EXPLANATION OF SIGNIFICANT DIFFERENCE
E.I. DU PONT DE NEMOURS AND COMPANY SITE

City of Rochester / Monroe County / Site No. C828142 / October 2016

Prepared by the New York State Department of Environmental Conservation
Division of Environmental Remediation

1.0 INTRODUCTION

The purpose of this notice is to describe the progress of the cleanup at the E.I. Du Pont de Nemours and Company Site (the DuPont site) and to inform you about a change in the site remedy. The DuPont site is located on 666 Driving Park Avenue in the City of Rochester. On March 2, 2012, the New York State Department of Environmental Conservation issued a decision document which selected a remedy to clean up the site. The proposed site use will be changed from restricted residential to commercial. The site cover requirement will be modified to one foot of soil meeting the commercial use soil cleanup objectives (SCOs) or hard surfaces such as pavement or concrete. Originally, the site cover requirements were two feet of soil meeting the restricted residential use SCOs or hard surfaces.

This Explanation of Significant Difference (ESD) will become part of the Administrative Record for this Site. The information here is a summary of what can be found in greater detail in documents that have been placed in the following repositories:

Maplewood Community Library
1111 Dewey Avenue
Rochester, NY 14613
Phone: (585)428-8220
http://www3.libraryweb.org

NYS Department of Environmental Conservation
6274 East Avon-Lima Road
Avon, New York 14414
Project Manager: Todd M. Caffoe, P.E.
Phone: (585)226-5350
Email: todd.caffoe@dec.ny.gov

Although this is not a request for comments, interested persons are invited to contact the Department's Project Manager for this site to obtain more information or have questions answered.

2.0 SITE DESCRIPTION AND ORIGINAL REMEDY

2.1 Site History, Contamination, and Selected Remedy

Location: The site is located at 666 Driving Park Avenue in the City of Rochester. The site is approximately ten acres in area and is bounded to the east and north by residential areas, with industrial areas to the south. The west side of the site is bounded by an active railroad line. The area is served by public water.

Site Features: The site is a vacant lot that is surrounded by a 6-foot high chain-link fence. The demolished former manufacturing building was located on the south side of the property along Driving Park Avenue.

The northern portion of the site is a former parking area that is covered with broken asphalt.

Current Zoning/Uses: The site is currently vacant and it is zoned for commercial or industrial uses. A densely populated residential area is immediately adjacent to the site.

Historic Uses: This property is a former manufacturing site that was operated since the early 1900s by DuPont and others to produce photographic film and paper. These manufacturing processes included the use of methanol, silver, cadmium, lead, and mercury. DuPont ceased operations at the facility in 1995 and demolished the building in 1996.

Prior to entering the Brownfield Cleanup Program, DuPont conducted an on-site soil and groundwater investigation. The results of the investigation identified several areas of cadmium and silver contamination in soils located near the former manufacturing building. In May 2007, DuPont signed a Brownfield Cleanup Agreement to investigate and cleanup the site.

Site Geology and Hydrogeology: Based upon the subsurface investigations to date, the site stratigraphy consists of historic fill and native soils over Rochester Shale bedrock. The depth to bedrock ranges from 4 to 12 feet below ground surface. Groundwater flows to the north, and predominantly exists within bedrock with localized groundwater in the overburden.

Please refer to Figure 1 for a site location map.

Nature and Extent of Contamination

Soil: Environmental investigations conducted to date have indicated soil contamination with heavy metals (mainly silver and cadmium) and polycyclic aromatic hydrocarbons (PAHs). Cadmium was detected at several localized sub-surface soil areas at levels exceeding the restricted residential cleanup level of 4.3 parts per million (ppm). Several of these sample results exceeded 100 ppm, and there was a single detection for cadmium at 1,590 ppm. Silver was detected at several locations exceeding the restricted residential level of 180 ppm. The silver and cadmium contamination is limited to sub-surface soils on-site within these discrete areas.

PAHs were detected predominantly in the historic fill at the site and sporadically above the restricted residential cleanup levels. On-site concentrations of benzo(a)pyrene (BAP) in soils range from ND to 58 ppm.

Groundwater: Low levels of chlorinated solvents have been detected in one well at the southern property border; however, these contaminants are migrating from off-site and are not site-related. Contaminants detected along the southern property line during the groundwater sampling rounds include: trichloroethene from 21 to 96 ppb; cis-1,2-dichloroethene from 46 to 290 ppb; trans-1,2-dichloroethene from 4.7 to 120 ppb; 1,1-dichloroethene from 1.4 to 8.1 ppb; and vinyl chloride from 4.3 to 24 ppb. Site-related metals were not detected in groundwater above the groundwater standards.

Elements of the Originally Selected Remedy

A remedy for the site was selected in March 2012. The remedy was a Track 4: Restricted use with site-specific soil cleanup objectives remedy.

