

*Region 2 serving the people of New Jersey,
New York, Puerto Rico and the U.S. Virgin Islands*



DuPONT POMPTON LAKES WORKS PUBLIC AVAILABILITY SESSIONS

NOVEMBER 14, 2013



11/15/2013



COMMUNITY INVOLVEMENT UPDATE

- Meetings with Concerned Residents/Local Officials/CAGs at Their Request
- Notifications & Outreach Via Email/Pompton Lakes Website/EPA's Social Media Channels/Posting & Distributing Flyers in Person Throughout Pompton Lakes
- EPA Staff Will Hold Weekly "Open Hours" From 10AM to 4PM to Answer Questions/Address Concerns Beginning November 21st at Municipal Building
- Summer: August 2013 Newsletter Issued to Inform Community of Progress & Held Two Public Information Sessions on June 19th



STATUS OF PERMIT APPEALS

- Permit Appeals by DuPont & Passaic River Coalition -
 - February 2013
- Stay of the Permit Appeal Requires:
 - August 26, 2013: Progress Status Report
 - October 25, 2013: EPA Response if Issues Unresolved
- August 26, 2013 Progress Status Report
 - Progress Reported On Sediment Sampling/Eco Investigations
 - Request to Extend Stay of Permit Appeal Granted Until January 2014
 - Status Update Required December 2013



STATUS OF PERMIT APPEALS

- Communication with Passaic River Coalition
 - Conference Call September 16th Regarding Sediment Sampling/Eco Investigations & Community Engagement
 - Follow-up Meeting to be Scheduled in Early December to Discuss Evaluation of Sediment Sampling Data



SEDIMENT SAMPLING PLAN

- EPA/NJDEP/USFWS/DuPont Series of Conference Calls/Meetings to Develop Scope of Work for Sediment Sampling
- DuPont Submitted and EPA/NJDEP Reviewed/Approved DuPont's *2013 Sediment Sampling Plan*
 - DuPont Implemented Field Work - Completed August 2013
 - Analysis of Over 300 Samples Completed
 - DuPont Reviewing Data and Preparing Report
 - EPA Has Initiated a Review on Data Provided to Date



SEDIMENT SAMPLING PLAN - FIELD WORK

- Bathymetry/Side Scan Sonar - Provides Update on Physical Characteristics of River Bed/Lake Bottom and Sediment
- 30 Samples for Grain Size Distribution - Assess Physical Properties of River Bed Material
- Approx. 108 Sediment Samples for Mercury Analysis - Address Uncertainty that Historical Data May Not be Representative of Current Conditions
- Approx. 220 Sediment Samples for Mercury Analysis - Determine Mercury Concentrations Where the Sediment Surface Changed and Areas with Limited Data (e.g. lower Ramapo River)
- General stream characterization - Field Mapping of Potential Sampling locations downstream of Pompton Dam to Riverside Park

