## SOLID AND HAZARDOUS WASTE MANAGEMENT SECTION LONG-TERM STEWARDSHIP INSPECTION

FACILITY:	DuPont Experimental Station 200 Powder Mill Road Wilmington, DE 19803
EPA ID:	DED003930807
DATE OF ASSESSMENT:	August 25, 2016
SHWMS REPRESENTATIVES:	Benjamin Mack - Environmental Scientist (SHWMS) BM 9/9/16 Lindsey Douglas – Environmental Scientist (SHWMS)
EPA REPRESENTATIVES:	Joel Hennessy - Region 3, Land and Chemicals Division John Hopkins - Region 3, Land and Chemicals Division
SITE REPRESENTATIVES:	Rick Drazich – Senior Environmental Engineer Susan Sandbothe – Environmental Engineer Mary Glowacki – Environmental Compliance Manager Jacob Larsen – Remediation Project Director Ray Brown – Thermal Waste Treatment Manager Mike Liberati – Project Director
<b>REPORT SUBMITTED TO:</b>	Jason Sunde, Program Manager 4 9-14-16
<b>REFERENCE:</b>	DuPont Experimental Station, File Code: 70 16 0825 70 Experimental Station LTS Report

# BACKGROUND:

The DuPont Experimental Station (DuPont) is the corporate-wide central research and development facility for DuPont. Their 150-acre campus is located in Wilmington, DE. Melissa Ferree is the project officer for the facility.

An Administrative Order on Consent (Order) was signed by DuPont on September 30, 1993. The Order compelled DuPont to implement a Sampling, Analysis, Monitoring, and Reporting (SAMR) Program selected by the EPA in the RCRA Record of Decision (ROD). A five-year groundwater monitoring program was implemented as described in the SAMR. Deed Restrictions for this area, known as the Creek Road Contamination Area (CRCA), were recorded with New Castle County in 1995. These restrictions prohibited use of the property for the installation of groundwater wells for domestic uses, as well as any use of the property that would permit dermal contact with either soil or groundwater. The Deed Restrictions also stated that the EPA must be notified before any excavation work could be initiated. DNREC-SHWMS and EPA representatives conducted a Long-Term Stewardship (LTS) inspection on August 25, 2016 to determine the efficacy of all Institutional Controls (ICs), as well as compliance with all other conditions of the Deed Restrictions.

For the purpose of this inspection, steel-toed shoes, safety glasses, and hardhats were deemed appropriate personal protection equipment for the areas in which the inspection took place.

DuPont Experimental Station – Long – Term Stewardship Inspection Page 2 of 10

On August 25, the weather was sunny with the temperature in the mid 80's. An aerial photograph with the outlined CRCA is Attachment #1. Photographs of the CRCA (as determined by the Deed Restrictions) are in Attachment #2.

#### **INSTITUTIONAL CONTROLS AND CONDITIONS OF DEED-RESTRICTED AREA:**

<u>CRCA</u>: The CRCA is southeast of Building 249 and is bounded by the Brandywine River to the south. Information regarding former site activities was limited. The area is the site of two former storage buildings and a former burning pit. Potential Contaminants of Concern (COCs) in the soil and groundwater include various Polyaromatic Hydrocarbons (PAHs) and Trichloroethene (TCE). A Risk Assessment was performed by DuPont in 1990. The Risk Assessment determined that conditions at the Experimental Station do not pose a threat to human health or the environment. DuPont was notified that they had completed the RCRA Corrective Action process on August 30, 2000.

