The Chemours Company
Pompton Lakes Works
2000 Cannonball Road
Pompton Lakes, NJ 07442

March 11, 2016

Mr. Perry Katz
USEPA REGION 2
290 Broadway
Mail Code: 19th Floor
New York, NY 10007-1866

RE: Response to EPA Comments
September 2015 Draft Corrective Measures Implementation Work Plan
Pompton Lake Study Area
Pompton Lakes Works Site
Pompton Lakes, New Jersey

Dear Mr. Katz:

In accordance with Module III.D.1 of the Final Permit Modification I to the Hazardous and Solid Waste Amendments of 1984 (HSWA) permit for the Pompton Lakes Works Site, a Corrective Measures Implementation Work Plan (CMI WP) was submitted on September 18, 2015 (within 90 days of the permit modification effective date).

On February 25, 2016, the U.S. Environmental Protection Agency (USEPA) transmitted comments on the CMI WP via electronic mail to The Chemours Company FC, LLC (Chemours).

Attached are the responses to USEPA's comments. In an effort to keep the project moving forward, these responses are being used to revise the work plan for submittal by March 26, 2016. This date is pursuant to the RCRA HSWA Permit Modified Compliance Schedule (Section B) dated May 4, 2010; requiring a resubmittal no later than 30 days from receipt of written comments.

If you have any questions, please contact me at (973) 492-7733.

Sincerely,

David E. Epps, P.G.
Project Director, Pompton Lakes Works
Corporate Remediation Group

cc: Anthony Cinque, NJDEP
PLW Project File

Response to Comments
Corrective Measures Implementation Work Plan

Section 1.0 – Introduction

1. Page 1, Paragraph 2 – Reference the two technical memoranda dated October 2014 that were utilized in the preparation of the permit modification. Those documents are: 1) *Technical Support for the Additional Sediment Removal Areas, Pompton Lake Corrective Action Implementation, Pompton Lakes, New Jersey Technical Memorandum (URS, October 2014a)* and 2) *Technical Support for Acid Brook Delta Upland Soil Areas Corrective Implementation, Pompton Lakes, New Jersey Technical Memorandum (URS October 2014b)*.

Response: References to the two October 2014 technical memoranda (URS, October 2014a and 2014b) will be added to paragraph 2 on page 1.

2. Page 5, "Installation of a Containment System" – In sentence 1, indicate the investigation(s) were geotechnical. Clarify in sentence 2 that Section 2.5.1 indicates the types of investigation(s) performed as well as a summary of the results. In sentence 4, reference that the three-tiered approach is described in Section 2.5.1.

Response: References to the geotechnical investigation and Section 2.5.1 (along with a summary of results) will be added to page 5.

3. Page 6, "Processing and Treatment" – Reference the section that more fully describes the solidification that is anticipated to be performed.

Response: A reference to Section 2.6.2 will be added to page 6.

4. Page 6, "Restoration" – Clarify what is meant by "ecological services" in the second to the last sentence.

Response: The term "ecological services" (alternatively termed ecosystem services) refers to the functions and associated benefits provided by natural systems. As used within the CMI WP, it is suggested that the proposed restoration elements will provide conditions that could increase the capacity of the system to provide such services. This clarification will be added to page 6.

5. Page 6, "Material Disposal" – Add language to clarify that the off-site facility is licensed and permitted to accept the material subject to disposal.

Response: The sentence will be revised to reflect that material will be transported to a permitted facility licensed to receive the material for final disposition.

6. Page 7, top – Reference Appendix A as well as Section 2.7.

Response: The text will be revised to include "and Appendix A" at end of sentence.

Section 1.4 – Public Involvement Plan

7. Page 7, Paragraph 3 – Add the address of the Chemours Public Information Office.

Response: The building in which the Public Information Center is located is currently for sale. Pending the outcome of any final transaction, the center may have to re-locate to a different address. As such, providing the address for the office in this document would be confusing if the location were to change due to conditions beyond the control of Chemours.

The text will be revised to reflect that there is an Information Center located in Pompton Lakes and that detail on where it is located can be found on the project website.

Section 1.5 – Document Organization

8. Page 8 – Add reference to presence of Appendices, Figures, and Tables.

Response: A sentence regarding the tables, figures, and appendices will be added to the end of the Document Organization section on page 8.

Section 2.2 – Pre-Construction Activities

9. Page 11, last paragraph – Reference that the inventory to document the number, types, and locations of facilities (e.g. structures, pavement, benches) and other physical features (e.g. trees, fences) in the areas noted in this subsection will be listed as a task on the revised schedule as part of "Pre-construction Activities".

Response: Section 6.1 (Schedule) will be updated to reflect the anticipated pre-construction tasks being undertaken. The schedule for these activities, if not already initiated, will initiate after CMI WP approval from EPA and continue through mobilization.

A reference to Section 6.1 will be added to Section 2.2.

Section 2.3 – Preparation and Access

10. Page 11, "Security and Traffic Control" – Indicate whether there will be a security guard on-site and what their hours of service will be (e.g. 24 hours, just during working hours, etc.).

Response: Security for the site has been discussed with the property owners and will consist of an onsite resource designated during working hours to evaluate the fence integrity and observe the work area for the presence non-approved individuals. A security firm will provide coverage during non-working hours (e.g., weekends) from 7 am until 11 pm. This information will be added to page 11.

11. Page 11, “Security and Traffic Control” – Text should be developed and/or referenced that addresses security of the work area, security as it relates to proximity of work to Lakeside Middle School, evacuation procedures, etc. Specifically regarding the Lakeside Middle School, Chemours should indicate that there will be interface with school officials pre-construction and also describe in the text what the elements of the interface with the school are in the event of an emergency.

Response: As discussed and approved by the property owners, the work area will be surrounded by a fence, and the integrity of the fence will be checked daily by Sevenson's onsite personnel. Chemours has also already notified the school regarding the activities and fencing, and school personnel will monitor student activities during the day to keep students away from the work area/fence. Flagmen, truck directors, and other workers will be positioned at the gate, thereby eliminating the opportunity for non-work personnel to enter through the gate. There will also be no walking access on the side of the road where the gate is located. Chemours and their contractors have planned for security as it relates to the proximity to the Lakeside Middle School which includes the voluntary suspension of trucking during school opening and closing, establishment of new crossing areas, and maintaining a safe walking space along Lakeside Avenue. This information will be added to page 11.

The Contingency Plan (Appendix B) outlines evacuation procedures – this text will be updated to specifically identify that Chemours will interface with the school prior to construction to establish a primary point of contact for notification in the event of an emergency requiring site evacuation.

Please note that the school would be following their own established procedures in the event of an emergency.

12. Page 12, “Management of Existing Utilities” – Indicate in the revised schedule as part of “Pre-Construction Activities”, the Remedial Action Contractor will determine the location of utilities and coordinate with the owners of the utilities regarding relocation/termination of utilities. Also, indicate that other activities (e.g. One-call) involving utilities are required to be performed as part of mobilization.

Response: Consistent with the response to Comment #9, this task will be added to the anticipated list of pre-construction activities outlined in Section 6.1 (Schedule).

Please note that utilities in the work area are known and consist of those owned by the Municipal Utilities Authority. These utilities are not anticipated to be impacted as a result of remediation activities.

13. Page 12, “Erosion and Stormwater Control Measures” – Incorporate into the revised schedule under “Pre-Construction Activities” and briefly describe in the text that the storm sewer outfalls in the Upland Soil Removal Areas have to be managed and coordinated with the Municipal Utilities Authority.

Response: Consistent with the response to Comment #9, this task will be added to the anticipated list of pre-construction activities outlined in Section 6.1 (Schedule).

The text on page 12 will be revised to reflect that storm sewer outfalls will be managed through consultation with the Municipal Utilities Authority. However, please note that outfalls are not anticipated to be impacted as a result of remediation activities.

14. Page 13, “Access for Mobilization of Equipment”, Paragraph 2 – Verify that the two locations identified as access points for mobilization/demobilization are owned by the Borough of Pompton Lakes and the Board of Education and if so, indicate that access has been secured.

Response: Chemours confirms that the two locations identified as access points are owned by the Borough and Board of Education. Chemours has obtained access from these two entities.

As this is considered a pre-construction activity, consistent with the response to Comment #9, this task will be added to the list in Section 6.1 (Schedule).

15. Page 13, “Establishing Appropriate Material and Equipment Staging Areas” – Reference Drawings 2, 3 and 8 of Appendix A as to where the design/configuration for the upland material and equipment staging area can be found.

Response: A reference to Appendix A and specifically Drawings 2, 3, and 8 will be added to the third full paragraph on page 13 for details on upland materials and equipment staging area.

Section 2.4.1 – Acid Brook Flow, Sewers, Outfalls and Groundwater Management

16. Page 14, Paragraph 1 – Reference is made to Acid Brook in Figure 2-1. The location of Acid Brook is unclear. Please revise the text to more clearly identify Acid Brook.

Response: The first sentence under Section 2.4.1 will be modified as follows to explain where Acid Brook is located on the figure (inserts underlined and deleted text shown as strikethrough): “Acid Brook flows approximately north to south and enters through the Uplands under the Lakeside Avenue culvert and takes a slight northeastern jog before entering Acid Brook Delta, as shown on Figure 2-1~~, with~~. Acid Brook has an average base flow of approximately 0.71 cubic feet per second.”

17. Page 14, Paragraph 2 – Indicate that Area A1's area of excavation has been delineated and that it is approximately 1 cubic yard. Verify if additional delineation sampling will be performed.

Response: Area A1 was initially defined and shown on Figure 1-2 (just south of the Lakeside Avenue culvert) and was also included on Table 2-2. Additional sampling was performed in the vicinity of the sewer line in 2015. As a result of this sampling, Area A1 has been modified to include a total area approximately 190 square feet in size and a removal depth of 2.5 feet. Figures 1-2, 2-1, and 2-1A and Table 2-2 will be updated to reflect this change and the delineation data will be included in a new appendix to the CMI WP.

18. Page 14, Paragraph 2 – The coordination with the Pompton Lakes Municipal Utilities Authority described in the text should be included as a task in the "Pre-Construction Activities" portion of the revised schedule. Indicate that this coordination has been initiated.

