Force	<p>5. A clear map with the exact coordinates of all potential recovery and monitoring well locations that are being proposed (including their depth) along with their exact geographic placement (not redacted) should be included as part of the SCWP.</p> <ul style="list-style-type: none"> ○ In the Community’s opinion, there has been little explanation from ET as to why the recently proposed well locations have been chosen, and it appears that some of those locations may indeed be relocated. Likewise, in our opinion, there has also not been any concrete explanation as to why the depths of these 	SPLP refers to its response to item 2 above. The location of all four (4) recovery wells, and the location of the then-proposed monitoring wells, was provided in Figure 10 of the Site Characterization Work Plan, which <u>was not redacted</u> in the 6/27/25 revised version of the document. After submission of the revised Site Characterization Work Plan, the final location of some of the monitoring wells were later adjusted based on conditions encountered in the field, including to incorporate further geological data and access considerations. To date, sixteen (16) monitoring wells have been installed, and the location of these wells is provided on

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	<p>proposed wells are so shallow, which is of extreme concern to the community, because we believe that much of the jet fuel recovered to date has come from wells that are several times deeper than the ones that are currently being proposed and have recently been installed.</p> <ul style="list-style-type: none"> ○ As such, it appears that the recently proposed well locations and depths have been chosen using some unidentified methodology. If they’ve been selected for very specific reasons, ET should share that rationale with the community as well as the names of the scientists and hydrogeologists who are making these decisions so that we may better understand the rationale and the decision-making process. Without this information, and the data points above, the community remains in the dark about what is happening in connection with the proposed monitoring plan. 	<p>a map that was displayed at the July 30th public meeting, and is also available on SPLP’s dedicated incident response website, here: https://uppermakefield.incidentupdates.com/wp-content/uploads/sites/2/2025/08/ET_Upper-Makefield-Zoom-Presentation_7.31.25-FINAL.pdf.</p> <p>Additional monitoring wells are in the process of being planned, and the locations of these wells will be informed based on the available data and the final locations will be provided once selected and installed. As noted in Section 3.4 of the Site Characterization Work Plan, the criteria utilized in selecting the proposed location for each recovery or monitoring well is based on the locations of identified light non-aqueous phase liquid (“LNAPL”) and dissolved-phase contamination along with the distribution of fracture traces identified by the electric resistivity imaging (“ERI”) and seismic surveys. As noted above, the final locations of the recovery or monitoring wells may be adjusted slightly in the field as needed based on the conditions observed in the field.</p>
Mt. Eyre Task Force	<p>6. Explanation of LNAPL observed on Spencer Road that “did not appear to be jet fuel based on the visual appearance and odor.” [Site Characterization Work Plan Section 2.6 Extent of Separate Phase Liquid].</p> <ul style="list-style-type: none"> ○ The SCWP should be amended to note, aside from visual appearance and odor, whether any analysis was performed to identify the petroleum product. And if so, what was the result? ○ The SCWP should be further amended to answer whether (or not) the identified LNAPL is consistent 	<p>The small volume of LNAPL only appeared on a single day at this location, was removed, and did not reappear. Accordingly, no analysis of this LNAPL was performed. The potable well where this LNAPL was removed has been continuously monitored, initially on a daily basis (6 days per week), and as of July 14, 2025, on a weekly basis – and LNAPL has not reappeared. Accordingly, because the LNAPL observed on a single day was removed and did not reappear, no additional characterization of this material or determination of its source is warranted or possible.</p>