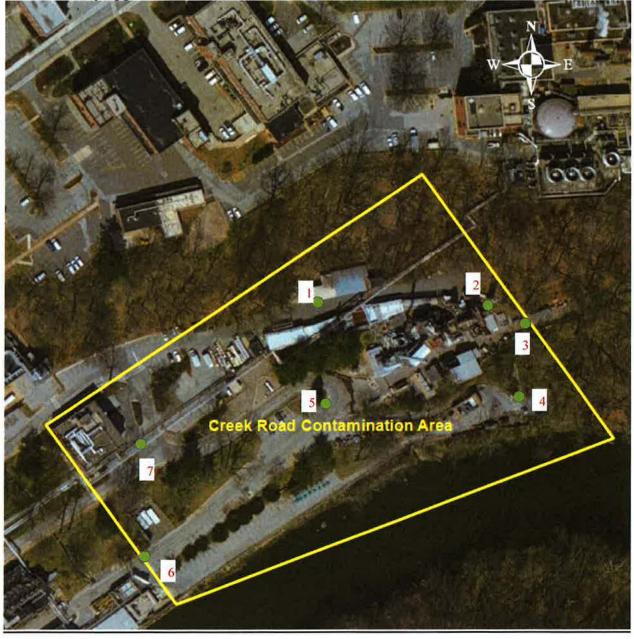
**Observations:** There are currently no groundwater wells at the Experimental Station. All groundwater wells were abandoned as required in Delaware's *Regulations Governing the Construction and Use of Wells*. There is no evidence of any activities at the Facility that would cause any dermal contact with either soil or groundwater. Although several excavation projects have occurred while the Deed Restrictions have been in place, the EPA was always notified and access to the excavation site was restricted. Excavation contractors also submitted a Health and Safety Plan before excavation activities occurred that discussed how the contractor would minimize dermal contact with either soil or groundwater. Mr. Drazich (Senior Environmental Engineer) also said that DuPont had no long-term plans to use the CRCA for any purpose other than its current use. No violations of the Deed Restrictions were observed.

### **CONCLUSIONS/RECOMMENDATIONS:**

A letter of compliance is recommended for the Deed Restriction conditions inspected on August 25, 2016.

DuPont Experimental Station – Long –Term Stewardship Inspection Page 3 of 10

<u>Attachment 1:</u> Map of DuPont Experimental Station CRCA. Photographs are numbered in the order they appear in Attachment 2.



DuPont Experimental Station – Long –Term Stewardship Inspection Page 4 of 10

# Attachment 2: CRCA Photographs



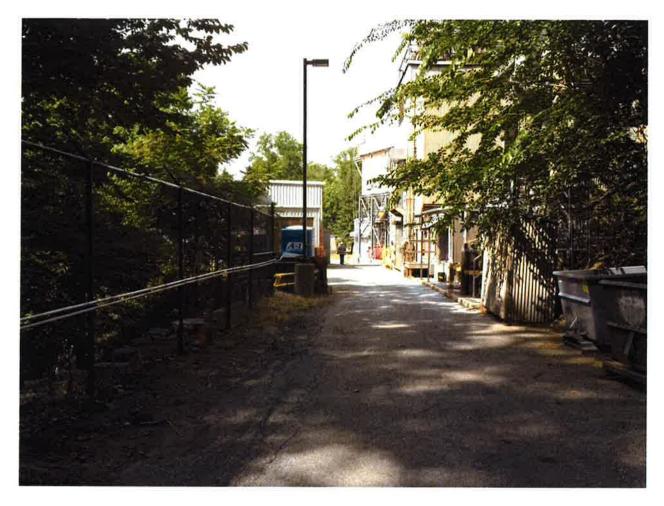
Photograph 1. Upper Creek Rd looking southwest.

DuPont Experimental Station – Long –Term Stewardship Inspection Page  ${\bf 5}$  of  ${\bf 10}$ 