Response: Consistent with the response to Comment #9, this task will be added to the anticipated list of pre-construction activities outlined in Section 6.1 (Schedule).

Chemours and its contractors have been, and will continue to be, in contact with the Municipal Utilities Authority to alert them of upcoming activities requiring coordination. This will also be added to paragraph 2 on page 14.

19. Page 14, Paragraph 2 – The text should be revised to reflect that the additional sampling and analysis to be performed to refine the extent of the removal area near the two sanitary sewers has been completed, that appropriate figures will be updated and that the analytical results will be provided as an appendix to the revised CMI WP.

Response: See response to Comment #17. The text will be edited to indicate that results will be provided in a new appendix and Figures 1-2, 2-1, and 2-1A and Table 2-2 will be updated with modified removal limits.

Section 2.4.2 – Uplands Work Area Isolation and Erosion Control Measures

20. Page 15, Paragraph 1 – Reference that the erosion control measures to be implemented in the Uplands work area as well as the rainfall diversion and surface water runoff measure will be pursuant to the requirements in the approved Soil Erosion and Sediment Control Plan (SESC).

Response: The first sentence will be revised to delete "as necessary" and add "in accordance with the approved SESCP". As with every project completed, Chemours and their contractors will always perform work in accordance with approved permits for this project (described in Section 3 of the CMI WP).

21. Page 15, Paragraph 3 – Indicate that the erosion and sediment control practices that will be performed throughout construction activities will be done in accordance with the "approved" SESCP.

Response: The first sentence will be revised to reflect that work will be performed in accordance with the approved SESCP.

22. Page 15, Paragraph 3 – Indicate the frequency of inspection of the erosion and sediment control measures will be pursuant to the approved SESC.

Response: The last sentence will be revised to reflect that inspections will be performed in accordance with the approved SESCP.

Section 2.4.4 – Uplands Soil Removal Process

23. Page 16, Paragraph 1 – The text states, "Removal (of sheet pile) will occur from land and then the areas will be backfilled. Following backfill placement, the sheeting will be removed." This does not make sense. Please provide clarification regarding the sequence of sheet pile removal and backfilling.

Response: It is assumed that this comment is referring to the text on page 16 of the Operations Plan (Appendix A) and not page 16 of the CMI WP text. Note that this text is specific to Areas E5, E6, and portions of Area F that are located outside the shallow water sheetpile barrier to be installed near Rotary Park. For these areas, three-sided sheeting will be installed to isolate each discrete removal area. Once the sheeting is in place, removal activities followed by backfilling will be performed from land. The sheeting will be removed following completion of backfilling. This will be clarified in the text.

24. Page 17, Paragraph 1 – The schedule should indicate when the horizontal limits of removal can be surveyed and staked in the field.

Response: "Surveying" will be added to the appropriate and existing line item under "Uplands Remediation" of the construction schedule included as Appendix C of the Operations Plan (Appendix A of CMI WP).

25. Page 17, Paragraph 3 – Indicate that the soil materials that will be removed will be characterized to comply with disposal facility requirements prior to off-site disposal.

Response: The last sentence will be revised to state more clearly that characterization for the purposes of acceptance at the disposal facility will be conducted as applicable and in coordination with the landfill's requirements.

26. Page 17, Paragraph 4 – What TCLP parameters were exceeded in Area B?

Response: One location exceeded the TCLP parameter for lead. This information is provided on Figure 2-1. The text will be revised to reflect this.

27. Page 17, Paragraph 4 – Cross reference Table 3-1, Item E in the Construction Quality Assurance Plan regarding the parameters that will be analyzed for post-treatment/pre-excavation to confirm the appropriate standards will have been achieved prior to removal.

Response: Text will be added to cross-reference Table 3-1 in the CQAP (Appendix E).

28. Page 18, Paragraphs 1-3 – The discussion of the backfilling procedures in the Uplands is confusing. The CMI WP indicates that after removal operations and backfilling, a geotextile liner will be placed on top of the backfill. The ecological layer will be spread on top of that, and then another geo-textile liner will be laid down to form a barrier between the work surface and the ecological layer. The CMI WP goes on to say, "Following dredging and demobilization of the solidification equipment, the additional fill material under the liner will then be reused for the ecological-layer. Finally, the Uplands will be restored by establishing design elevations and installing the final surface layer or restoration features..." The interpretation of this description is that the second (upper) liner will be removed after dredging and demobilization and the ecological layer laid underneath will remain in place, upon which additional backfill material (presumably soil) will be placed until the design elevations are reached. Clarify if this interpretation is not correct.

Response: The ecological-layer fill material (under the upper liner) will not remain in place in the Uplands, but rather will be placed in Delta Area. Once the ecological-layer fill materials are removed, the Uplands area will be restored by establishing final elevations using the backfill material (under the lower liner) and installing the final surface layer materials or restoration features.

29. Page 18, Paragraph 3 – Provide a brief description of the geo-textile liner and the impermeable liner proposed for installation by providing a reference to a cut sheet that will be provided in Appendix A – Project Operations Plan.

Response: Typical cut sheets will be added in a new appendix to the Operations Plan (Appendix A) for the geotextile and impermeable liners, and references to these cut sheets will be added to the third paragraph on page 18.

Section 2.5.1 – In-water Work Area Isolation

30. Page 19, Paragraph 1 – Provide the geotechnical data collected in the spring 2010 and summer 2015 that supports the conclusion that a sheet pile wall would not be feasible along much of the eastern boundary of the removal area in the ABD. Are there any discreet areas where sheet piling can be utilized to surround work areas during implementation of the corrective measures? In areas where sheet pile cannot be used, can a triple curtain be used, or please provide supporting documentation that a single turbidity curtain is sufficient.

Response: The 2010 and 2015 data will both be provided in a new appendix to the CMI WP, and a reference to this appendix will be added to the first paragraph under Section 2.5.1 on page 19.

A sheetpile wall will be utilized when working along the shoreline near Rotary Park, which is within the Delta Area turbidity control system. The triple-tiered curtain configuration also includes a baffle curtain, thereby providing overlapping dual containment in a portion of the water column. This configuration has successfully been used during removal activities at the lower Willamette River in Portland, Oregon.

Single turbidity curtains have been effectively used on dredging conducted within EPA Region 2. Most notable is the Onondaga Lake project in Syracuse, New York where NYSDEC's 5-year review of the program stated that "there were no exceedances of the turbidity alert or action levels during dredging". A single silt curtain system has also been used by Sevenson at dredging projects within EPA Region 2 such as the Roebling Steel Superfund Site in Roebling, New Jersey and Horseshoe Road Superfund Site in Sayreville, New Jersey.

31. Page 19, Paragraph 2 – The description of the 3-tier containment system should include distances between the baffle and permeable curtains.

Response: So that the curtains to not get entangled, there will be a distance of approximately 3 feet between the baffle and permeable curtains. The text on page 19 will be revised to include this approximate distance.

32. Page 19, Paragraph 2 – EPA consulted with personnel at the Environmental Laboratory of the United States Army Corps of Engineers' Engineer Research and Development Center in Vicksburg, Mississippi. Based on that consultation, EPA requires further support for the conclusion that the permeability curtains will be effective. The gap between the sediment baffle and permeable curtains is not a continuous barrier and there is a potential for transport of colloid associated mercury through the permeable silt curtain. Describe how this will be addressed.

Response: The permeable turbidity curtain set-up was developed considering the typical response of suspended solids in the water column. Permeable turbidity barriers create a quiescent zone behind the curtains that permits settling to occur. The benefit of a permeable curtain is its ability to resist billowing or sailing in wind, waves, or

current. This allows the permeable curtain to maintain a more vertical profile and the effective depth of the barrier isn't compromised. Suspended solids will be distributed throughout the water column and some ultra-fine sediments will be suspended for longer periods of time than larger diameter solids. With the vertical overlap between the curtains, the suspended solids on the bottom will not escape and the TSS in the water column will be contained within the curtain prior to reaching the most outer perimeter curtain.

Sevenson used this same design on the Gasco early action project on the lower Willamette River in Portland, Oregon. The river environment was similar with concerns for TSS. The TSS data collected indicated that the curtain arrangement was effective and there were no corrective action exceedances. This is the best management practice for containing the TSS that Sevenson has seen or used. The TSS monitoring outside the curtain described in Section 7 of the CMI WP will confirm the effectiveness of the curtain set-up.

Please note that as part of the 2009 treatability studies performed by Waste Stream Technologies (WST), Extended Dredge Elutriate Tests (DRETs) were performed to assess potential impacts to the water column. In these tests, the supernatant water was sampled after settling times of 12 hours to 32 days. The water was filtered through 1.0, 0.45, and 0.01 micrometer (µm) filters and unfiltered/filtered samples were collected for mercury analysis. After 12 hours, the total mercury concentration was 29.5 µg/L, but the concentration after filtering with the 0.45 µm filter was only 0.015 µg/L. The results were similar for samples taken from 2 to 32 days. This demonstrates that there is negligible impact due to colloidal size particles, which would have passed through the 0.45 µm filter. Results from the WST testing will be included in a new appendix to the CMI WP.

33. Page 19, Paragraph 2 – Is there sufficient flow velocity between the permeable curtain and the baffle curtain to result in scouring of fine sediments deposited there?

<u>Response</u>: The three-tiered containment system will be set up outside the targeted remedial areas and, therefore any potential sediment movement between the curtains will be non-impacted materials; although flow velocities are anticipated to be minimal due to the quiescent nature established by placement of the curtains. Furthermore, the amount of fine sediments anticipated to be deposited between the curtains is anticipated to be negligible as the flow within the removal area will be minimal, if any, and particles will likely settle in place.

34. Page 20, Paragraph 3 – Describe the plan for curtain removal and how resuspension and loss of sediment trapped between the permeable curtain and baffle curtain will be prevented.

Response: The curtain will be removed from the perimeter curtain first then work into the innermost dredge curtain near the dredge zone. Also see response to Comment #33.

