



# POMPTON LAKES WORKS SITE PUBLIC AVAILABILITY SESSION

**MARCH 30, 2017**





## AGENDA

- Pompton Lake Study Area Dredging/Removal
  - ✓ Overview/Summary of Season 1 Work (2016)
  - ✓ Season 2 Work (2017)
  - ✓ Community Concerns
  - ✓ Schedule
  
- Hydraulic Surcharging Pilot Study
- On-site In-situ Chemical Oxidation Pilot Study
- On-site Corrective Measures Study
- Vapor Intrusion Status Update



## “DREDGING” PROJECT OVERVIEW

- Pompton Lake Study Area (Dredging/Off-site Disposal of Sediments)
  - Acid Brook Delta (ABD) Sediments - Approx. 36 Acres
  - Pompton Lake - Lakeside Ave. Bridge to Pompton Lake Dam
    - ✓ Area A - Approx. 0.5 Acres
    - ✓ Island Area - Approx. 2.5 Acres
  - ABD Upland Soil Areas (Excavation/Off-site Disposal)
    - ✓ Removal From 16 Delineated Areas With Depths Ranging from 0.5 to 9 ft. Below Ground Surface
  - Eco-layer Placement in ABD/Island Area/Area A
    - ✓ 6” Layer to Facilitate Biological Growth
  - Restoration/Long-term Monitoring



# CORRECTIVE ACTION IMPLEMENTATION AREA



<p><b>LEGEND</b></p> <ul style="list-style-type: none"> <li>APPROXIMATE TALL POLE POSITION FOR 2017</li> <li>40 FOOT TOPOGRAPHIC CONTOUR</li> <li>10 FOOT CHOROPLETH CONTOUR</li> <li>CORRECTIVE ACTION IMPLEMENTATION AREA</li> <li>AREA OF TRANSFORMED POND</li> </ul>	<p><b>NOTES</b></p> <ol style="list-style-type: none"> <li>1. THIS DATA WAS PREPARED BY R.C. DESIGN, INC. AND IS BASED ON Aerial, 1:25000 Scale, Vertical Aerial Photography, 1998, and 1:25000 Scale, 2007, and 1:25000 Scale, 2011, Aerial Photography. THIS DATA IS FOR INFORMATIONAL PURPOSES ONLY. IT DOES NOT REPRESENT A GUARANTEE OF ACCURACY OR LIABILITY FOR ANY USE OF THIS DATA.</li> <li>2. THIS CORRECTIVE ACTION IS BASED ON A REPORT BY R.C. DESIGN, INC. DATED IN 2011 BY THE NAME OF "POND".</li> <li>3. FOR THE CHESLEN POLYCOB AND ASSOCIATED WASTE LOCATIONS.</li> </ol>	<p>DUPONT POMPTON LAKES WORKS POMPTON LAKES, NEW JERSEY</p> <p><b>CORRECTIVE ACTION IMPLEMENTATION AREAS</b></p> <p>FIGURE</p>
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## SEASON 1 (2016) SUMMARY

- Approx. 28,810 Cubic Yards (CY) Impacted Soil/Sediment Excavated/Dredged, Processed and Disposed Off-site
- Volume Disposed Off-site Involved Transport of 1,955 Loads of Impacted Material
- Over 30,000 Safe Man-hours Worked With No Injuries/Incidents
- No Exceedances of Action Levels Related to Turbidity in Lake, Perimeter Dust and Mercury Air Vapor Monitoring
- Treated Water From Dredged Sediment Discharged to Lake Met Criteria Listed in the NJDEP Permit Except During One Discharge Event - Addressed by Chemours



## SEASON 2 (2017) PREPARATORY ACTIVITIES

- Installation of Treatment and Other Equipment in the Work Area
- Site Reconfiguration (e.g. Internal Site Roads) to Accommodate Hydraulic Dredging
- Installation of an Energy Supply to the Work Area For Sediment Processing Equipment to Support Hydraulic Dredging
- Pre-Dredging Water Activities (e.g. Sampling For Waste Characterization Purposes as Required by Disposal Facility and Bathymetric Surveying)



