



Chemours™

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

April 27, 2017

Mr. Anthony Cinque  
New Jersey Department of Environmental Protection  
Division of Responsible Party Site Remediation  
401 East State Street, 5<sup>th</sup> Floor  
P.O. Box 028  
Trenton, NJ 08625-0028

**RE: Progress Report – 1<sup>st</sup> Quarter 2017  
Pompton Lakes Works Site  
Pompton Lakes, New Jersey  
PI#007411**

Dear Mr. Cinque:

In accordance with the Administrative Consent Order for the Pompton Lakes Works Site, enclosed for your review is the 1<sup>st</sup> Quarter 2017 Progress Report covering activities during January 1, 2017 through March 31, 2017. A vapor intrusion program summary for the reporting period is also provided as part of this quarterly progress report.

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

Sincerely,

A handwritten signature in cursive script that reads "David E. Epps".

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

cc: Perry Katz – USEPA Region II  
Ed Merrill – Borough of Pompton Lakes Environmental Officer  
Kevin Boyle – Borough of Pompton Lakes Borough Administrator  
PLW Central File

Attachments (2)

1<sup>st</sup> Quarter 2017 Progress Report  
Pompton Lakes Works Site  
Pompton Lakes, New Jersey

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## 1.0 Activities Scheduled

### Onsite Soils

- Remedial Design
  - Develop schedule for submitting revised CMS once use of alternative remediation standards is addressed by USEPA.

### Onsite Groundwater

- Remedial Investigation
  - Address comments, if any, on the *Draft Onsite Groundwater Bedrock Investigation Work Plan* submitted on April 26, 2016.
- Remedial Design/Pilot Study
  - Implement ISCO design testing program and evaluate results.
- Remedial Action
  - MW-107R
    - No activities planned.
  - Groundwater Pump & Treat System:
    - Continue GWETS system operation.
    - Conduct monthly sampling of system influent and effluent.
    - Collect quarterly water level measurements from monitoring wells and piezometers.
    - Submit 4<sup>th</sup> Quarter 2016 GWETS operating/monitoring reports.

### Offsite Groundwater

- Remedial Design
  - Hydraulic surcharging pilot study
    - Submit response to comments on NJDEP/USEPA comments to the *Implementation Work Plan – Hydraulic Surcharging Pilot Study* and Permit-by-Rule (received on December 12, 2016).
- Remedial Action
  - Vapor Intrusion:
    - Continue implementation of the VIRMWP.
    - Hold status calls with NJDEP/USEPA, as needed.

### Groundwater Compliance Monitoring Program

- Submit *2016 Annual Groundwater Report* on February 28, 2017.
- Address comments, if any, on the *2014 Annual Groundwater Report* which was submitted on February 27, 2015.
- Address comments, if any, on the *2015 Annual Groundwater Report* which was submitted on February 29, 2016.
- Address comments, if any, on the *Response to NJDEP Correspondence dated 2 June 2016 – Comments on 2016 Classification Exception Area – Biennial Certification* which was submitted on August 3, 2016.

### Pompton Lake Delta

- Address comments, if any, on the *Draft Ramapo-Pompton River Sediment Investigation Report* which was submitted on July 15, 2015.
- Address comments, if any, on the *Draft Long-Term Monitoring Plan* submitted on June 2, 2016.
- Address comments, if any, on the *Final Technical Memorandum – Proposed Revised Removal Area for Uplands Area A1* submitted on August 25, 2016.
- Continue implementation of the remedy including the following activities (weather-dependent):
  - Continue routine inspections of the site and work areas in accordance with approved permits and safety conditions,
  - Complete site reconfiguration for hydraulic dredging process (e.g., internal site roads, installing equipment, etc.),
  - Remove equipment not needed for 2017 work,
  - Complete water treatment from mechanical dredging,
  - Install high energy supply to site for sediment processing equipment associated with hydraulic dredging,
  - Finalize installation of hydraulic dredging sediment processing and water treatment system, and
  - Complete eco-layer placement in Island and Area A and removal of remaining material/backfill of Area A1.