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		with any other fuel that has been transported through the Twin Oaks pipeline in the last 10 years.	
Mt. Eyre Task Force	7. We request that any status and/or results of the “remaining planned geophysical work,” scheduled to be completed “by RETTEW of Lancaster, Pennsylvania, by early July (weather permitting)” be made publicly available, and to what extent the information may be incorporated into the site characterization work being conducted [Site Characterization Work Plan Section 3.2 Additional Surficial Geophysical Investigations].		The planned geophysical work referenced in the comment was proposed in the Site Characterization Work Plan and has now been completed. The results from those characterization activities will be included in the Interim Site Characterization Report that is being prepared and will be made available by SPLP by September 2, 2025. The results of the geophysical work on private properties have also already been provided to the individual homeowners, and a summary of this work was included in the presentation made at the July 30 th public meeting, included in the link provided in response to item 5 above. As stated in the Site Characterization Work Plan, this geophysical data was used to inform the final locations selected for the monitoring wells.
Mt. Eyre Task Force	8. Until the items above are reconciled and it is known how much jet fuel was leaked and where (and until our groundwater is completely restored to pre-discharge conditions), it is requested that ET continue to provide POET system maintenance (regardless of the company who may service the system), air quality testing and sub slab testing for all residents, greater exploration into septic system concerns, and continued and transparent water testing of all VOCs, including Lead on a monthly (not bi-monthly) cadence.		SPLP refers to its response to item 1 above, and notes that nearly identical relief is being sought by members of the “Mt. Eyre Task Force” in litigation commenced by Berger Montague that is currently pending in the Philadelphia Court of Common Pleas, Dkt. No. 250303655. SPLP also notes that it continues to perform water sampling and POET system maintenance in accordance with its revised Potable Water Sampling and Analysis Plan (v. 1.4 dated 7/24/25), and that the POET system maintenance is being performed by at no cost to the residents by SPLP’s designated vendor, Suburban Water Technology, Inc. Results of each water sampling event are provided directly to each resident and are also reported to PADEP on a daily

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		<p>basis, with copies of lab reports provided to PADEP each week.</p> <p>To date, SPLP has performed indoor air sampling at six properties, has performed sub-slab soil gas sampling at those same six properties, and performed sub-slab soil gas and at ten additional properties (with sub-slab soil gas sampling at four more properties planned). SPLP notes that this is an iterative process and that it is continuing to evaluate potential vapor intrusion for individual properties within the area of impact pursuant to the applicable Act 2 requirements and guidance.</p> <p>With respect to septic system concerns, SPLP refers to its 6/27/25 response to PADEP’s deficiency letter on the original version of the Site Characterization Work Plan, which specifically responded to and addressed those concerns.</p>
Mt. Eyre Task Force	<p>In addition to the modification of requests to the Site Characterization Work plan from 6/27/25 noted above, the Task Force is once again requesting in-person public meetings as soon as possible. The Tele-Town Halls and Zooms run by Energy Transfer are not a satisfactory format, as they do not allow residents to ask questions in their entirety or to ask follow-up questions.</p> <p>Given that we believe that ET may monitor, screen, and modify the questions being submitted by the residents on the phone, there must be additional opportunities provided to residents to address their concerns in real time. This is the only way for residents to ensure that ET is acting with</p>	<p>SPLP notes that it continues to host a mix of in-person and virtual meetings in accordance with its PADEP-approved Public Involvement Plan. SPLP does not screen or modify any of the questions submitted for those meetings except as needed to remove abusive questions, to protect private information, and in light of the pending litigation.</p>

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		<p>urgency, transparency, and in the best interests of the community as they work to clean up this evolving environmental catastrophe.</p> <p>Thank you for taking these requests into consideration.</p>	
2.	Patricia Haneman	<p>What is the basis for drilling the Energy Transfer Recovery wells at only 75 feet depth, when homeowner wells in the community and the homeowner well that is recovering fuel, are significantly deeper than 75 feet? Why is Energy Transfer not drilling deeper to improve the probability of recovering the fuel from the leak?</p>	<p>The depth for each of the four (4) recovery wells installed to date was selected based on the information and data gathered from downhole investigations performed at the recovery wells and water supply wells, including ultraviolet light fluorescence evaluations for the presence of LNAPL.</p> <p>SPLP acknowledges that product has been observed at approximately 150 feet deep in a single residential potable well, however, those observations of deeper product appear to be an isolated condition related to how that specific well was constructed. More specifically, the ultraviolet light fluorescence evaluations in that location did not detect the presence of LNAPL-bearing geologic features below 41 feet, and the LNAPL that was detected below 41 feet appears to be the result of LNAPL moving within that well’s borehole (and not in the bedrock fractures and groundwater surrounding the well) to those deeper depths.</p>
	Patricia Haneman	<p>As a resident of the initially identified area of spill impact, we were told that we would be contacted once a month for water testing. We have not been contacted in the past month for testing. What has changed? Change in the designated impacted area? Change in need for frequency? Improved characterization of the movement of the plume that no longer puts our location at risk? Please communicate with the residents so that we understand our individual status.</p>	<p>SPLP is now performing potable water testing in accordance with its revised Potable Water Sampling and Analysis Plan (v. 1.4 dated 7/24/25) that was submitted to PADEP. Pursuant to Tables 4 and 5 in that Plan, the sampling frequency for each well depends on whether the property has a POET system and the historic sampling results for that residence. A copy of the Plan is available on SPLP’s dedicated incident response website:</p>