## SEASON 2 (2017) PREPARATORY ACTIVITIES

- Preparing the Acid Brook Delta for Dredging Including Installation of a Turbidity Curtain and Fish Relocation
- Routine Inspection of Site and Work Areas per Approved Permits and for Safety Purposes
- Modification of New Jersey Department of Environmental Protection Permits to be Consistent With Changes in the Sediment Treatment Processes



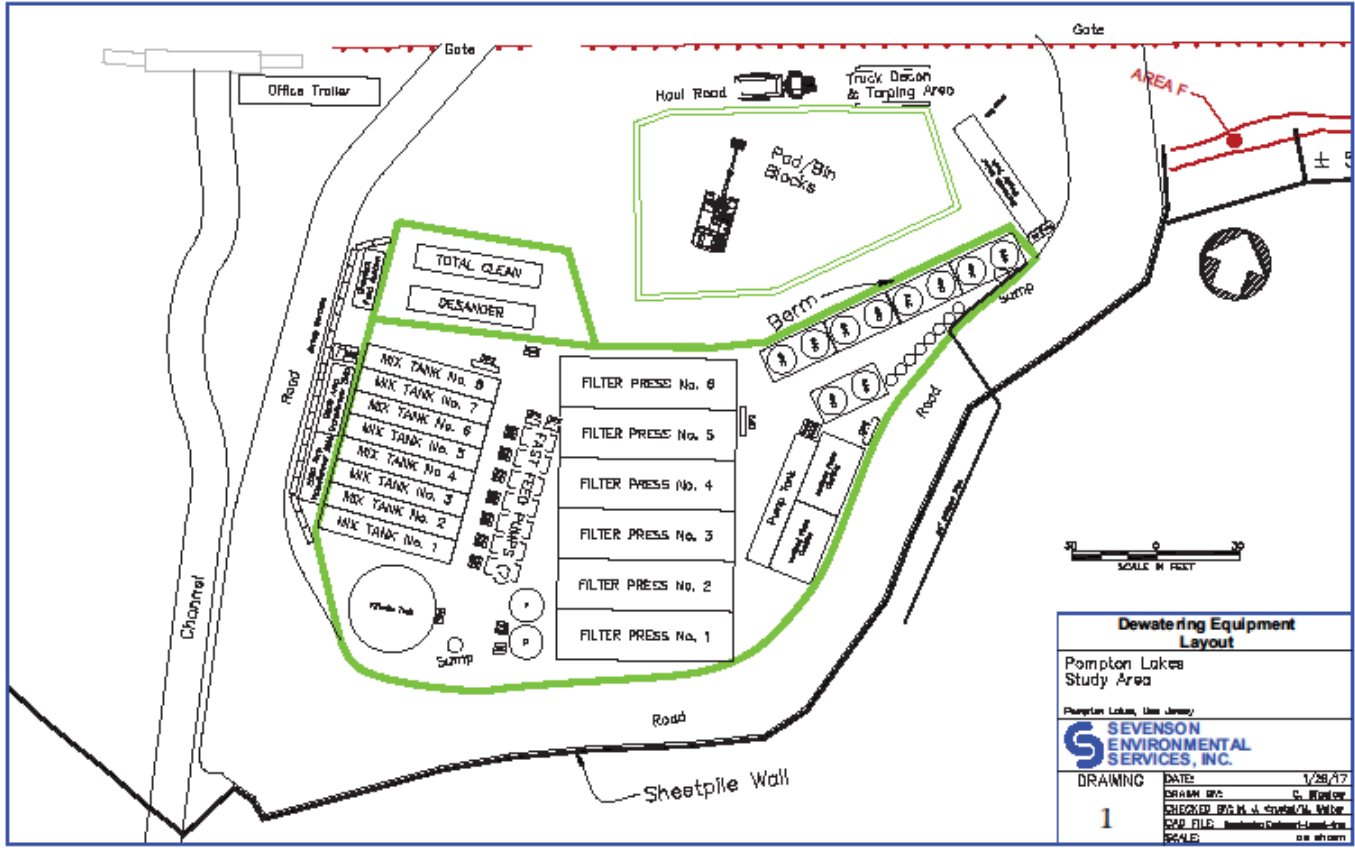
## SEASON 2 (2017) PLANNED ACTIVITIES

- Excavate Approximately 1 CY Soil From Area A1 in Uplands Soil Area - Could Not be Excavated in 2016 Due to Presence of Sewer Pipe
- Hydraulic Dredging and Ecological Layer Placement Within 36-acre ABD
- Perform Turbidity and Air Perimeter Monitoring in Accordance With EPA-Approved Work Plan
- Complete Ecological Layer Placement in the Island Area and Area A— Weather Conditions Prevented Completion in 2016
- Field Oversight by EPA
- EPA Will Provide Weekly Community Updates Once Dredging is Initiated





# Site Layout





## 2017 SEQUENCE OF ACTIVITIES

- Currently in Progress/Through April
  - Remobilize/Site Preparation
  - Install Dredging and Water Treatment Plan Equipment
  - Install Turbidity Curtain/Fish Relocation
  - Eco-Layer Placement at Area A
  - Fish Relocation
- Dewatering/Water Treatment System Testing - early May
- Hydraulic Dredging of ABD - May through November
- Initiate Eco-layer Placement Island Area/ABD - November/December
- Winter Shutdown - December



## COMMUNITY CONSIDERATIONS -TRAFFIC CONTROL

- Traffic Control Measures Successfully Implemented in 2016
- Work Hours
  - ✓ M-F Set-Up 6AM-7AM/Work 7AM-7PM/Clean-Up 7PM-7:30PM