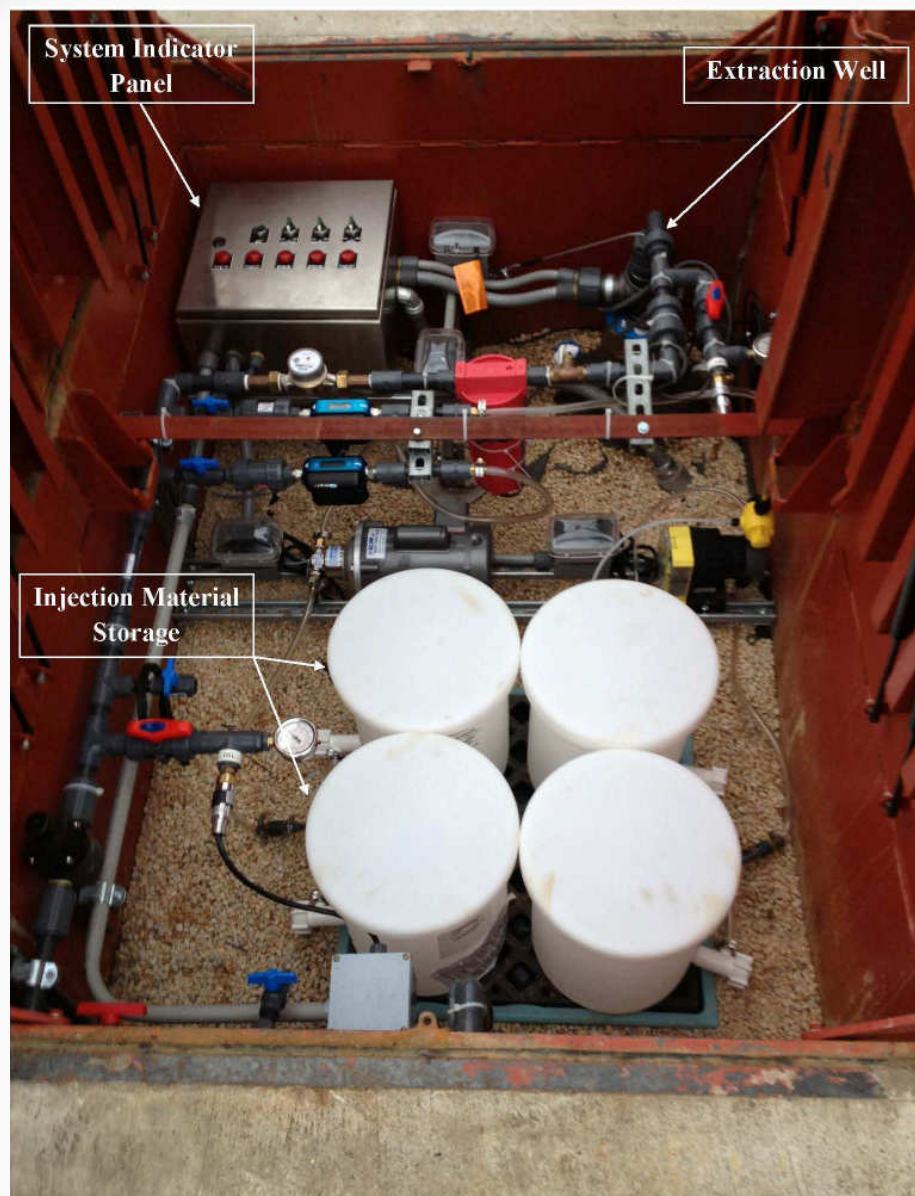


ECOLOGICAL INVESTIGATIONS

- Multiple Scopes of Work Submitted by DuPont for Eco Investigations for EPA/NJDEP/USFWS Review
- DuPont Performing Work Simultaneous with Agency Reviews
- Scopes of Work Investigate:
 - Surface Water
 - Benthic Macroinvertebrates (Organisms within Sediment)
 - Fish
 - Insects
 - Amphibians
 - Birds



EISB Pilot Study Extraction Well and Instrumentation (Chamber Interior)





STATUS OF BIOREMEDIATION PILOT

Pilot Operations

- Pilot Began June 24, 2013, Status Updates August/Sept./Oct.
- Groundwater Extraction/Recirculation Continues - 324K Gals.
- Potassium Bromide Tracer Continuously Added to Re-injected Groundwater...Addition Extended 4 Weeks to Ensure Coverage
- Sodium Lactate Added to Re-injected Groundwater 1x/Day
- Addition of Microbes to Groundwater to Enhance Bioremediation
- Routine System Maintenance



STATUS OF BIOREMEDIATION PILOT

Pilot Study Results To Date

- Three Groundwater Sampling Events for VOCs/Dissolved Hydrogen Gases/Other Parameters
- Total Organic Carbon Concentrations Increasing in Targeted Intermediate Zone (40-65' BGS)
 - Shows Sodium Lactate Transport From Injection Wells
- Bromide Tracer Reaching Targeted Intermediate Zone



STATUS OF BIOREMEDIATION PILOT

Pilot Study Results to Date

- Hydraulic Performance Issues (i.e. Decrease in Water Levels) Necessitated Well Rehabilitation (Early Oct. to Early Nov.)
- Pilot Expected to be Completed in Late December
- No Discernable Trends With VOC Concentrations to Date



HYDRAULIC SURCHARGING PILOT STUDY

- Implementation Work Plan - Hydraulic Surcharging Pilot Study Submitted to NJDEP/EPA June 28, 2013
- Collect Data to Determine if Groundwater Flow Rates Within Shallow Aquifer in the Western Portion of the Plume Can be Optimized Through the Design and Installation of a Water Delivery System (i.e., Horizontal Well)
- NJDEP/EPA Comments to Work Plan Submitted to DuPont August 28, 2013
- DuPont Responded to EPA/NJDEP Work Plan Comments