### Wanaque River

- Address comments, if any, on the *Response to NJDEP Comments – Wanaque River Interim Remedial Measure Data Collection Activities Report* which was submitted on November 9, 2015.

## **2.0 Activities Completed**

### Onsite Soils

- Remedial Design
  - Awaiting review comments from USEPA to develop a schedule.

### Onsite Groundwater

- Remedial Investigation
  - No comments have been received to date on the *Draft Onsite Groundwater Bedrock Investigation Work Plan*.
- Remedial Design/Pilot Study
  - Conducted ISCO design testing program in January 2017. Preliminary results were evaluated and additional groundwater sampling was conducted in March 2017 to further assess the testing program data and path forward.
- Remedial Action
  - MW-107R
    - No activities conducted.
  - Groundwater Pump & Treat System:
    - Continued GWETS system operation.
    - Conducted monthly sampling of system influent and effluent.
    - Collected quarterly water level measurements from monitoring wells and piezometers.
    - Submitted 4<sup>th</sup> Quarter 2016 GWETS operating/monitoring reports.

### Offsite Groundwater

- Remedial Design
  - Hydraulic surcharging pilot study
    - Submitted response to comments on NJDEP/USEPA comments to the *Implementation Work Plan – Hydraulic Surcharging Pilot Study* and Permit-by-Rule on January 31, 2017.
    - Received approval of response to comments (identified above) from NJDEP/USEPA and published public notice in *Suburban Trends* on March 26, 2017.
- Remedial Action
  - Vapor Intrusion:
    - Continued implementation of the VIRMWP.
    - Held status calls with NJDEP/USEPA, as needed.

### Groundwater Compliance Monitoring Program

- Submitted *2016 Annual Groundwater Report* on February 28, 2017.
- No comments have been received to date on the *2014 Annual Groundwater Report* which was submitted on February 27, 2015.
- No comments have been received to date on the *2015 Annual Groundwater Report* which was submitted on February 29, 2016.
- No approval has been received to date on the *Response to NJDEP Correspondence dated 2 June 2016 – Comments on 2016 Classification Exception Area – Biennial Certification* which was submitted on August 3, 2016.

### Pompton Lake Delta

- No comments have been received to date on the *Draft Ramapo-Pompton River Sediment Investigation Report* which was submitted on July 15, 2015.
- No comments have been received to date on the *Draft Long-Term Monitoring Plan* submitted on June 2, 2016.
- No approval has been received to date on the *Final Technical Memorandum – Proposed Revised Removal Area for Uplands Area A1* submitted on August 25, 2016.
- Continued implementation of remedy:
  - Continued routine inspections of the site and work areas in accordance with approved permits and safety conditions,
  - Continued site reconfiguration for hydraulic dredging process (e.g., internal site roads),
  - Continued removal of equipment not needed for 2017 work,
  - Completed water treatment from mechanical dredging (transported offsite to approved facility),
  - Continued installation of high energy supply to site for sediment processing equipment associated with hydraulic dredging,
  - Continued installation of hydraulic dredging sediment processing and water treatment system, and
  - Began installation of turbidity curtain around Acid Brook Delta Area.

### Wanaque River

- No comments have been received to date on the *Response to NJDEP Comments – Wanaque River Interim Remedial Measure Data Collection Activities Report* which was submitted on November 9, 2015.

### 3.0 Activities Not Completed

- None.

### 4.0 Problems/Delays Encountered

- None.

### 5.0 Deviations to Approved Work Plan(s)

- None.

### 6.0 Revised Schedule

- None.

### 7.0 Status of Permit Applications

- None.