35. Page 20, Paragraph 4 - Define the term “prop-wash”.

Response: The term prop-wash or propeller wash refers to the current of water created on the sediment bed by the action of the boat propeller. This definition will be added to the text on page 20.

36. Page 20, Paragraph 4 – Provide the plan/protocol and/or permit for the collection and relocation of fish and other large aquatic species from the containment area.

Response: The text on page 20 will be revised to reflect that the procedures for collection and relocation will be in accordance with the approved Scientific Collectors Permit and Fish Stocking Permit.

37. Page 21, top – Reference that the erosion and sediment control work will be performed in accordance with the “approved” SESC.

Response: “Approved” will be added to the SESCP permit reference at the top of page 21.

38. Page 21, top – Indicate the frequency of erosion and sediment control device inspection will be in accordance with the “approved” SESC.

Response: Consistent with the response to Comment #22, the text on page 21 will be revised to reflect that the frequency of inspections will be in accordance with the approved SESCP permit.

Section 2.5.2 – Debris Removal

39. Page 21, Paragraph 2 – Incorporate language from the Project Operations Plan (Appendix A), page 19 that submerged aquatic vegetation (SAV) removed from the area to be dredged will be loaded onto trucks for off-site disposal.

Response: Text will be added to page 21 stating that SAV will be loaded into trucks for offsite disposal consistent with other debris, with a reference to Appendix A.

40. Page 21, Paragraph 2 – The CMI WP should provide additional details regarding how the removal of trees and shrubs (including stumps and roots) will be accomplished at the site, and what impact vegetation removal and the presence of any stumps or roots may have on dredging operations and residuals. The National

Research Council recommends that the following best management practices (when appropriate) will act to minimize residuals:

- Reducing the impact speed of the dredge bucket with the bottom, the rate of ascent of a filled bucket, and the swing rate of cutter-head dredge;

- Avoiding overfilling buckets through accurate and controlled bucket placement while also maximizing the bite of the bucket to avoid thin lifts;

- Allowing time for draining of a sediment-filled bucket before breaking the water's surface;

- Once the water's surface is broken, holding the buckets just above the water's surface to allow water to drain before swinging the bucket to the barges/scows;

- Protecting the overwater swing path of a filled bucket (e.g., by placing an empty barge/scow or apron to catch lost material);

- Preventing water entrained with the dredged sediment from being released back to the water (i.e., controlling sediment runoff from barges/scows and handling areas by filtering water through hay bales or fabric, or using baffles to contain sediment);

- Over-dredging into clean material, and where removal is designed to extend to native peat, inspecting bucket materials to ensure that all fine-grained sediment has been removed before moving on to the next area;

- Incorporating a two-pass dredge approach to remove soft find-grained sediment that sloughs along the dredge cut face back on to previously dredged areas;

- Performing frequent inspection of the bedded baffle, silt curtain, and anchors to ensure the baffle is in contact with the lake bed;

- Creating incentives for contractors to reduce resuspension and residuals;

- Allowing sediment particles to settle a minimum of 6-12 hours prior to placement of the ecological layer, and

- Providing sufficient time for ecological layer to settle prior to removal of the turbidity curtain.

<u>Response</u>: The removal of trees or shrubs will occur in the Upland area and is not anticipated to have any impact on dredging or dredge residuals. The presence of in-water debris and SAV is not expected to have any adverse impacts on dredging and/or residuals as debris will be addressed prior to or during dredging operations.

Sevenson will perform a debris survey prior to any dredging. Mechanical debris removal from the sediment remediation areas will be accomplished using an excavator equipped with a perforated bucket and/or a specialized rake and grapple. Sevenson will determine the actual equipment to be used in the field depending on the type of debris to be removed. The containment system will be in place prior to any debris removal operations.

The BMPs recommended in the comment are consistent with the procedures and protocols being implemented by Sevenson as they work at many dredging and excavation projects for EPA through the Army Corps of Engineers.

Furthermore, the BMPs have been incorporated in the processes to be implemented on this project by Sevenson.

Section 2.5.3 – Limit and Depth of Sediment Removal

41. Page 21, Paragraph 1 – Please clarify where those areas are that require removal of peat based on historical data gathered by updating Figure 2-3 to show those areas where peat will be removed and referencing Figure 2-3 in the text.

Response: Figure 2-3 will be updated to show those areas targeted for peat removal. A reference to peat removal and this figure will be added to Section 2.5.3 on page 21.

Please note that this information was previously provided to EPA and is included in the Permit Modification (Figure 1).

42. Page 22, Paragraph 1, bullet 1 – The sentence comprising this bullet is incomplete. Please clarify.

Response: The bullet will be corrected as follows (insert underlined text): "A 1-foot vertical cut will be removed along the boundary of the sediment removal limit at the shoreline, at which point the removal depth will be tapered at a 3H:1V slope (i.e., 3 horizontal:1 vertical), as necessary, to the required removal depth."

43. Page 23, Paragraph 1 – The shoreline reconnaissance originally performed in the fall of 2010 to locate and identify structures along the shoreline that may influence the removal of sediment is proposed to be performed in more detail and discussed with the property owner(s) prior to construction. Incorporate this task under "Pre-Construction Activities" that will be incorporated into the revised schedule.

Response: Consistent with the response to Comment #9 regarding pre-construction activities, this task will be added to the anticipated list of pre-construction activities outlined in Section 6.1 (Schedule). This work will be completed within a few weeks of starting the remediation activities adjacent to each specific property.

Section 2.5.4 – Sediment Removal Process and Sequencing

44. Page 24, Paragraph 3 – Provide a reference in the text that the sampling locations/results for those sediments that exceeded TCLP for lead will be provided in an appendix.

Response: The last full paragraph on page 24 will be edited to reference the TCLP delineation results that will be provided in a new appendix to the CMI WP.

45. Page 24, Paragraph 3 – Provide a brief description of what MAECTITE is and include an MSDS or cut sheet in an appendix.

Response: Sevenson's patented MAECTITE® chemical treatment process treats RCRA metal-contaminated waste and renders it non-hazardous by RCRA definition. The MAECTITE® process was accepted into the EPA Superfund Innovative Technology Evaluation (SITE) program in 1992. The principle behind the MAECTITE® process is chemical bonding, which creates substituted mixed mineral forms, stable and resistant to leaching.

A brief description of MAECTITE® will added to the text on page 24 along with the reference already in this paragraph referring the reader to Appendix A (Operations Plan) for additional details. Appendix A revisions will include the addition of applicable information (i.e., product information details) as an appendix to that plan.

Section 2.5.5 – Sediment Removal Completion Confirmation

46. Page 25, Paragraph 1 – The Revised Permit Module indicates that removal in the ABD, Lake Area A, and Island Area will, "…focus on the mercury-impacted sediments including sediments down to the native cobble or gravel", and include, "…select areas of the peat layer which have elevated mercury concentrations". The Revised Permit Module further states that, "Confirmation of sediment dredging/removal completion shall be conducted…to verify that dredging down to the peat layer has been achieved." However, the CMI WP does not include information regarding methods that will be used to confirm that removal of material down to, and in some areas including, the native substrate has been achieved.

Response: As described within the EPA- and NJDEP-approved Remedial Investigation Report and Remedial Action Selection Report/Corrective Measure Study, characterization samples were collected vertically throughout the study area and analyzed for site-related constituents. The data generated by the analysis of thousands of samples were used to define the vertical limit of removal. The elevation of sample depths were generated by a licensed surveyor and used to define the removal depths and subsequent dredge prisms for the CMI WP to meet the objectives stated in the RCRA Permit Modification. Furthermore the permit modification itself states that confirmation of sediment dredging/removal completion will be performed using traditional and dredge-mounted survey techniques to verify that vertical limits of removal have been achieved. The requirements for the post-dredging surveying are described in the CQAP (Appendix E).

47. Page 25, Paragraph 1 – Why isn't multi-beam bathymetry conducted to survey post excavation depths? In some cases, depths would preclude its use, but typically multi-beam (or single beam) bathymetry would be the standard method to survey.

Response: In-water bathymetric surveys in areas with adequate water depths are included in the CQAP (Appendix E) as a measurement approach to confirm post-removal elevations and depths.

Section 2.6.1 – Material Transportation and Re-handling

48. Page 26, Paragraph 2 – State that the actively used grounds of the Lakeside Middle School (e.g. athletic fields) will not be utilized for any remedial activities.

Response: Text will be added to the second paragraph under Section 2.6.1 to reflect that remedial activities will be confined to the fenced area shown on Drawing 1 in the Operations Plan (Appendix A) and that this area is not actively used by the middle school.

49. Page 26, Paragraph 2 – Reference Drawings 2 and 8 in the Project Operations Plan that specifies the configuration and placement of equipment in the staging area.

Response: The text will be revised to reference the applicable drawings included in Appendix A.

50. Page 27, Paragraph 1 – Clarify sentence two and indicate transport of processed sediment is off-site.

Response: The second sentence in the first full paragraph on page 27 will be modified as follows (insert underlined and deleted text shown as strikethrough): "This process will reduce the number of vehicles needed to transport sediment for off-site disposal ~~versus solidification being conducted at an alternate location~~."

51. Page 27, Paragraph 2 - Define what is considered "porous debris".

Response: Porous debris could refer to logs, stumps, broken concrete, etc. or something that may be difficult to decontaminate. This definition will be added on page 27.

Section 2.6.2 – Soil and Sediment Solidification

52. Page 29, top – The results of the bench-scale sediment solidification testing are presented but no conclusions are made. The revised CMI WP needs to include the methods/results/conclusions of sediment and soil treatability testing. Revise paragraph two to indicate that additional soil treatability testing to confirm the solidification/stabilization methods are completed.

Response: The 2008 through 2010 and 2015 treatability studies data will be provided in a new appendix to the CMI WP, and references to this appendix will be added to Sections 2.6.2 and 2.6.3 (pages 27-30). In addition, the text in Section 2.6 will be updated to include a summary of the 2015 treatability studies. Treatability studies are now complete, and any references to ongoing studies will be deleted.