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			(https://uppermakefield.incidentupdates.com/). Scheduling for periodic sampling is coordinated directly with each landowner.
3.	David Dotson	<p>Here are some questions that I have after reviewing the above:</p> <p>The report indicates that the purpose of the plan is to determine the nature, extent, direction, rate of movement, volume and composition of the spill.</p> <p>1. What additional tasks will be taken to determine the volume overall and in particular the volume of petroleum products that migrated downward into the unconfined water table at a depth of 25 to 30 feet under the spill site?</p> <p>2. The report states that based on the observed leak rate, the amount leaked is 156 barrels. We would like to receive more information about how that was determined. Can you provide the leak rate and timeframe applied to determine this amount.</p>	<p>As noted above, within 48 hours of the initial notification made to the NRC, SPLP revised the release volume to an estimated 156 barrels, based on the observed leak rate once the soil surrounding the pipeline was removed. SPLP has continued to collect and evaluate data since that time and has not identified any information that would warrant revising the estimated release volume.</p> <p>Further, and as is also noted above, the current focus of SPLP’s remedial efforts is on characterizing, delineating, and remediating the impacts caused by that release to meet PADEP’s unrestricted residential SHS MSCs. Demonstrating that the impacts have been characterized, delineated and remediated to meet the SHS MSCs is the end goal, and determining the amount of released product that migrated to the aquifer is not a determining factor as to whether the end goal has been met.</p>
	David Dotson	3. What aspect of the plan is designed to determine the rate of movement?	Determination of the rate of movement of groundwater contamination is part of the fate-and-transport analysis that will be performed using the geotechnical data obtained through the site characterization activities specified in the Site Characterization Work Plan. The fate-and-transport analysis will be provided in future submittals to PADEP.
	David Dotson	4. What aspect of the plan will determine the specific composition of the spill?	The Act 2 Notice of Intent to Remediate identified the products of concern as jet fuel and unleaded gasoline. As noted above, the current focus of SPLP’s remedial efforts is

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		on characterizing, delineating, and remediating the impacts caused by that release to meet PADEP’s unrestricted residential SHS MSCs for the relevant constituents in these products.
David Dotson	What is “Separate-Phase Liquid”?	Separate phase liquid is a liquid that is immiscible meaning that it cannot mix with another liquid without separating from it (e.g., petroleum products that float on top of water like LNAPL).
David Dotson	The report states that there is no evidence of residual petroleum in the soil at the Release Location. What tests have been done post-excavation to determine that? E.g., what specific evidence was examined to support this conclusion?	As stated in Section 2.8 of the Site Characterization Work Plan, the only potential residual petroleum products remaining in soils at the release location are potential low-level concentrations at the base of the interim remedial excavation in weathered bedrock, per the post-excavation samples that were collected. The results of the post-excavation samples were presented in the Interim Remedial Action Plan that was submitted on March 19, 2025 (rev. 4/16/25). Additional soil borings were performed on June 17, 2025, per Section 3.3 of the Site Characterization Work Plan, to confirm this conclusion, and the results of those borings will be provided in the Interim Site Characterization Report.
David Dotson	The report states that one well contained LNAPL that did not appear to be jet fuel based on visual observation and smell. Was that sample also tested to support this conclusion?	As noted above, the small volume of LNAPL only appeared on a single day in this location, was removed, and did not reappear. Accordingly, no analysis of this LNAPL was performed. The potable well where this LNAPL was removed has been continuously monitored, initially on a daily basis (6 days per week), and as of July 14, 2025, on a weekly basis – and LNAPL has not reappeared.