  - ✓ Saturday Hours, if Needed
- Trucking Restrictions
  - ✓ School Opening/Closing - Construction-Related Traffic Will be Prohibited
  - ✓ Restricted Times - 7:45AM - 8:30AM and 2:30PM - 3:15PM
  - ✓ Flagmen Utilized to Control Entry/Exit to the Work Site
- Heavy Vehicle Dispatch
  - ✓ Random Check of Trucks to Assess Compliance With Following Route
  - ✓ Wayne Police at Lakeside Ave./Terhune Dr. Intersection Due to Heavy Traffic



## COMMUNITY CONSIDERATIONS -SITE SECURITY/NOISE/ODORS

### SITE SECURITY

- No Issues With Site Security in 2016

### ODORS

- No Issues With Odors
- Contaminants of Concern (i.e. Mercury/Lead) Not Expected to Cause Odors
- Nuisance Odors Associated With Natural Material/Decay Processes in Pompton Lake Not Detected Except At Processing Area

### NOISE

- No Issues With Noise in 2016
- Sediment Processing/Water Treatment Equipment May Generate Short-term Noise But Below Thresholds For Further Action
- Concerns With Vibration in Homes Investigated



## COMMUNITY CONSIDERATIONS - AIR MONITORING

### Dust Monitoring/Verification

- Continuous Real-Time Monitoring For Dust During Soil Excavation in Uplands and Sediment Handling/Processing
  
- Fixed Locations Along Work Area Perimeter Including One Location Adjacent to Lakeside Middle School
  
- No Action Level Exceedances Associated With Work Area Activities
  
- Dust Control Measures Implemented
  - ✓ Water Misting During Tree Clearing
  - ✓ Water Mister Stationed on Fence Along Lakeside Avenue
  - ✓ Water Misting During Sediment Processing
  - ✓ Truck Spraying Water on Site Haul Roads and Lakeside Avenue
  - ✓ Street Sweeping Along Lakeside Avenue