Section 2.6.3 – Hydraulically Dredged Sediment Particle Separation and Compression

53. Page 29, Paragraph 1 – Include as an appendix the report provided to DuPont/Chemours prepared by Waste Stream Technology that included methods/results of the treatability study to assess particle separation and compression technologies for sediment from the ABD.

Response: The report will be provided as a new appendix to the CMI WP, and a reference to this appendix will be added to Section 2.6.3 on page 29.

Section 2.6.4 – Water Treatment

54. Page 30, Paragraphs 1 and 2 – Cross reference the permit with the requirements for addressing Chemours' defined "contact water".

Response: The text will be revised to reflect that contact water will be managed in accordance with the approved NJPDES Discharge to Surface Water Permit (BGR) and Treatment Works Approval (TWA) permit issued by NJDEP.

55. Page 30, Paragraph 2/Page 31, top – Clarify the last sentence beginning on Page 30 that carries over to the top of page 31.

Response: The text will be revised as follows: A turbidity containment system will be in place when discharge of non-contact or contact water is occurring.

Section 2.6.5 – Material Disposal

56. Page 31, Paragraph 1 – Note in the text that off-site disposal will be at licensed and permitted facilities and cross-reference the Project Operations Plan which contains the proposed facilities to be utilized.

Response: Text will be revised to reflect that material will be transported to a permitted facility licensed to receive the material for final disposition. A reference to the Operations Plan (Appendix A) will also be added to this paragraph.

57. Page 31, Paragraph 3 – Cross-reference the Project Operations Plan, which is where decontamination procedures for trucks/equipment are fully described in the CMI WP.

Response: A reference to the Operations Plan (Appendix A) will be added to the last sentence on page 31.

Section 2.7 – Monitoring Program

58. Page 32, Paragraph 1 – Note in the text that all monitoring data will be field logged and included in the Construction Completion Report in addition to any other types of monitoring reporting performed for the duration of construction.

Response: A sentence will be added to the second paragraph under Section 2.7 indicating that monitoring data will be included in the completion report. Similar text will also be added to Section 2.12.

59. Page 32, Paragraph 1 – Indicate that Table 2-4 includes the types, locations as well as the monitoring parameters to be conducted with each remedial activity and also cross-reference Table 3-1 of the CQAP.

Response: The first sentence in the second paragraph under Section 2.7 will be edited to cross-reference Table 3-1 of the CQAP.

60. Page 34, bullet #1 (Water Column Monitoring) – > 50 NTUs over upstream turbidity levels prompts evaluation of a possible cause and water column sampling for TSS and dissolved mercury upstream, adjacent to (if applicable) and downstream. What actions are being taken by the Remedial Action Contractor while the samples are being analyzed? Chemours should execute the following based on exceedance of NTU thresholds: a threshold of greater than 25 NTU above background requires modification of construction procedures and increased frequency of testing. At greater than 50 NTU above background, cessation of work activities or implementation of additional engineering controls is required until monitored levels reach below the threshold level for 24 hours.

Response: Sevenson will be evaluating their processes to determine what would have caused the elevated readings and completing those activities to prevent the occurrence from happening again. Additionally, work will be conducted in accordance with the approved permits for the project.

The levels proposed for this remediation project are based upon the work experience of the technical consultants and Seveson at similar sites. The turbidity levels greater than 25 NTUs and less than 50 NTUs over upstream levels are considered an early warning level, not an action level. Levels greater than 25 NTUs would result in prompt visual inspection of the current work areas to identify possible causes of the turbidity levels and modifications to operations based on these inspection results. Levels greater than 50 NTUs over upstream levels would result in sample collection and analysis for

dissolved mercury and TSS, along with an evaluation of the turbidity exceedances and implementation of corrective measures (e.g., additional engineering controls, modifications to dredging activities, etc.).

Chemours respectfully requests from EPA the technical basis for modifying the proposed levels and actions associated with those levels.

61. Page 34, bullet #2 (Water Column Monitoring) – Regarding the discussion of the action level for mercury, the NJDEP Surface Water Quality Standard of 0.77 ug/l (chronic value) should be used since chronic exposures to aquatic life stages can occur if releases are continuous. Explain the rationale for making a correction to the upgradient concentrations.

The selection of the aquatic acute criterion as the basis for the action level for water quality monitoring in Pompton Lake is consistent with action levels established for EPA-approved monitoring programs for sediment remedial actions (e.g., dredging and capping) at other EPA Region 2 sites. The aquatic acute criterion for mercury of 1.4 µg/L (dissolved) was established as the appropriate action level to evaluate potential short-term water quality impacts associated with sediment remedial actions at the following sites:

- *Onondaga Lake, NY: Water Quality Management and Monitoring Plan (Anchor QEA and Parsons, 2012), and*
- *Upper Hudson River, NY: Hudson River PCBs Site Revised Engineering Performance Standards for Phase 2 (Louis Berger Group, 2010).*

Further to that, the dredging operations for this project will occur over a span of months – not years – so a chronic exposure value is not appropriate.

The action level will be established as a concentration measured at a downstream station that is at or above 1.4 µg/L (dissolved phase) over the upstream station concentration. The concentration at the upstream station is incorporated into the action level to account for the contribution of dissolved mercury from upgradient sources that are not associated with remedial activities in Pompton Lake.

Anchor QEA and Parsons. 2012. Water Quality Management and Monitoring Plan: Onondaga Lake. Prepared for Honeywell, Inc. May 2012.

Louis Berger Group. 2010. Hudson River PCBs Site Revised Engineering Performance Standards for Phase 2. Prepared for U.S. EPA, Region 2 and the U.S. Army Corps of Engineers, Kansas City District. December 2010.

62. Page 34, bullet #3 (Water Column Monitoring) – Provide the basis for using an action level of 25 mg/L for TSS above background.

<u>Response</u>: The action level was developed from the New Jersey Surface Water Quality Criteria in N.J.A.C. 7.9B-1.14(d) for FW2 waters.

63. Page 34, Paragraph 2 (Water Column Monitoring) – The text should indicate that if the results from water monitoring exceed either TSS or dissolved mercury action, the NJDEP Surface Water Quality Standard of 0.77 ug/l (chronic value) should be used since chronic exposures to aquatic life stages can occur if releases are continuous. Explain the rationale for making a correction to the upgradient concentrations.

Response: See response to Comment #61.

64. Page 35, Paragraph 1 (Water Monitoring) – One mid-depth water column turbidity sample in each area (ABD, Island Area, Area A) to evaluate whether the turbidity containment system can be removed does not seem sufficient. Chemours should provide its rationale that one sample is sufficient.

Response: The river is shallow and the flowing water will prevent stratification of suspended sediment, so mid-depth monitoring will provide a representative sample interval. Multiple depths are only necessary in lakes or bays with over 20 feet of water depth with slow moving water. That is not the case with Pompton Lake.

65. Page 35, Paragraph 1 (Water Discharge Monitoring) – What action(s) will be taken in the event that water discharge monitoring shows exceedances of the NJDEP permit?

Response: The final permit will dictate steps that will need to be taken. Additionally, depending on what the cause might be, Sevenson will make applicable adjustments to processes and associated activities.

66. Page 37, Paragraph 1 (Mercury Verification Sampling) – The pre-design investigation data obtained from the flux chamber analysis and modeling performed should be provided in an appendix.

Response: The data/analysis results will be provided in a new appendix to the CMI WP, and a reference to this appendix will be added to the end of the first full paragraph on page 37.

67. Page 37, Paragraph 3 (Mercury Verification Sampling) – The proposed monitoring approach for mercury needs to be enhanced. While Chemours contends that "….mercury in its vapor phase is not expected to be released during sediment processing and handling", the need for enhanced monitoring of mercury is appropriate in light of the proximity of the work to sensitive populations (i.e. school children) and nearby residents. The mercury monitoring approach should include sampling of mercury for the duration of the soil excavation and sediment handling/processing with provisions for increasing/decreasing the frequency of mercury monitoring factoring in the results of dust monitoring and site conditions.

Response: Chemours and their contractors have safety as their most important goal. This is not only the safety of themselves but that of the community as well. Several larger remediation projects have been completed by the site directly within the community dealing with the same media and same constituents. The largest of these projects was the Acid Brook remediation which was conducted in and around the homes of residents and dealt with concentrations in soil/sediment that were greater than the associated with this project. During the Acid Brook remediation, air monitoring was conducted and the results of this program showed that the air quality did not represent a hazard to receptors as a result of completing the remediation. The monitoring program and the flexibility already included in the program are robust such that all potential receptors will be protected.

The statements on page 37 regarding "…mercury in its vapor phase is not expected to be released during sediment processing and handling…" are based on pre-design investigations using site sediment placed in a flux chamber. To monitor the potential for particulate-bound solid mercury air emissions, the CMI WP proposes collection and analysis of a 24-hour integrated ambient air sample of particulates (PM10) approximately once per week for 8 weeks during Upland soil excavation (3 weeks) and sediment handling/processing (5 weeks). Air monitoring will gather samples using a high volume sampler for PM10, in accordance with EPA Method 40 CFR 50, Appendix J. Samples will be analyzed by graphite furnace atomic absorption spectroscopy in accordance with EPA Method SW846-7471A. The anticipated analytical method reporting limit is 0.001 µg/m3. This sampling is being conducted during times which represent the highest probability where mercury could be present as a result of remedial activities.

The proposed approach already includes enhanced monitoring in that the monitoring will be increased if the observed conditions warrant it. The CMI WP clearly explains the process for evaluating the air data on page 38, and the proposed approach includes a protocol to increase the frequency of sampling and analysis, if the initial monitoring results indicate that more frequent monitoring would be necessary. The protocol on page 38 explains that if one or more of the mercury sample results from the first eight weeks of sampling are above 0.155 µg/m^3 (50% of the EPA Regional Screening Level [RSL] for inhalation of mercury for residential settings), then more frequent monitoring would be implemented via a proposed revised plan that will be approved by EPA. If elevated results are observed (meaning analysis results are above 50% of the RSL)

during any of these sampling events, a proposed revised monitoring plan for addressing these results including work modifications and additional sampling will be developed for EPA review.