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	David Dotson	Does Figure 6 and Figure 10 show the same fractures lines conclusions?	SPLP is not sure what is meant by the word “conclusions,” but the same inferred fracture traces were depicted on Figures 6 and 10 in the Site Characterization Work Plan.
	David Dotson	What information will be provided to landowners to allow them to understand the data and information on the redacted figures that is applicable to their properties?	As noted above, the figures have been redacted in the publicly available documents to protect information about individual private properties. It is important to note that the results have been provided directly to each of the individual homeowners by SPLP.
4.	Andrea Moise	<p>Hi!</p> <p>In response to the email from June 11, 2025 "Revised Site Characterization Work Plan Open for Public Comment through July 30", please find my comments below</p> <p>1. Section 2.2 Estimated Volume of Release has the following sentence (emphasis added) "Based on the observed leak rate, Sunoco Pipeline estimates that the volume of the released petroleum product to be 156 barrels (6,552 gallons). "</p> <p>How was the leak observed? Was the pipeline operating when the sleeve A repair site was dug out? What was the rate of the leak?</p>	<p>SPLP used a variety of techniques to investigate the suspected leak, which was ultimately confirmed by visual observation on January 31, 2025. The pipeline was not operating at that time, and the area of the leak had been dug out to make the visual confirmation. Additional information about these activities is provided at: https://uppermakefield.incidentupdates.com/background/.</p>
	Andrea Moise	2. Section 3.4.1 Monitoring Well Installation: The current recovery wells are not retrieving significant amounts of fuel. The planned monitoring wells will not exceed a depth of 75 feet. Will deeper wells ever be considered to improve site characterization? While the theory about bedrock fractures is interesting, the reality remains that deeper wells are contaminated.	As noted above, the depth for each of the four (4) recovery wells installed to date was selected based on the information and data gathered from downhole investigations performed at the recovery wells and water supply wells, including ultraviolet light fluorescence evaluations for the presence of LNAPL. These recovery wells are collectively recovering product.

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		<p>To date, SPLP has also installed sixteen (16) monitoring wells at both shallow and deeper intervals. The 75-foot maximum depth of the deeper monitoring wells is consistent with the information and data gathered from downhole investigations performed at the recovery wells and water supply wells, including ultraviolet light fluorescence evaluations for the presence of LNAPL, as noted above. Deeper monitoring wells may be installed in the future as part of the iterative site characterization process if new data is collected which suggests that dissolved phase concentrations exist at deeper depths.</p> <p>As noted above, SPLP acknowledges that product has been observed at approximately 150 feet deep in a single residential potable well, however, those observations of deeper product appear to be an isolated condition related to how that specific well was constructed. More specifically, the ultraviolet light fluorescence evaluations in that location did not detect the presence of LNAPL-bearing geologic features below 41 feet, and the LNAPL that was detected below 41 feet appears to be the result of LNAPL moving within that well’s borehole (and not in the bedrock fractures and groundwater surrounding the well) to those deeper depths.</p>
Andrea Moise	<p>3. Section 3.4.1 Monitoring Well Installation has a section about monitoring nearby wells during drilling activities: "Monitoring of nearby water supply wells will be conducted during monitoring well drilling activities using procedures similar to those used during recovery well installation activities. The water supply well monitoring procedures will be included in the SOPs for the monitoring well</p>	<p>SPLP is confused by and does not understand the comment/question. As noted in the quoted language, during the installation of monitoring wells, SPLP does actively observe and monitor potable wells at adjacent properties using procedures similar to those described in Section 2.5 of the Recovery Well Installation Work Plan dated April 22, 2025 (rev. May 6, 2025). The Recovery Well Installation Work</p>