### 8.0 Tabulation of Data, Correspondence, and Documents

- Tabulation of Data
  - Monthly influent and effluent results are included in operational reports.
  - Vapor intrusion analytical results are submitted to NJDEP when received from laboratory.
  - Data tabulated, as applicable, and included in scheduled deliverables for submittal to NJDEP/USEPA.
- Tabulation of Correspondence and Documents

<b>Submission Date</b>	<b>Deliverable Title</b>
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January 31, 2017	4 <sup>th</sup> Qtr. 2016 Site-wide Progress Report / VI Progress Report
January 31, 2017	4 <sup>th</sup> Qtr. 2016 GWET Operating Summary
January 31, 2017	Response to NJDEP/USEPA Correspondence dated 28 November 2016 Review of <i>Implementation Work Plan - Hydraulic Surcharging Pilot Study</i>
February 28, 2017	<i>2016 Annual Groundwater Report</i>
March 7, 2017	Response to Comments to NJDEP Review of 4 <sup>th</sup> Qtr. 2016 Groundwater Extraction & Treatment Operating Summary

### 9.0 Activities Scheduled for Next Reporting Period (2<sup>nd</sup> Quarter 2017)

#### Onsite Soils

- Remedial Design
  - Develop schedule for submitting revised CMS once use of alternative remediation standards is addressed by USEPA.

#### Onsite Groundwater

- Remedial Investigation
  - Address comments, if any, on the *Draft Onsite Groundwater Bedrock Investigation Work Plan* submitted on April 26, 2016.
- Remedial Design/Pilot Study
  - Complete evaluation of ISCO design testing program results and discuss path forward with NJDEP and USEPA.

- Remedial Action
  - MW-107R
    - Conduct annual sampling at MW-107R for total organic carbon and transmit results in 2<sup>nd</sup> Qtr. 2017 Site Progress Report (due July 31, 2017).
  - Groundwater Pump & Treat System:
    - Continue GWETS system operation.
    - Conduct monthly sampling of system influent and effluent.
    - Collect quarterly water level measurements from monitoring wells and piezometers.
    - Submit 1<sup>st</sup> Quarter 2017 GWETS operating/monitoring reports.

#### Offsite Groundwater

- Remedial Design
  - Hydraulic surcharging pilot study
    - Assist NJDEP, as needed, on public hearing if requested by public.
- Remedial Action
  - Vapor Intrusion:
    - Continue implementation of the VIRMWP.
    - Hold status calls with NJDEP/USEPA, as needed.

#### Groundwater Compliance Monitoring Program

- Conduct semi-annual sampling event.
- Address comments, if any, on the *2014 Annual Groundwater Report* which was submitted on February 27, 2015.
- Address comments, if any, on the *2015 Annual Groundwater Report* which was submitted on February 29, 2016.
- Address comments, if any, on the *Response to NJDEP Correspondence dated 2 June 2016 – Comments on 2016 Classification Exception Area – Biennial Certification* which was submitted on August 3, 2016.
- Address comments, if any, on the *2016 Annual Groundwater Report* which was submitted on February 28, 2017.

#### Pompton Lake Delta

- Address comments, if any, on the *Draft Ramapo-Pompton River Sediment Investigation Report* which was submitted on July 15, 2015.
- Address comments, if any, on the *Draft Long-Term Monitoring Plan* submitted on June 2, 2016.
- Address comments, if any, on the *Final Technical Memorandum – Proposed Revised Removal Area for Uplands Area A1* submitted on August 25, 2016.
- Continue implementation of the remedy including the following activities (weather-dependent):
  - Continue routine inspections of the site and work areas in accordance with approved permits and safety conditions,
  - Complete eco-layer placement in Lake Area A,
  - Complete installation of high energy supply to site for sediment processing equipment associated with hydraulic dredging,
  - Complete site reconfiguration for hydraulic dredging process,
  - Complete installation of hydraulic dredging sediment processing and water treatment system,
  - Mobilize hydraulic dredges and install dredge line,
  - Complete installation of turbidity curtain and conduct fish relocation,

- Complete dewatering and water treatment system testing, and
- Begin hydraulic dredging, processing, and offsite disposal of sediment in the Acid Brook Delta Area.

Wanaque River

- Address comments, if any, on the *Response to NJDEP Comments – Wanaque River Interim Remedial Measure Data Collection Activities Report* which was submitted on November 9, 2015.