68. Page 38, Paragraph 2 (Meteorological Monitoring) – Indicate whether a site-specific meteorological station will be established or will a nearby weather station (provide location) will be utilized to obtain meteorological data.

Response: A nearby weather station will be utilized – Caldwell Essex County Airport which is approximately 10 miles away. This information will be added to page 38.

69. Page 39, top (Odor Monitoring) – Please state whether deodorizers are an option that would be employed to control odors. If so, provide information including representative types that might be used and associated MSDSs, if available.

Response: The text will be revised to remove discussion on the use of deodorizers as it not anticipated that this will be necessary for the project.

70. Page 39, Paragraph 1 (Noise Control) – What is the basis for the 65dBA sound level as an action level?

Response: The Borough of Pompton Lakes noise ordinance protects the "peace and good order" of its residents – it does not have a quantitative sound level limit.

N.J.A.C. 7:29 (Noise Control) identifies 65dBA as level that should not be exceeded for industrial, commercial, or community service facilities, and N.J.S.A. 13:1G-1 et. seq. limits daytime noise to 65dBA.

Finally, for reference, the Hudson River Quality of Life standards include 80dBA during daytime and 65dBA at night (75dBA was daytime control level, mitigation recommended, not required).

71. Page 39, Paragraph 1 (Noise Control) – Include the representative type(s) of noise controls or operational modifications that may be employed to reduce noise levels, if needed.

Response: The text will be revised to describe the types of noise controls that will be used. For example, Sevenson will have mufflers on all diesel or gasoline engines and equipment will be shut off when not in use.

72. Page 39, Paragraph 2 (Vibration Monitoring) – The pre-construction survey, including securing appropriate access agreements, should be tracked as a pre-construction task in the revised schedule.

Response: Consistent with the response to Comment #9, this task will be added to the anticipated list of pre-construction activities outlined in Section 6.1 (Schedule).

73. Page 40, Paragraph 3 – Define “PPV and RMS” and include in the list of acronyms.

Response: These terms will be defined in the third paragraph on page 40 – PPV = peak particle velocity and RMS = root mean square.

74. Page 40, Paragraph 1 – The results of noise and odor monitoring should also be posted on the website for public access.

Response: Chemours will post the noise and odor monitoring results to the website; this will be added to the last paragraph on page 40.

Section 2.8 - Restoration

75. Page 41, Paragraph 1 (Restoration) – Cross-reference Section 3 (Permits) and indicate which permit applications specifically address restoration of regulated natural resources.

Response: The text will be revised to include a cross-reference to Section 3. Additionally, text will be added which provides the applicable permits for restoration.

76. Page 41, Paragraph 2 (Restoration) – Indicate when the detailed restoration design will be submitted for review.

Response: A summary of restoration details are provided in the CMI WP. Additional restoration design elements are included in drawings prepared for NJDEP permit applications for Freshwater Wetland General Permit No. 4 Modification and Flood Hazard Area Individual Permit Modification (NJDEP DLUR File No. 1609-09-0006.1) and provided within Operations Plan (Appendix A). Permit level design details will be supplemented with implementation specifications to be provided to Sevenson in advance of restoration activities.

77. Page 43, Paragraph 1 (2.8.1.1 - Public) – Add language to this paragraph indicating the updated Remediation and Restoration Plan required by the Permit Modification is also provided in Appendix A of the CMI WP. Cross-reference the specific section of the Project Operations Plan that constitutes the Remediation and Restoration Plan.

Response: Language will be added to Section 2.8.1.1 to indicate that elements of the restoration plan are also discussed in the Operations Plan (Appendix A). Additionally, in Appendix A, discussion on the restoration process will be made into its own section (as opposed to being a part of demobilization).

Please note that specifics on the remediation and restoration plan may be adjusted to comply with the final permits issued by NJDEP – see also the response to Comment #76.

78. Page 44, Paragraph 1 (2.8.2 – Pompton Lake – Delta Area, Lake Area A, and Island Area) – Indicate that the Cowardin system is a classification system for wetlands and deep water habitats.

Response: The text will be revised to include this information.

79. Page 45, Paragraph 1, (*Preliminary Restoration*) – Provide the rationale for base layer being approximately 2" and the final layer being approximately 4" for a total ecological layer of 6".

Response: Permit Modification I (Module III Section E.1) requires an overall 6-inch minimum eco-layer with a -0-inch to +0.25-inch tolerance. The ecological layer will be placed in two layers (first lift of 2 inches and second lift of 4 inches) to reduce the potential for mixing of the underlying peat or the native cobble or gravel into the eco-layer.

Placing the ecological-layer in two layers has been demonstrated on many other dredging projects to be the best methodology to ensure a uniform layer is placed on the lake bottom. These projects have been:

- *Onondaga Lake Dredging, Sediment Transportation and Capping Project (Syracuse NY);*
- *Buffalo River AOC Capping and Habitat Restoration (Buffalo, NY);*
- *Silver Lake Removal Action and Subaqueous Cap Installation (Pittsfield, MA);*
- *Horseshoe Road Superfund Site Operable Unit 3 – Marsh and River Sediment Remediation (Sayreville, NJ); and*
- *Roebling Steel Superfund Site (Roebling, NJ).*

See also response to Comment #80 for additional details on the overall ecological-layer placement process.

80. Page 46, Paragraph 1, (*Preliminary Restoration*) – Page 45 indicates that the base layer will not be placed until suspended sediments in the water associated with the dredging have declined to acceptable levels. What is considered an "acceptable" level of suspended sediments? One way to achieve this is described as isolating active areas of dredging from ecological layer placement via a turbidity curtain. Why would this be necessary if there is no ecological layer placement until dredging is completed?

Response: The following provides additional details on the overall removal and ecological-layer placement activities to clarify the approach.

The dredging area will be subdivided into Dredge Management Units (DMUs) of 3 to 5 acres in size, as stated in the CQAP (Appendix E). After Sevenson reports that dredging work is finished in each DMU and performs a post-dredge bathymetric survey, Chemours will evaluate the post-dredging survey to confirm that the dredging work is

complete. No ecological-layer placement will start until dredging completion is confirmed in an entire DMU. The process of performing and evaluating the survey will take at least 2 work days, which will provide time for suspended sediment to settle.

Once dredging is confirmed as complete within a DMU, the first lift of the ecological-layer may be placed at the same time as dredging in an adjacent DMU, with internal turbidity curtain separation between DMUs. After placing an internal turbidity curtain, the turbidity will be measured in the DMU that is ready for placement of the first lift of the eco-layer.

The internal turbidity curtain will remain in place to provide sufficient time for solids settling. The curtain will be removed after dredging in the adjacent DMU is complete and the turbidity is less than 180 NTU above upstream levels. In Lake Area A and the Island Area, the final lift of the eco-layer will be placed after dredging is complete for the season. In the ABD area, the final lift of the eco-layer will be placed after ABD dredging is complete and after the first lift has been placed over the entire ABD area. Therefore no internal turbidity curtains will be needed during placement of the final lift.

81. Page 46, Paragraph 2, (*Preliminary Restoration*) – The borrow source will require EPA/NJDEP approval and chemical testing will be required to verify the borrow material is acceptable.

Response: The text will be revised to reflect that the borrow source will be from a permitted/licensed facility. Chemours will provide information on the borrow source to demonstrate that it meets the requirements stipulated in the CQAP (Appendix E). Testing results will be provided to EPA, but as long as results are within CQAP requirements, work will move forward without EPA feedback or approval.

82. Page 47, Paragraph 1 (2.8.3 – Delta Area Wetlands and Wetland Transition Areas: *Preliminary Restoration*) – Add language to this paragraph indicating the updated Remediation and Restoration Plan required by the Permit Modification is also provided in Appendix A of the CMI WP. Cross-reference the specific section of the Project Operations Plan that constitutes the Remediation and Restoration Plan.

Response: Language will be added to Section 2.8.3 to indicate that elements of the restoration plan are also discussed in the Operations Plan (Appendix A). Additionally, in Appendix A, discussion on the restoration process will be made into its own section (as opposed to being a part of demobilization). Please note that specifics on the remediation and restoration plan may be adjusted to comply with the final permits issued by NJDEP – see also the response to Comment #76.

83. Page 50, Paragraph 1 (2.8.4 – Acid Brook Stream and Delta Area Riparian Zones: *Preliminary Restoration*) – Add language to this paragraph indicating the updated Remediation and Restoration Plan required by the Permit Modification is also provided in Appendix A of the CMI WP. Cross-reference the specific section of the Project Operations Plan that constitutes the Remediation and Restoration Plan.

Response: Language will be added to Section 2.8.4 to indicate that elements of the restoration plan are also discussed in the Operations Plan (Appendix A). Additionally, in Appendix A, discussion on the restoration process will be made into its own section (as opposed to being a part of demobilization). Please note that specifics on the remediation and restoration plan may be adjusted to comply with the final permits issued by NJDEP – see also the response to Comment #76.

84. Page 50, Paragraph 2 (2.8.4 – Acid Brook Stream and Delta Area Riparian Zones: *Preliminary Restoration*) – Reference where the proposed design for the re-establishment of Acid Brook is located in the CMI WP or permit.

Response: As noted in Section 2.8.4, Page 50, Paragraph 2, the plan view of the design for the re-establishment of Acid Brook is provided on Figure 2-9. Additional restoration design details are included NJDEP's permit application for Freshwater Wetland General Permit No. 4 Modification and Flood Hazard Area Individual Permit Modification (NJDEP DLUR File No. 1609-09-0006.1) and provided within Appendix A (Operation Plan). Permit level design details will be supplemented with implementation specifications to be provided to Sevenson in advance of restoration activities.

85. Page 50, Paragraph 3 – Given that some locations in wetland and wetland transition zones may have only one foot of backfill material placed on top of undredged soil/sediment, the Service recommends that an evaluation be performed of the root depth of plant species to be used for the restoration. Plants with root systems likely to be more than a foot in depth should not be planted where they may come into contact with the contaminated soil underlying the backfill material.