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		<p>installation." The document does not describe the procedures followed during the recovery well installation. What are the procedures? A monitoring well was recently installed near my home, and water levels were recorded regularly - showing a decreasing trend. However, it is unclear what these water levels are intended to demonstrate. There was no basis for comparison, as water levels were not measured over the same time period on a different day.</p>	<p>Plan was provided to PADEP and to Upper Makefield Township and is available on both of those entities websites.</p>
5.	Upper Makefield Township	<p>The Upper Makefield Township Board of Supervisors ("UMT BOS"), provides the following comments on the June 27, 2025, Revised Site Characterization Work Plan ("Work Plan"), prepared by Verdantas LLC ("Verdantas"), for the Sunoco Pipeline, LP ("SPLP") Twin Oaks - Newark 14"-diameter pipeline release response.</p> <p>These comments also consider the July 9, 2025 correspondence from the Pennsylvania Department of Environmental Protection ("DEP") to Energy Transfer, in which DEP responds to the lack of progress on vapor intrusion investigations at homes and the installation of monitoring wells in the area of known groundwater contamination, and provides notice to Energy Transfer that the work must be completed before the Interim Site Characterization Report is submitted on or before September 2, 2025.</p> <p>Acknowledging the iterative nature of the site characterization and interim remediation processes, the UMT BOS reserves the right to provide additional comments, as data from site characterization and interim redial activities becomes available, including the Failure History Evaluation and other deliverables required by the</p>	<p>SPLP appreciates Upper Makefield Township's comment and its shared desire to complete the remedial activities as expeditiously as possible. SPLP has not sought any extensions of the requested deadlines suggested by PADEP's July 9, 2025, correspondence and, in fact, has completed all of the tasks outlined therein.</p>

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	<p>May 2, 2025 Administrative Order, issued by the United States Pipeline and Hazardous Materials Safety Administration ("PHMSA"), relative to the release, operation and maintenance of the pipeline and the integrity of the pipeline.</p> <p>So as not to be perceived as presenting impediments to SPLP to complete site characterization in the most expeditious manner, the UMT BOS requests that DEP approve the June 27, 2025, Revised Work Plan and requests that the content of the comments provided herein be addressed in the Interim Site Characterization Report. Specifically, the UMT BOS objects to any requested extension of time to submit reports required under DEP's July 9, 2025, correspondence.</p>	
Upper Makefield Township	<p><u>Release Mechanism</u></p> <p>On March 6, 2025, DEP issued an Order, documenting complaints of petroleum odors in residential well water in the Mt. Eyre neighborhood dating back to as early as September 26, 2023 and PHMSA advises that the pipeline was leaking for at least 16 months before the leak was confirmed on January 31, 2025.</p> <p>The Work Plan states that based on the observed leak rate, SPLP estimates the volume of the released petroleum product to be 156 barrels (6,552 gallons).</p> <p>In the six months since the leak was confirmed, the UMT BOS, the community and elected officials have repeatedly requested that Energy Transfer provide calculations,</p>	<p>At the outset, SPLP respectfully disagrees with the assertion that the pipeline “was leaking for at least 16 months before the leak was confirmed on January 31, 2025.”</p> <p>As noted above, the current focus of SPLP’s remedial efforts is on characterizing, delineating, and remediating the impacts caused by that release to meet PADEP’s unrestricted residential SHS MSCs. Demonstrating that the impacts have been characterized, delineated, and remediated to meet the SHS MSCs is the end goal, and the estimated amount of product released is not a determining factor as to whether the end goal has been met.</p>