Schedule of Regulatory-Required Deliverables for Site

<b>Submission Timeline</b>	<b>Deliverable Type</b>
April 28, 2017	1 <sup>st</sup> Qtr. 2017 GWET Operating Summary
April 28, 2017	1 <sup>st</sup> Qtr. 2017 Site-wide Progress Report / VI Progress Report

Schedule of Anticipated Field Activities for Site

<b>Date of Activity</b>	<b>Field Activity Description</b>
Apr/May/June 2017	System influent and effluent sampling
May 2017	Semi-annual groundwater sampling
May 2017	Water level measurements

## 1.0 ACTIVITIES COMPLETED

### Expanded Investigation Area (EIA)/Vapor Mitigation Area (VMA) Status

- There are currently a total of 76 properties identified as part of the EIA, broken down as follows:
  - Original EIA properties – 32
  - Properties changed from EIA to VMA based on sub-slab results – 10
  - Properties added to EIA based on adjacent sub-slab results – 10
  - 200-foot Buffer/CEA #4 boundary Expanded EIA locations – 39
  - Additional properties added by NJDEP – 2
  - Additional properties added by USEPA - 3
- There are currently a total of 422 residential properties (includes those properties changed from EIA to VMA based on sub-slab results) and 1 industrial property identified as part of the VMA (423 total properties). Two properties previously in the VMA underwent termination sampling and were approved for termination by NJDEP/USEPA. The systems were relinquished to the property owners and, as such, are not included in the total count of 422 properties. There are an additional 13 empty lots (no structures) in the VMA (also not included in total count).

### Work Plan Implementation

#### *Sampling*

- Post-mitigation indoor/outdoor air sampling was completed at one property.
- Long-term monitoring indoor/outdoor air sampling was completed at two properties.
- Termination sampling (sub-slab soil gas, indoor/outdoor air) was completed at one property.

#### *System Design Visits/Drawings and Approval Process*

- No work was completed during the reporting period.

#### *System Installation*

- A vapor mitigation system was installed at one property.

#### *System Operation & Maintenance*

- Annual O&M inspections were completed at properties where access was granted.

### Communications

- Talked with residents during the course of the reporting period, at their request, to discuss the vapor program and any questions/concerns they had about sampling, design, and system installation.
- Calls were held with NJDEP and USEPA, as needed, to update the project team on the status of activities and any issues requiring discussion/approval.



## **Submittals**

- The 4<sup>th</sup> Quarter 2016 Status Report for the vapor intrusion program was submitted on January 31, 2017.
- Laboratory packages and required electronic data deliverables were transmitted to NJDEP as they were submitted to Chemours from the laboratory (TestAmerica). One data package (2 samples) was submitted during the reporting period.
- Results were mailed to property owners as they were received by Chemours from the laboratory. One letter was transmitted during the reporting period.

## **2.0 PROBLEMS/DELAYS ENCOUNTERED AND RECOMMENDED SOLUTIONS**

- There continues to be a number of property owners located in both the EIA and VMA that have been non-responsive. These owners have been contacted on numerous occasions via telephone as well as dropping postcards off at their homes. Work continues in conjunction with NJDEP and USEPA in contacting these owners.

## **3.0 DEVIATIONS TO APPROVED WORK PLAN(S)**

- No deviations noted during the reporting period.

## **ACTIVITIES SCHEDULED FOR NEXT REPORTING PERIOD (2<sup>nd</sup> QTR 2017)**

### **EIA/VMA Status**

- Continue to track status of work conducted in EIA and VMA.

### **Work Plan Implementation**

- Continue implementation of vapor intrusion field program which includes sampling, design testing, installation of sub-slab depressurization systems, post-mitigation indoor air sampling, termination sampling, reporting, and operation & maintenance visits.

### **Communications**

- Provide NJDEP and USEPA with status updates regarding the vapor intrusion program.

### **Submittals**

- Transmit analytical data/results to NJDEP and property owners as sampling is completed and reported by the laboratory.
- Submit *2016-2017 Operation & Maintenance Report*.
- Submit *Revised Vapor Interim Remedial Measure Work Plan*.