Response: The plan incorporates removal of soil in these zones to a depth of either 3 feet below ground surface or one foot below the elevation where the water table is encountered. As provided in the Technical Support for Acid Brook Delta Upland Soil Areas Corrective Implementation, Pompton Lakes, New Jersey Technical Memorandum (URS October 2014b), the proposed CMI WP activities within wetlands and the wetland transition zone incorporate measures (horizontal and vertical extent of excavation and backfill with clean material) that eliminates and/or minimizes potential for plant root systems to be exposed to soils with constituents of concern above established surface and subsurface soil criteria. The proposed restoration planting schedule has been developed to incorporate beneficial native species adapted to restored landscape positions. If changes to the planting schedule become necessary due to species availability or other limiting factors, an evaluation of replacement plantings will be

completed to provide species with high potential for establishment in restored conditions.

Section 2.11 – Summary of Green Remediation Practices

86. Page 54, Paragraph 1 (2.11 – Summary of Green Remediation Practices) – Briefly define Tier 3 and Tier 4 standards.

Response: The following will be added to the end of the first full paragraph on page 54: "The tier level governs the required emissions reductions for non-road diesel engines with the focus on carbon monoxide, hydrocarbons, nitrogen oxides, and particulate matter (http://www3.epa.gov/otaq/ nonroad-diesel.htm)."

Section 2.12 – Completion Report

87. Page 55, Paragraph 1 (2.12 – Completion Report) – Per EPA's RCRA Corrective Action Plan Guidance, the document to be prepared following completion of the work is the Construction Completion Report and not the Corrective Measures Completion Report. Revise sentence accordingly.

Response: The first sentence under Section 2.12 will be revised to reference the Construction Completion Report.

88. Page 56, top (2.12 – Completion Report) – Revise the sentence to convey that all as-built drawings, including those for the restoration activities will be included in the Construction Completion Report.

Response: As-built drawings are noted as part of the Construction Completion Report, which includes restoration elements. The word "all" will be added in front of the text.

Section 3.0 – Permitting and Other Approvals

89. Page 57, (3.0 – Permitting and Other Approvals) – Reflect updated information on the permits/other approvals Chemours is required to submit for Federal, State, local and other agencies.

Response: This listing will be reviewed and updated, if applicable.

90. Page 59, bottom (3.0 – Permitting and Other Approvals) – Provide the name and purpose of any other permits required that will be obtained by the Remedial Action Contractor.

Response: This listing will be reviewed and updated, if applicable.

91. Page 59, bottom (3.0 – Permitting and Other Approvals) – Please note that while informal consultation with the USFWS regarding potential impacts to listed species was undertaken in advance of the proposed removal in 2012, the project has changed, and the northern long-eared bat (Myotis septentrionalis) has since been federally listed as threatened. This species is known to be present in the vicinity of

the project site. A new consultation will be initiated by EPA with the USFWS to ensure that there are no potential impacts to federally listed species.

Response: Consultation with the NJDEP Natural Heritage Program was completed in October 2015 in compliance with NJDEP's Freshwater Wetland permit modification requirements and included in Appendix D of that application. Such consultation provides current understanding of the records of rare species that may occur in proximity to the project. No rare bat species were identified as either occurring on site or within one mile of the proposed project site.

Further to that, pages 1900 to 1922 of Volume 81, No. 9 of the Federal Register dated Thursday, January 14, 2016 document the rules and regulations regarding the northern long-eared bat. The restrictions related to this bat primarily focus on the hibernacula (overwintering places) and activity within ¼ mile. There is a time restriction for trees is which this bat is present (June-July). The 2014 USFWS study found one northern long-eared bat by the equestrian center which is more than ¼ mile away (and had a low mercury fur level).

The current project schedule proposed in the CMI WP had anticipated the potential impact of endangered species and, as such, had the removal of trees occurring outside of the times listed to prevent impact to these species. However, if this will not occur, it is respectfully requested that Chemours be present as part of the consultation being required by USFWS.

Section 6.0 – Project Schedule and Management

92. Page 62, (6.0 Project Schedule and Management) – Cross-reference the detailed schedule provided with the Project Operations Plan (Appendix A).

Response: The text will be revised to include a cross-reference to the construction schedule provided in the Operations Plan (Appendix A).

93. Page 62, (6.1 Schedule) – The last paragraph on this page first indicates that work hours will be Monday to Saturday, but later states that the work hours will be Monday to Friday, with make-up work hours being considered for Saturday. Please clarify this discrepancy.

Response: The primary working hours will be Monday through Friday. Saturday will be used for equipment maintenance, etc. However, if there are schedule delays during the week (e.g., bad weather), Saturday may be used as a make-up day so that the project can remain on schedule.

94. Page 62, (6.1 Schedule) – The sheet pile barrier and turbidity curtains should be installed before the Pompton Lake fish stocking activities take place.

Response: According to NJDEP Division of Fish & Wildlife information, stocking is conducted in late summer and fall, which should occur following the installation of the turbidity curtain containment system.

NJDEP Hackettstown Hatchery Fish Distribution and Stocking page
http://www.njfishandwildlife.com/htown-stocking.htm.

95. Page 63, (6.2 Project Management) – Provide a detailed Project Team Organization Chart in the revised CMI WP.

Response: An organization chart will be added as a new figure in the CMI WP showing the information known at this time, including company names for the various categories and, in some places, names if they are known to be final. The organization chart will be preliminary only and subject to change as the project progresses to construction.

CMI WP: APPENDIX A – POMPTON LAKES STUDY AREA PROJECT OPERATIONS PLAN (POP)

INTRODUCTION

96. Page 3, Paragraph 2 – Pompton Dam should be Pompton Lake Dam.

Response: The change to the name of the dam on page 3 will be made as noted.

OPERATION PLAN COMPONENTS

97. Page 5, Paragraph 2, bullet 2 – Have additional treatability studies to support the project design of the solidification work been conducted? The submitted schedule does not indicate when the work is to be performed.

Response: See response to Comment #52.

PREMOBILIZATION, MOBILIZATION SUPPORT ACTIVITIES & SITE PREPARATION

Pre-Mobilization

98. Page 8, top bullets 2 and 3 – What is the status of the bench-scale studies described in bullets 2 and 3.

Response: See response to Comment #52.

Mobilization

99. Page 8, Paragraph 1 – See comment #85.

Response: Page 8, Paragraph 1 discusses key site personnel and Comment #85 refers to evaluating the root depth of plant species to be used for restoration. It is assumed

that EPA is referring to Comment #95 in which case please see response to that comment.

100. Page 8, Paragraph 2 – See comment #11.

Response: See response to Comments #10 and #11.

Site Preparation

101. Page 9, Paragraph 1, bullet 9 – Coordination with property owners regarding the removal of docks and storage should be tracked as a Pre-Construction Activity in the revised CMI WP schedule.

Response: See response to Comment #43.

102. Page 10, Paragraph 1, bullet 1 – Clarify that installation of a "visual screen" is the installation of a fence. Will the fence include a visual screen?

Response: The fence is the visual screen and will remain in place during the time it is needed to secure the work area and provide a physical barrier preventing accidental access to the area.

Clearing and Grubbing

103. Page 11, Paragraph 1 – Cross-reference Drawing #1 of the Project Operations Plan and note where the Lakeside Middle School is located on Drawing #1.

Response: The text will be revised to cross-reference Drawing #1. Additionally, this drawing will be revised to depict where the school is located.

104. Page 12: The document indicates that: "The areas that are cleared will only be grubbed if the rooting systems and stumps of the cleared vegetation will interfere with the temporary infrastructure and restoration design." However, roots and stumps will likely interfere with the effective removal of contaminated soil and are often associated with the presence of both undredged and generated residuals. Why can't grubbing of root systems and stumps to the maximum extent possible within the proposed horizontal and vertical dredging footprint be conducted?

Similar to the response to Comment #40, the removal of trees or shrubs will occur in the Upland area and is not anticipated to have any impact on dredging or dredge residuals. Clearing as described on page 12 of the Operations Plan refers to the Upland areas. The areas that are cleared will only be grubbed if the rooting systems and stumps of the cleared vegetation will interfere with the temporary infrastructure and restoration design. The stumps and root systems within the above areas and the excavation areas will be removed as they are encountered and during excavation activities.

WORK AREA ISOLATION MEASURES

Structural Inspection Prior to Isolation Measures

105. Page 13, Paragraph 1 – Identify within the text the number of structures within 100 feet of the work location.

Response: The text will be revised to state the anticipated number of structures within 100 feet of the work location. Based on an initial review, there are a total of 4 structures across Lakeside Avenue that fall within this 100-foot radius.

106. Page 16, top – The text states, "Removal [of sheet pile] will occur from land and then the areas will be backfilled. Following backfill placement, the sheeting will be removed." This is unclear and requires clarification regarding the sequence of sheet pile removal and backfilling.

Response: See response to Comment #23.

FISH REMOVAL WITHIN CONTAINMENT SYSTEMS

107. Page 16, Paragraph 2 – During the fish collection that precedes containment system installation, can consideration be given to removing those species (rather than relocating them outside the containment system) that are invasive?

Response: This request is not only impossible to ensure, but the result would be meaningless as the remainder of the lake have the same species. Given that the containment system will be installed within an open river system, the removal of individual invasive fish species collected within the containment system will likely have a negligible effect on reducing overall invasive fish populations in Pompton Lake. If invasive fish populations are established in the Ramapo River-Pompton Lake system, any individual fish removed from within the containment system will likely be re-populated by individuals from outside of the containment system in Pompton Lake and/or the Ramapo River.

ODOR, DUST, AIR AND NOISE MITIGATION

Odor

108. Page 16, Paragraph 1 – Provide examples of the foaming agent products that might be used on open material surfaces as well as associated MSDSs.

Response: The text will be revised to include an example of a type of foaming agent that could be used with a descriptor of "such as but not limited to" along with product information.

109. Page 17, Paragraph 2 – Provide examples of the odor control products that might be used during mechanical dredging operations as well as associated MSDSs.

Response: The text will be revised to include an example of a type of odor control product that could be used with a descriptor of "such as but not limited to" along with product information.

Air Monitoring

110. Page 18, Paragraph 1 – Insert language regarding Chemours' commitment to provide field personnel to walk the exterior of the Lakeside Middle School property with a hand-held air monitoring instrument.