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	<p>monitoring records, and any other data supporting SPLP's estimate of the release. To date, that information has not been provided.</p> <p>The magnitude and duration of the release are fundamental elements of determining the extent of contamination, evaluating potential pathways of contaminant migration and for formulating meaningful site characterization and remediation strategies.</p> <p>The UMT BOS requests that all calculations, monitoring records and other data supporting SPLP's estimate of the release be included in the Interim Site Characterization Report.</p>	
Upper Makefield Township	<p><u>Documentation of Results of Interim Remedial Actions</u></p> <p>Energy Transfer advises that product recovery through July 23, 2025, totals 937 gallons or approximately 14 percent of the total estimated release, with 644 gallons of this product being entrained in soil excavated near the release location and 293 gallons recovered from wells.</p> <p>The recovery efforts in wells have been limited to skimming and bailing systems and the use of absorbent pads. While not discussed in the Work Plan, the UMT BOS understands that SPLP is now considering a Total Fluid Recovery system to enhance product recovery.</p> <p>The UMT BOS requests that the Interim Site Characterization Report include a discussion of all interim remedial actions, including product recovery amounts from all environmental media and detailed design drawings and</p>	<p>While this comment is not related to the content of the Site Characterization Work Plan, SPLP notes that it provides information on the product recovery to PADEP on a daily basis, and also in the weekly updates that it provides directly to Upper Makefield Township. SPLP also notes that the Interim Site Characterization Report will include a discussion of the interim remedial actions completed, including the product recovery amounts from the various environmental media, and a description of further planned remedial measures. The requested detailed specifications for those planned remedial measures will be provided in the Remedial Action Plan that will be submitted in accordance with Paragraph 2.b.iii of the Order.</p>

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		specifications for the Total Fluid Recovery system, including any components of the system that may need to be located on Township property or within roadways.	
	Upper Makefield Township	<p><u>Soil Impacts</u></p> <p>The Work Plan presents three propositions to support SPLP's contention that widespread soil impacts are not present along the pipeline.</p> <p>The UMT BOS requests that the results of recently completed In-Line Inspection ("ILI") data, and other elements of the Failure History Evaluation, be included in the Interim Site Characterization Report to evaluate SPLP's contentions within the context of the CSM.</p>	<p>SPLP notes that the in-line-inspection ("ILI") tool run data and Failure History Evaluation that is being developed in accordance with the PHMSA Consent Order and Agreement is not relevant to characterizing, delineating, and remediating the impacts caused by the release to meet PADEP's unrestricted residential SHS MSCs in compliance with Act 2. This data and information is not part of the Act 2 process, or otherwise subject to oversight by PADEP or Upper Makefield Township, but rather is subject to the direct oversight of PHMSA.</p> <p>Moreover, as previously communicated to Upper Makefield Township by letter dated August 8, 2025, SPLP will not provide ILI data to the Township, as the data is confidential security information of a pipeline asset that is protected from disclosure under the Public Utility Confidential Security Information Disclosure Protection Act (35 P.S. §§ 2141.1 to 2141.6) and related regulations (52 Pa. Code §§ 102.1-102.4). The disclosure of confidential security information – including the ILI data Upper Makefield Township has repeatedly requested – subjects an individual, including a public official or public employee, who acquires and discloses that information to a misdemeanor of the second degree, which can include fines, imprisonment, and removal from office or agency employment. 35 P.S. § 2141.6. The ILI data has been provided to PHMSA – the agency that regulates the Pipeline – and is the only entity to which SPLP will provide the ILI data.</p>