## COMMUNITY CONSIDERATIONS - AIR MONITORING

### Mercury Vapor Monitoring/Verification

#### 2016

- Real-Time Monitoring For Mercury Vapor at Downwind Location With a Portable Mercury Vapor Analyzer Completed During Uplands Soil Excavation
- Voluntary Monitoring For Mercury Vapor With Portable Mercury Vapor Analyzer Performed in Vicinity of Island Area
- No Exceedances of Action Levels

#### 2017

- Daily Monitoring at the Downgradient Dust Station Location



## COMMUNITY ENGAGEMENT ACTIVITIES

- Presence On-site to Respond to Questions/Concerns
- On-going EPA Availability at Municipal Building on Thursdays to Answer Questions Regarding Pompton Lake Study Area Clean-up
- Access to Website to Observe Monitoring Data During Construction
- Weekly Community Updates Sent by EPA Via Email Summarizing Work Activities



## HYDRAULIC SURCHARGING PILOT STUDY

- Work Plan Including Final Design and Permit-by-Rule (PBR) Application Submitted to EPA/NJDEP Has Been Approved
- Approved Work Plan Will be Posted on EPA/NJDEP Websites
- Public Notice Issued March 26<sup>th</sup> With a 30-Day Public Comment Period and Opportunity for Public Hearing, Which Has Been Requested
- Written Comments Can be Submitted to NJDEP and Chemours/Oral Comments Will be Heard at Public Hearing, Which Has Been Requested
- Once All Permits Obtained, Implementation of Pilot Study to be Initiated





## IN-SITU CHEMICAL OXIDATION (ISCO) PILOT STUDY

- Pilot Study Evaluating An Additional Technology to Address Groundwater
- ISCO Work Plan Approved/Permit-by-Rule Issued September 2016
- Implementation of Pilot Study in Phases
  - ✓ Design Testing to Optimize Operational Parameters
  - ✓ Submit Final Pilot Study Work Plan With Final Design
  - ✓ Full-Scale Pilot Study Implementation
- Design Testing Fieldwork Implemented to Optimize Operational Parameters and Collect Info Regarding Technology Feasibility/Implementability Given Hydrogeologic and Geochemical Conditions Existing in Subsurface



## IN-SITU CHEMICAL OXIDATION (ISCO) PILOT STUDY

- Scope of Work
  - Installation of Injection/Monitoring Points in Five Areas - Completed December 2016
  - Injection of Sodium Persulfate/Hydrogen Peroxide Solution at Varying Depths and Collection of Performance Monitoring Data - Completed January 2017
- Evaluation of Data Determined that Additional Information Needed to Design Implementation of Full-Scale Pilot Study
  - Data Collection Efforts to be Completed in Next Several Weeks (weather dependent)
  - Evaluation of Additional Data Necessary to Define Steps Required for Feasibility Evaluation and/or Final Design



## CORRECTIVE MEASURES STUDY (CMS)

- Initial EPA/NJDEP CMS Comments Transmitted to Chemours
- Additional EPA/NJDEP CMS Comments to be Transmitted to Chemours Regarding Their Proposed Site Remediation Standards/Land Use
- Chemours to Revise CMS Based on NJDEP/EPA Comments
- Once Reviewed by EPA/NJDEP, CMS Will be Presented to Community Via Public Information Session
- Draft Permit Modification Will be Prepared With a Public Hearing/Public Comment



## VAPOR INTRUSION (VI) UPDATE

- Number of Vapor Mitigation Systems Installed - 335
- Termination Sampling Completed - 2
- 1 Property in Process of Termination Sampling
- EPA/NJDEP and/or Chemours Continue to be Available to Answer Questions About the VI Program and Communication Package Sent in July 2015



## CLOSING

- Questions??
  
- Contacts:
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