Response: Text will be added to reflect that perimeter air monitoring will be performed around the perimeter of the work area during the period of Upland soils removal only. As this information was specifically requested by the Pompton Lakes School Board during the soil excavation program, the monitoring data will be communicated directly to the Pompton Lakes School Board on a daily basis. Note, however, that this comment is somewhat unjust in that this agreement was made after the submittal of the CMI WP.

Noise Mitigation

111. Page 19, Paragraph 2 – Reference Section 2.7 of the CMI WP regarding noise control and monitoring measures.

Response: Text will be revised on page 19 to reference this information included in Section 2.7. See also the response to comment #71.

DEBRIS REMOVAL

112. Page 20, Paragraph 1 – Provide information on the potential off-site disposition of removed debris. Indicate that the removed debris would be disposed of at a licensed, permitted facility.

Response: The text will be revised to reflect that material will be transported to a permitted facility licensed to receive the removed debris for final disposition.

UPLANDS SOIL AND SHALLOW WATER DELTA AREA SEDIMENT REMOVAL

113. Page 21, Paragraph 1 – The description provided, specifically when the backhoe loads the drained material into Moxy trucks for hauling to the process area appears inconsistent with Drawing 6. Please reconcile.

Response: Sevenson intends to employ a conveyor to transfer the drained material to the processing area. However, a Moxy truck will be used as a contingency if the conveyor is not optimal. The text on page 21 and Drawing 6 will be modified to clarify this approach.

UPLANDS BACKFILL AND SHALLOW WATER DELTA AREA ECOLOGICAL LAYER PLACEMENT ACTIVITIES

114. Page 22, Paragraph 1 – Indicate that certification as to the quality of the backfill will be provided as well as identifying a back-up source.

Response: The sentence will be revised to reflect that the borrow source for backfill will be from a permitted/licensed facility. See also the response to Comment #81.

115. Page 22, Paragraph 2 – There is no specification provided for the ecological layer. Refer the reader to the CMI WP Section 2.8.2.

Response: The ecological layer requirements are provided in the CQAP (Appendix E). The text on page 22 already includes a reference to the "specification provided in the CMI WP". However, a reference to specific Section 2.8.2 and the CQAP will also be added here.

116. Page 22-23: The discussion regarding backfilling, placement of the ecological layer, and geotextile liners is not clear. In particular, it is unclear whether the "additional material" that is going to be re-used as part of the ecological layer (page 23, first sentence, second paragraph) will be separated from work activities by a geotextile liner. Any material that is not overlain by a geotextile liner to separate it from work activities should not be used as part of the ecological layer.

Response: See response to Comment #28.

LAKE AREA A & ISLAND AREA MECHANICAL DREDGING AND ECOLOGICAL LAYER

117. Page 25, Paragraph 1 – There is no specification provided for the ecological layer. Refer the reader to the CMI WP Section 2.8.2.

Response: See response to Comment #115. The text will be revised to cross-reference the reader to Section 2.8.2 and the CQAP.

DELTA AREA HYDRAULIC DREDGING

118. Page 25, Paragraph 1 – Indicate the volume of material dredged will be reported weekly on the website to be established by Chemours.

Response: Volume reporting will only be published after it has been checked as part of the QA/QC process. This will be completed on a monthly basis for posting to the website.

IN-SITU STABILIZATION

119. Page 30, Paragraph 3 – The text indicates that there are multiple areas that will require in-situ treatment for lead. Figure 2-1 illustrates one area. Please clarify that Figure 2-3 illustrates four areas that will be cross-referenced.

Response: The text will be revised to reflect that there is one soil area (Figure 2-1) and four sediment areas (Figure 2-3).

DELTA AREA ECOLOGICAL AREA PLACEMENT

120. Page 31, Paragraph 1 – See comments #103 and #104 for the Project Operations Plan.

Response: Page 31, paragraph 1 refers to the ecological-layer placement. Comment #103 requests a cross-reference to Drawing #1 and noting where the middle school is. Comment #104 questions the grubbing of root systems and stumps. As such, it is uncertain what this comment pertains to. It is assumed to be related to the ecological-layer placement and, as such, please refer to responses associated with that topic.

121. Page 32, Paragraph 2 – See Comment #74 for the CMI WP and clarify.

Response: Page 32, paragraph 2 refers to the ecological-layer placement. Comment #74 requests that the results of noise and odor monitoring be posted on the website for public access. As such, it is uncertain what this comment pertains to. It is assumed to be related to the ecological-layer placement and, as such, please refer to responses associated with that topic.

METHOD FOR CONTROLLING EXCAVATION ELEVATIONS, DREDGING ELEVATIONS AND HORIZONTAL CONTROL

Upland and Shallow Water Delta Area Surveys

122. Page 33, Paragraph 1 – Sentence 2 indicates that survey spot elevations will be performed as defined in the CMI WP. Reference the reader to where this is defined in the CMI WP and/or CQAP.

Response: A reference to the CQAP (Appendix E) will be added to page 33.

Ecological-Layer Thickness Verification for Open Water Areas

123. Page 35, Paragraph 1 – Table 3-1 of the CQAP states that one core per acre will be collected to verify ecological layer thickness. This is insufficient. Six to eight cores per acre should be performed. Additionally, what would the follow-up action(s) be in the event that one or more of the cores indicates less than 6' of ecological layer placement?

Response: The thickness of the ecological-layer will be determined using multiple lines of evidence; not solely on the result of cores. As described on page 25 of the Operations Plan (Appendix A), lateral and vertical control during excavation and

ecological-layer placement will be provided by use of a Real Time Kinematic Differential Global Positioning System (RTK DGPS) mounted on the dredging excavator and placement barge. The RTK DGPS combined Dredgepack software, inclinometers, and the level cut clamshell buckets will help eliminate over- or under-excavating sediments by accurately positioning the excavator's bucket with every bite. The proposed contour surfaces for dredging and for ecological-layer placement will be programmed into the Dredgepack system giving the operator a heads up, real-time display of target removal depths/elevations and target ecological-layer placement thickness. During dredging and ecological-layer placement, the volume of material excavated or placed will be measured and recorded using slurry flow rate and density measurements. This information will provide real-time control over the area and quantity of material placed each work day.

After placement of the ecological-layer, bathymetric surveys will be completed in addition to the core samples, as described in the CQAP.

In summary, the thickness of the ecological-layer will be determined using the placement barge positioning system, the location and mass balance quantity of material placed each work day, the post-placement surveys and the cores. Since the cores are only one part of the QA/QC system, one core per acre is sufficient.

MATERIAL HANDLING AND TRANSPORT FOR OFF-SITE DISPOSITION

124. Page 36, Paragraph 1 – Clarify how trucks will be brought into the Borough for hauling dredged material/soil.

Response: Trucks awaiting entrance to the project work area will be staged outside the boundaries of the Borough of Pompton Lakes and communication via radio or telephone will be used to indicate approval to mobilize to the project work area.

CMI WP POP: APPENDIX C – CONSTRUCTION SCHEDULE

125. The revised construction schedule needs to include Pre-Construction Activities, those upfront/pre-implementation activities including, but not limited to, permit acquisition, property access, bathymetric survey, vibration monitoring, bench-scale treatability testing and any other activities noted as Pre-Construction Activities in the aforementioned comments.

Response: Section 6.1 (Schedule) will be updated to reflect the anticipated pre-construction tasks being undertaken. The schedule for these activities, if not already initiated, will initiate after CMI WP approval from EPA and continue through mobilization.

Appendix C of the Operations Plan is for remedial construction activities being performed by Sevenson and not pre-construction activities. As such, no changes are being proposed to Appendix C.

CMI WP: APPENDIX B – CONTINGENCY PLAN

1.0 Introduction

126. Page 1, Figure 1 – See Comment #79 of the CMI WP.

Response: Page 1, Figure 1 depicts the emergency notification chain of command. Comment #79 asks for the rationale for the different layers of the ecological-layer. It is assumed that EPA is referring to Comment #95 regarding organization charts and, as such, please refer to the response for this comment.

3.0 Odor Control Methods

127. Page 6, Paragraph 2 – SDSs of representative foaming agents needed to be provided as an appendix.

Response: The text will be revised to include an example of a type of foaming agent that could be used with a descriptor of "such as but not limited to" along with product information.

6.0 Marine Contingency Measures

128. Page 11, Paragraph 2 (Section 6.1) – Page 11 of the Project Operations Plan (Office Infrastructure) indicates that equipment fueling will be from the pier. Please reconcile.

Response: Equipment and boats will be refueled from the pier. The fuel transfer boat will be used to refuel the dredge, capping barge, debris barge, and excavator. This will be clarified on page 11 in the Operations Plan (Appendix A) and page 11 in the Contingency Plan (Appendix B).

10.0 Offsite Disposal Truck Material Spills

129. Page 21, Paragraph 1 – Notification by the trucking company to the Remedial Action Contractor of an accident should be as soon as practical no later than a timeframe less than 24 hours.

Response: The text states "as soon as practical but no later than 24 hours post-accident". The phrase 'no later than 24 hours post accident' will be removed from the text.

11.0 Evacuation Procedures

130. Page 22, Paragraph 1 (Section 11.2) – Indicate in the text that evacuation procedures will be reviewed with the Pompton Lakes Police Department, Fire Department and their emergency management agency.

Response: The text will be revised to reflect that site-specific procedures will be reviewed with the police and fire departments and their respective emergency management entities.

CMI WP: APPENDIX C – HEALTH & SAFETY PLAN

131. Section 3.2.1.8 describes the procedures to monitor heat stress. Who will measure the heart rate, pulse, and oral temperature on site?

Response: Sevenson's Site Safety Officer or designated responsible person will be monitoring for heat stress. Text will be added to reflect this detail.

132. Section 3.2.3.4 describes poisonous plants but it is recommended that the HASP include pictures so personnel can identify them on site.

Response: The HASP will be revised to include pictures of potential poisonous plants that may be encountered during the course of work.

133. Section 7.1.1 describes the real time action level for mercury as .0125 mg/m^3. Reference the derivation of the action level?