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	Upper Makefield Township	<p><u>Bedrock Geology</u></p> <p>The project area is underlain by the Lockatong Formation of Triassic age. The Lockatong Formation has been the subject of extensive geologic research and investigations by the United States Geological Survey ("USGS") and others, and this information is accessible in published scientific literature. As such, the one paragraph description of the Lockatong formation presented in the Work Plan is inadequate.</p> <p>The Interim Site Characterization Report should include an expanded discussion of bedrock geology, including regional and local bedrock structure, based on a comprehensive scientific literature search, and the results of surface geophysical surveys, drilling logs, borehole geophysical logging, and packer testing performed on recovery and site characterization wells.</p>	<p>The Interim Site Characterization Report will include an expanded discussion of bedrock geology including information obtained from field activities.</p>
	Upper Makefield Township	<p><u>Hydraulic Influence of Domestic Well Pumping</u></p> <p>The Mt. Eyre neighborhood is comprised of 180 dwellings. Domestic water supply is provided by on-lot wells. The Work Plan states that the reported well depths range from 100-700 feet below ground level.</p> <p>The USGS estimates that each American uses an average of 82 gallons of water per day. Assuming each dwelling in the Mt. Eyre neighborhood is occupied by three people, the combined groundwater withdrawal from the domestic wells in the neighborhood is estimated to be 44,280 gallons per day.</p>	<p>The hydraulic effects from pumping individual residential potable supply wells will be considered in developing the remedial strategy, but the purpose of the Interim Site Characterization Plan required under the Order is to describe the activities that have been conducted to date to characterize the release, and it would be premature to include a discussion of the remedial activities and strategies proposed to address the release in that plan. Finally, SPLP refers to its response below regarding the use of continuous water level monitoring.</p>

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	<p>While the Work Plan acknowledges that the pumping of domestic wells creates "dynamic hydraulic gradients" in the water-bearing bedrock fractures which are the predominant pathways for groundwater movement, the target depths of recovery wells and site characterization wells have been limited to 75 feet below ground surface, despite evidence that contamination has migrated deeper.</p> <p>Basic information about neighborhood domestic wells such as total depth, casing depth, pump settings and the distribution of water producing zones is limited, despite being easily attainable by removing the submersible pumps in the wells and performing a downhole television survey and a rudimentary suite of borehole geophysical logs, and more sophisticated borehole geophysical logs and straddle packer testing are readily available for evaluation of residential wells that have confirmed LNAPL impacts.</p> <p>In this fractured bedrock setting, installation of continuously recording water level monitoring devices in wells that have confirmed impact is indicated to determine water level fluctuations in response to daily domestic water use. This technology is also appropriate for installation in site characterization wells to evaluate the areal, vertical, and directional hydraulic influence of domestic well pumping in the neighborhood.</p> <p>The Interim Site Characterization Report should discuss how the hydraulic effects from pumping neighborhood supply wells will be considered in the remedial strategy.</p>	
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Upper Makefield Township	<p><u>Proposed Site Characterization Tasks</u></p> <p>The Work Plan advises that the site characterization is an iterative process with the results of each characterization activity being used to determine future activities, with changes to planned activities and the performance of additional activities expected, with changes being communicated to DEP in 90-day updates or other communication.</p> <p>The proposed 90-day schedule for updates as presented in the Work Plan is impracticable.</p> <p>Given that the site characterization will be performed in a high consequence residential neighborhood, notifications of changes to any planned activities should be made within 24 hours of SPLP's decision, to the Township Manager, by electronic mail, and allowing for 48 hours for the Township to respond to SPLP with questions or concerns and to provide notification to stakeholders, prior to the changes being implemented by SPLP.</p>	<p>SPLP provides the 90-day updates pursuant to paragraph 2.b.v of the Order. SPLP notes that it already notifies its email distribution list, PADEP and Upper Makefield Township at least <u>one week</u> in advance of any intrusive site characterization activities pursuant to its Public Involvement Plan. SPLP also notes that it meets with the Township weekly to provide updates on the status of its field activities.</p>
Upper Makefield Township	<p><u>Standard Operating Procedures</u></p> <p>As is standard industry practice, standard operating procedures should be included in the Work Plan and provided in the appendices of the Interim Site Characterization Report.</p>	<p>SPLP acknowledges the comment and will take it into account in preparing the Interim Site Characterization Report.</p>