HYDRAULIC SURCHARGING PILOT STUDY

Next Steps

1. DuPont Receives Work Plan Approval From NJDEP/EPA Once Comments Are Adequately Addressed
2. DuPont Submits Work Plan to Railroad (RR) for Their Approval of:
 - Surveying/Clearing Along RR Tracks to Establish ROW
 - Horizontal Well/Geotechnical Boring Locations
 - Laydown Area for Well Materials Along RR Tracks
 - Track Undercrossing Location and Construction
3. Secure Work Plan Approval and Access Agreement From RR



HYDRAULIC SURCHARGING PILOT STUDY

Next Steps (Continued)

4. Upon RR Approval, Conduct Geotechnical Borings for Final Design
5. DuPont Submits Final Design/Implementation Work Plan to NJDEP/EPA
6. NJDEP/EPA Approval of Final Design
7. DuPont Submits NJDEP Permit-by-Rule (Permit in Preparation)
 - Community Outreach & Public Notice Required



HYDRAULIC SURCHARGING PILOT STUDY

Next Steps (Continued)

8. NJDEP Permit-by-Rule Approved
9. DuPont Mobilizes for Implementation of Work Plan
10. Implementation Schedule Driven by RR Access/Design Approval and NJDEP Permit-by-Rule



RESULTS /FOLLOW-UP MAY 16 TECHNICAL GROUNDWATER MEETING

- Technical Reps from EPA/CAGs/DuPont Met to Discuss Remedial Technologies to Address Contamination From Vapor Intrusion
- General Agreement that Hydraulic Flushing of the Shallow Groundwater Zone Had Potential to be Very Effective
- EPA to Evaluate Potential to Employ In-situ Chemical Oxidation (ISCO) as a Technology to Address Vapor Intrusion
- DuPont Considering On-site Pilot Study With ISCO
- Next Meeting with Technical Representatives Tentatively to be Scheduled in December 2013



STATUS UPDATE - VAPOR INTRUSION PROGRAM

- Vapor Mitigation Systems Installed
 - 247 (DuPont/O'Brien & Gere)
 - 68 (Third Party Contractor)

- Vapor Mitigation Systems "In Pipeline" For Installation
 - 3 (DuPont/O'Brien & Gere)
 - 16 (Third Party Contractor)



STATUS UPDATE - VAPOR INTRUSION PROGRAM

- Revisions to Comparison Levels for Sub-slab and Indoor Air Based on EPA Toxicity Factors/Equations Occurred in Early 2013
- DuPont Requested that NJDEP Approve Modification of the Comparison Levels Used in Their Vapor Mitigation Program so They Are Consistent with Current Regulatory Levels
- NJDEP/EPA Have Requested that DuPont Provide a Revised Work Plan



CORRECTIVE MEASURES STUDY

- Submitted by DuPont June 28th for NJDEP/EPA Review
- Covers Eastern/Western/Northern Manufacturing Areas
- NJDEP/EPA Completing Review with Comments to DuPont mid/late November
- Once Completed, Corrective Measures Study Subject to Permit Modification with Public Notice/Comment



RESULTS OF CLADDING TUNNEL INSPECTIONS

- Concerns Raised About Presence of Depleted Uranium in Tunnels
- Department of Energy File Review Indicated No Depleted Uranium Was Ever Present on the DuPont Pompton Lakes Works Site
- EPA Radiological Specialist Inspection June 6th and September 19th Revealed No Presence of Depleted Uranium



REVIEW OF CLADDING TUNNEL INSPECTIONS

- DOE Radiological Record Search: No Records Related to Depleted Uranium or Other Radiological Contaminants
- EPA Physical Inspection: All radiation readings at entrance of the tunnel and inside tunnel were within the natural background level ranging from 6-16 uR/h





FISH ADVISORY SIGNAGE

- Concerns Raised About Need for Additional Fish Advisory Signage for Pompton Lake
- Local Officials Purchased Additional Signage (7 in English/Spanish for Placement)
- Signs Being Prepared
- Locations Include: Within Rotary Park/Ramp Area with Signs Facing Water/Lakeside Avenue Bridge



QUESTIONS???????