Response: The action level was determined by Sevenson to be one half of the American Conference of Governmental Industrial Hygienists (ACGIH) threshold limit value (TLV). This detail will be added to the text in Section 7.1.1.

134. Section 10.6 – Provide the rally point for emergencies.

Response: Rally points will be identified by the Site Safety Officer and Site Superintendent during mobilization. Workers will be frequently briefed on the rally point location during safety meetings and maps showing the rally points will be hung in conspicuous locations (i.e., trailers). The text will be revised to include details on this process.

135. General – Hand signals are referenced as a control measure in several activities. How will site personnel be made aware of the hand signal meanings? Tool box meetings, some other method?

Response: Hand signals will be discussed as part of the Project Safety Analysis (PSA) required by Chemours before the project begins. Additionally, this will be a rotating topic discussed at toolbox meetings.

136. General – Will DEET be provided as personal protection equipment for mosquitoes? The HASP mentions the risks associated with using DEET so it is recommended that a fact sheet for DEET be provided so personnel can be aware of them.

Response: The Site Safety Officer will have an information sheet at the distribution point for the product being used. The fact sheet will be made available to all personnel.

CMI WP: APPENDIX D – TRAFFIC CONTROL PLAN

137. Passaic County will be performing work on two nearby bridges, including Lakeside Avenue. The Passaic County contact for coordinating the work is Aura Mayer of the Passaic County Engineering Department at 973-881-4450. EPA will make the initial inquiry regarding this, but Chemours should be aware of this for purposes of overall schedule planning and implementation.

Response: It is requested that Chemours and its contractors be able to work with Passaic County directly regarding the planned bridge work and overall schedule for implementation.

138. The report recognizes that the intersection of Terhune/Lakeside could be an issue. Propose a signing plan to address this, such as "TRUCKS ENTERING", etc… Other signs to be included could be an intersection warning sign, along with an advisory speed limit. Also, your contractor should clear all vegetation from the intersection that is blocking the sight distance. This can only be done within the County Right-of-Way.

Response: Sevenson will provide suggested signage in consultation with Passaic County prior to initiation of work. If additional vegetation clearing is necessary it will coordinated with Passaic County.

CMI WP: APPENDIX E – CONSTRUCTION QUALITY ASSURANCE PLAN

2.0 Project and Personnel Roles and Responsibilities

139. Page 4, Paragraph 1 – See comment #85 regarding the CMI WP.

Response: Page 4, paragraph 1 discusses project roles and responsibilities. Comment #85 recommends an evaluation of the root depth of plant species to be used for restoration. It is assumed that EPA is referring to Comment #95 and, as such, please refer to the response to that comment.

140. Page 6, Paragraph 2 (Section 2.3) – Indicate who will be responsible for posting results on the website to be established by Chemours. If not a "Technical Team" member, indicate the correct entity.

Response: One of the technical team contractors will be responsible for coordinating and posting results to the website. This will be clarified in Section 2.3.

141. Page 6, Paragraph 2, bullet #1 (Section 2.4) – Provide the QC organization chart in the revised CMI WP.

Response: See response to Comment #95.

142. Page 7, Paragraph 1 (Section 2.5) – Indicate that Chemours will provide the identity of the certified New Jersey laboratories to be used once the laboratory services have been procured.

Response: The text will be revised to state that the name of the laboratory will be provided to EPA once the services have been procured.

4.0 Documentation

143. Page 11, Paragraph 1 (Section 4.1) – Regarding submittals to EPA, the text should reflect that submittals provided to EPA would include those that demonstrably change the scope of work and/or schedule for the implementation of the corrective action.

Response: The first paragraph on page 11 will be edited as follows (insert underlined): "As appropriate, certain submittals (i.e., those that demonstrably change the scope of work and/or implementation schedule for the corrective action) will also be provided to EPA for further review and approval."

144. Page 12, Paragraph 2 (Section 4.2.1) – The permit compliance matrix/database proposed to be prepared that is inclusive of all permits procured should be provided to EPA prior to mobilization.

Response: The matrix/database will be made available to EPA prior to mobilization.

145. Page 13, Paragraph 1 (Section 4.2.2) – The text should reflect that imported materials testing results need to be provided to EPA.

Response: Imported materials will be from a permitted/licensed facility. See also response to Comment #81.

146. Page 13, Paragraph 1 (Section 4.3.1) – The section should include a provision for a weekly construction meeting to be attended by EPA, Chemours, the Remedial Action Contractor that will be based on a written weekly agenda/progress report of performed activities and activities for the following week. The weekly agenda/progress reports would be provided as an appendix in the Construction Completion Report.

Response: The text will be revised to reflect that weekly construction meetings will be held using a standing agenda that will be documented accordingly. These reports will be provided as part of the Construction Completion Report (on CD).

147. Page 13, Paragraph 1 (Section 4.3.1) – It should be noted that copies of Daily Construction Summary Reports should be available to EPA upon request.

Response: The text will be revised to state that daily reports will be available in the site trailer.

148. Page 15, Paragraph 1 (Section 4.3.1) – Revise the text to reflect that the photographic log will be submitted to EPA as part of the Construction Completion Report.

Response: The first paragraph on page 15 will be edited to note that the photographic log will be included in the Construction Completion Report (on CD).

149. Page 15, Paragraph 2 (Survey Data) – The text states a post-remediation survey will be performed to document final remediation conditions and verify placement of all ecological layer material. Cross-reference Table 3-1 of the CQAP which describes the surveys to be performed.

Response: The text will be revised to cross reference Table 3-1 of the CQAP.

150. Page 15, Paragraph 3 (Survey Data) – Indicate that the survey results will be included as an appendix in the Construction Completion Report.

Response: Summary of final survey results (note – not detailed data from each point) will be included in the report.

151. Page 16, Paragraph 2 (Section 4.3.2) – Indicate that a summary of the Monitoring Data Report will be a component of the weekly agenda/progress reports.

Response: This will be included as a standing topic on the weekly agenda, and will be noted in the text.

152. Page 17, Paragraph 1 (Section 4.3.3) – Disposal records for soil/sediment/debris should be provided as an appendix in the Construction Completion Report.

Response: Disposal records will be included as an appendix in the Construction Completion Report (on CD).

153. Page 19, Paragraph 1 (Section 4.4.2) – See Comments #80 and #81.

Response: Section 4.4.2 discusses the completion report. Comments #80 and #81 are specific to restoration. It is unclear what the actual comment is referring to.

154. Page 19, Paragraph 1 (Section 4.5) – Construction deficiencies and corrective measures need to be summarized in the Construction Completion Report.

Response: Construction deficiencies and associated corrective measures will be summarized in the Construction Completion Report.

155. Page 20, Paragraph 2 (Section 4.5.1) – Problems/deficiencies should be summarized in the weekly agenda/progress report.

Response: This will be included as a standing topic on the weekly agenda, and will be noted in the text.

156. Page 22, top (Section 4.6) – The text should indicate that changes to the QC measures will be communicated to EPA for concurrence prior to implementation.

Response: Any modifications to QC measures would not change compliance with the CMI WP but rather may change how compliance is measured. The final result would still be data to support achievement of the CMI WP requirements.

The text will be revised to reflect that any changes will be communicated to EPA for concurrence prior to implementation.

157. Table 3-1 (page 2 of 9) – Regarding the Uplands survey, etc., what inventory is being referred to?

Response: This refers to efforts described in Section 2.2 of the CMI WP.

158. Table 3-1 (page 2 of 9) – Regarding permits, provide a note that permits will be tracked via a permit compliance matrix/database.

Response: As noted in the second paragraph on page 12, a permit compliance matrix/database will be prepared inclusive of all permits. This will be added to Table 3-1.

159. Table 3-1 (page 3 of 9) – Under "Sheet pile installation/extraction" (QA/QC Elements), there is a notation to "See also monitoring rows". Clarify what that means.

Response: This is a reference to also see the applicable monitoring described in this same table under row 'B. Monitoring'. The text will be modified to clarify this reference.

160. Table 3-1 (page 4 of 9) – Under "Uplands excavation" (QA/QC Elements), the same comment as in Comment #139.

Response: Comment #139 references Comment #85 which is specific to restoration, and not applicable to this page of the table. As such, it is unclear as to what this comment is referring to.

161. Table 3-1 (page 6 of 9) – Under “Material handling, transport, and disposal”, there is a notation to “See Appendix A”. The appropriate content from Appendix A should be inserted in the columns with the notation.

Response: The reference will be corrected to Attachment B (Waste Management Plan). In order to avoid extensive duplication, a summary sentence will be added to Table 3-1.

162. Table 3-1 (page 7 of 9) – Under “Restoration Earthwork”, list the intervals referenced in the “Measurement Approach” column.

Response: As stated under this column, intervals will be consistent with and in accordance to New Jersey requirements. The words “at intervals” will be deleted from the text. The reference document will be added to the first bullet of this column which is NJDEP’s April 2015 Fill Material Guidance for SRP Sites, Version 3.0.

163. Table 4-1, Page 1 – Under “Construction – All Activities”, list the weekly agenda/progress report as a documentation requirement.

Response: The weekly agendas/progress reports will be kept in the site trailer for information. Table 4-1 will be revised accordingly.

164. Attachment B (Project-Specific Waste Management Plan), Page 8 (Section 4.2.3, Paragraph 2) – Where will the permitted waste accumulation area be located?

Response: Used oil and hydraulic fluids will be stored in approved containers in the waste accumulation area, which will be in the Uplands area on the side opposite the Lake, near the Haul Road shown on Figure 2 of the Operation Plan. The containers will be placed in secondary containment bins at all times.

165. Attachment B (Project-Specific Waste Management Plan), Page 10 (Section 6.0) – Wouldn’t a spill of contaminated soil/sediment on the truck haul route enact spill reporting?

Response: The text on page 10 will be updated to include this scenario.

166. Attachment B (Project-Specific Waste Management Plan), Page 10 (Section 6.3) – Clarify the entity/project team member responsible for spill reporting to Federal, State and Local agencies.

Response: The Chemours Project Director, or his designee, has this responsibility. The text will be revised to reflect this statement.