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Upper Makefield Township	<p><u>Compile Available Property Information</u></p> <p>As discussed in a previous comment, because of the presence of contamination in deep domestic water supply wells, and the influence of domestic well pumping, the CSM should not be limited to the evaluation of shallow groundwater flow.</p>	<p>SPLP acknowledges the comment and will take it into account in preparing the Interim Site Characterization Report.</p>
Upper Makefield Township	<p><u>Soil Characterization</u></p> <p>Preliminary interpretations and conclusions relative to the horizontal and vertical extent of petroleum impacts in the release area or along the pipeline are inappropriate for inclusion in this Work Plan and premature, pending the results of the recently completed In-Line Inspection ("ILI") data, Failure History Evaluation, and other elements of the PHMSA order.</p> <p>Subjective phrases such as "relatively low concentrations" are also inappropriate for inclusion in this Work Plan. In the alternative, analyte concentrations should be compared to the relevant standard for the sampled media.</p>	<p>Please refer to the discussion above regarding the Township's comments on the ILI data and Failure History Evaluation.</p> <p>SPLP acknowledges the comment on the use of subjective phrases and will take it into account in preparing the Interim Site Characterization Report.</p>
Upper Makefield Township	<p><u>Groundwater Characterization</u></p> <p>The Work Plan states that the planned location of monitoring wells is based on the location of LNAPL and dissolved -phase concentrations greater than SHS MSCs and the distribution of fracture traces identified by ERI surveys. The results of hydrogeologic investigations performed by the USGS and others suggest that the northeast orientation of bedrock strike within the Lockatong Formation should also be considered in the placement of monitoring wells.</p>	<p>SPLP does not understand the premise of this comment but notes that it weighs all available relevant information in selecting the proposed locations for monitoring wells.</p>

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Upper Makefield Township	<p><u>Monitoring Well Installation</u></p> <p>As discussed in a previous comment, the presence of contamination in deep domestic wells in the neighborhood indicates the need for site characterization wells deeper than 75 feet.</p> <p>The Township is on record with both SPLP and DEP as not concurring with the practice of using periodic manual water level measurements in domestic supply wells to monitor for hydraulic impacts associated with well drilling. Continuous water level monitoring devices appropriate for this application are commonly used by groundwater professionals worldwide and are readily available for purchase or rental.</p>	<p>As noted above, SPLP acknowledges that product has been observed at approximately 150 feet deep in a single residential potable well, however, those observations of deeper product appear to be an isolated condition related to how that specific well was constructed. More specifically, the ultraviolet light fluorescence evaluations in that location did not detect the presence of LNAPL-bearing geologic features below 41 feet, and the LNAPL that was detected below 41 feet appears to be the result of LNAPL moving within that well’s borehole (and not in the bedrock fractures and groundwater surrounding the well) to those deeper depths. Deeper monitoring wells may be installed in the future as part of the iterative site characterization process if new data is collected which suggests that dissolved phase concentrations exist at deeper depths.</p> <p>SPLP will continue to evaluate the need for continuous monitoring of domestic supply wells as its site characterization activities progress.</p>
Upper Makefield Township	<p><u>Evaluation of Potential Vapor Evaluation Pathways</u></p> <p>The UMT BOS agrees with DEP regarding the importance of conducting vapor intrusion investigations at residences in the Mt. Eyre neighborhood and requests that DEP enforce the deadlines for the performance of these investigations as presented in DEP's the July 9, 2025, correspondence with Energy Transfer.</p>	<p>As noted above, SPLP is continuing to evaluate potential vapor intrusion for individual properties within the area of impact pursuant to the applicable Act 2 requirements and guidance, and that it is an iterative process. Also as noted above, SPLP has not sought any extensions to the requested deadlines suggested in PADEP’s July 9, 2025, correspondence, and in fact, has completed all of the tasks outlined therein.</p>
Upper Makefield Township	<p><u>Interim Characterization Report</u></p>	<p>An electronic copy of the Interim Site Characterization Report, inclusive of all figures, tables, exhibits, maps, and calculations will be provided to the Township on or before</p>

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		The UMT BOS requests that an electronic copy of the Interim Site Characterization Report, inclusive of all figures, tables, exhibits, maps, and calculations be provided to the Township Manager on or before September 2, 2025.	September 2, 2025. However, as noted above, certain attachments to that copy may be redacted to protect information about individual private properties.
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