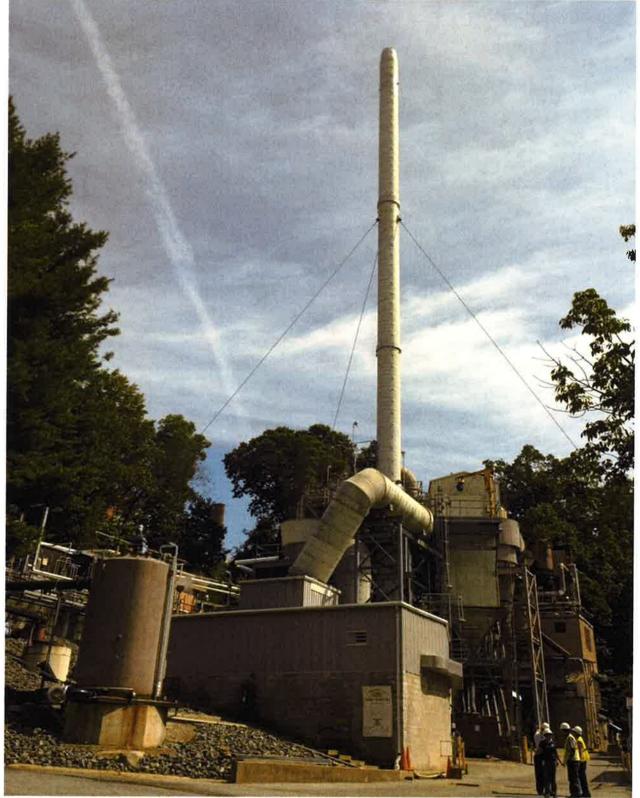


Photograph 2. Eastern edge of CRCA on Upper Creek Road looking northeast.

DuPont Experimental Station – Long – Term Stewardship Inspection Page  ${\bf 6}$  of  ${\bf 10}$ 

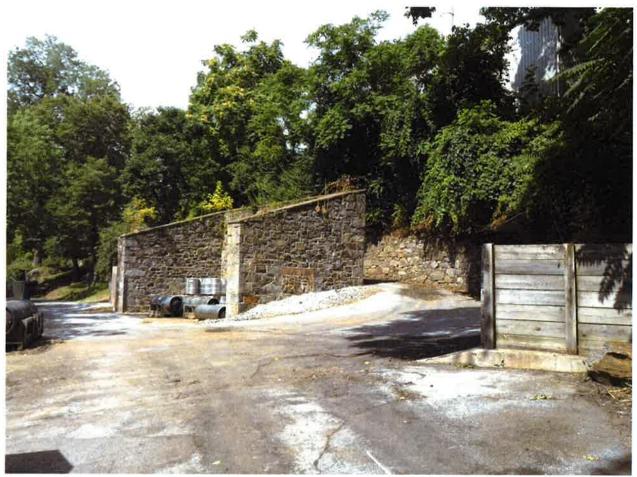


Photograph 3. Eastern edge of CRCA at Middle Creek Road looking southwest.



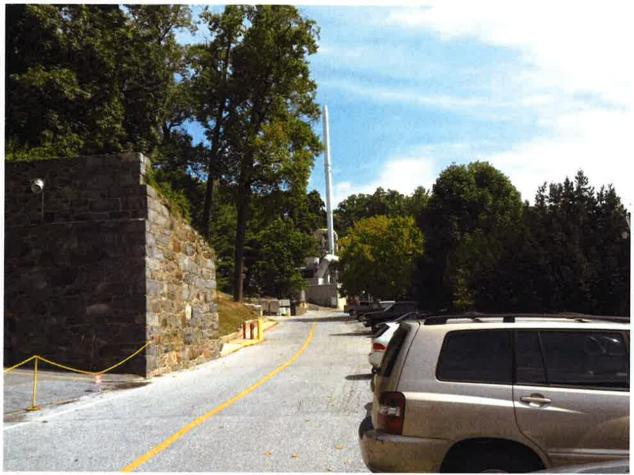
Photograph 4. Midpoint of CRCA on Middle Creek Road looking northeast

DuPont Experimental Station – Long –Term Stewardship Inspection Page  ${\bf 8}$  of  ${\bf 10}$ 



Photograph 5. Eastern edge of CRCA at Lower Creek Road facing west.

DuPont Experimental Station – Long – Term Stewardship Inspection Page 9 of 10



Photograph 6. Southwestern corner of CRCA facing east.

DuPont Experimental Station – Long –Term Stewardship Inspection Page 10 of 10



Photograph 7. Southeastern corner of Building 249 facing northwest.