The remedy was selected based on the site's contemplated use as restricted-residential. The elements of the selected remedy included:

1) Excavation of soil exceeding the restricted residential cleanup levels for cadmium and silver. An estimated 480 cubic yards of material will be excavate and disposed at an off-site permitted facility. The excavations will be backfilled with clean fill meeting the restricted residential cleanup levels. An interim Site Management Plan (SMP) will be developed to continue the following activities: weekly site inspections to check the integrity of the fence and to check storm drains for proper function; make repairs to fence as necessary; clear storm drains as necessary; periodically cut vegetation; and provide documentation of the inspections to the Department on a periodic basis.

2) A site cover will be required to allow for restricted-residential. The cover will consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of two feet, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for restricted residential use. The soil cover will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d). [This element is being modified in this ESD.]

3) Green remediation principals and techniques will be implemented to the extent feasible in the site management of the remedy as per DER-31. The major green remediation components are as follows:

   - Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
   - Reducing direct and indirect greenhouse gas and other emissions;
   - Increasing energy efficiency and minimizing use of non-renewable energy;
   - Conserving and efficiently managing resources and materials;
   - Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste.

4) Imposition of an institutional control in the form of an environmental easement for the controlled property that:

   - requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
   - allows the use and development of the controlled property for restricted residential, commercial and industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws; [This element is being modified in this ESD]
   - restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and
   - requires compliance with the Department approved Site Management Plan.

5) A Site Management Plan is required, which includes the following:

a. Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: Placement of an environmental easement as discussed in paragraph 3 above

Engineering Controls: Placement of the soil cover discussed in Paragraph 2 and evaluate the potential for soil vapor intrusion during future development.

This plan includes, but may not be limited to:

- An Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- Descriptions of the provisions of the environmental easement including any land use, and groundwater use restrictions;
- A provision for evaluation of the potential for soil vapor intrusion for any buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- provisions for the management and inspection of the identified engineering controls;
- Maintaining site access and controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

b. Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

- monitoring for vapor intrusion for any future buildings occupied or developed on the site, as may be required by the Institutional and Engineering Control Plan discussed in item a above.

3.0 CURRENT STATUS

Since the issuance of the site's decision document in March 2012, remedial action was initiated. Soil excavations were completed in 2012 and a construction completion report was approved by the Department in July 2014. Please refer to Figure 2 for the excavation locations. An interim site management plan is currently in place to provide for regular site inspection and maintenance of the chain-link fence bordering the site. DuPont is providing quarterly inspection reports to the Department; however, the final site cover needs to be placed, a final site management plan needs to be developed, and an environmental easement needs to be executed to complete the implementation of the remedy.

4.0 DESCRIPTION OF SIGNIFICANT DIFFERENCE

4.1 New Information

A developer has proposed construction of a solar array on-site. This development project is supported by the City of Rochester and the remedial party and is consistent with local zoning. In light of this proposal, the use restriction for this BCP will be changed from restricted-residential to commercial use.

4.2 Comparison of Changes with Original Remedy

The new site cover will consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper one foot of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of one foot, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for commercial site use. The main difference in the new site cover is that soil cover will only need to be one foot in thickness for commercial use as opposed to two-feet in thickness for restricted-residential use. The proposed site use is the driver for the change from restricted-residential to commercial site use. The remedy is still protective of human health and the environment because there will be no direct contact with residual contamination below the site cover, consistent with the original remedy.

5.0 SCHEDULE AND MORE INFORMATION

A remedial work plan will be submitted to the Department for placement of the site cover within the next two months. Once work plan is approved and remedial work is completed, the applicant will place an environmental easement on the property and develop a site management plan to address maintenance of the site cover and any future site development.

If you have questions or need additional information you may contact any of the following:

Project Manager: Todd M. Caffoe
NYSDEC – Region 8 Headquarters
6274 East Avon-Lima Road
Avon, NY 14414
Phone: (585)226-5350
Email: todd.caffoe@dec.ny.gov

NYS Health Dept: Julia Kenney
Bureau of Environmental Exposure Investigation
Corning Tower, Room 1787
Albany NY 12237
Phone: (518)402-7860

Press Inquiries: Linda Vera, Citizen Participation Specialist
NYSDEC – Region 8 Headquarters
6274 East Avon- Lima Road
Avon, New York 14414
Phone: (585)226-5324

10/3/16
Date

Todd M. Caffoe, P.E., Project Manager
Division of Environmental Remediation, Region 8

10/4/16
Date

Bernette Schilling, P.E., Section Chief/RHWRE
Division of Environmental Remediation, Region 8

10/5/2016
Date

Michael J. Cruden, P.E., Director
Bureau of Remedial Bureau E

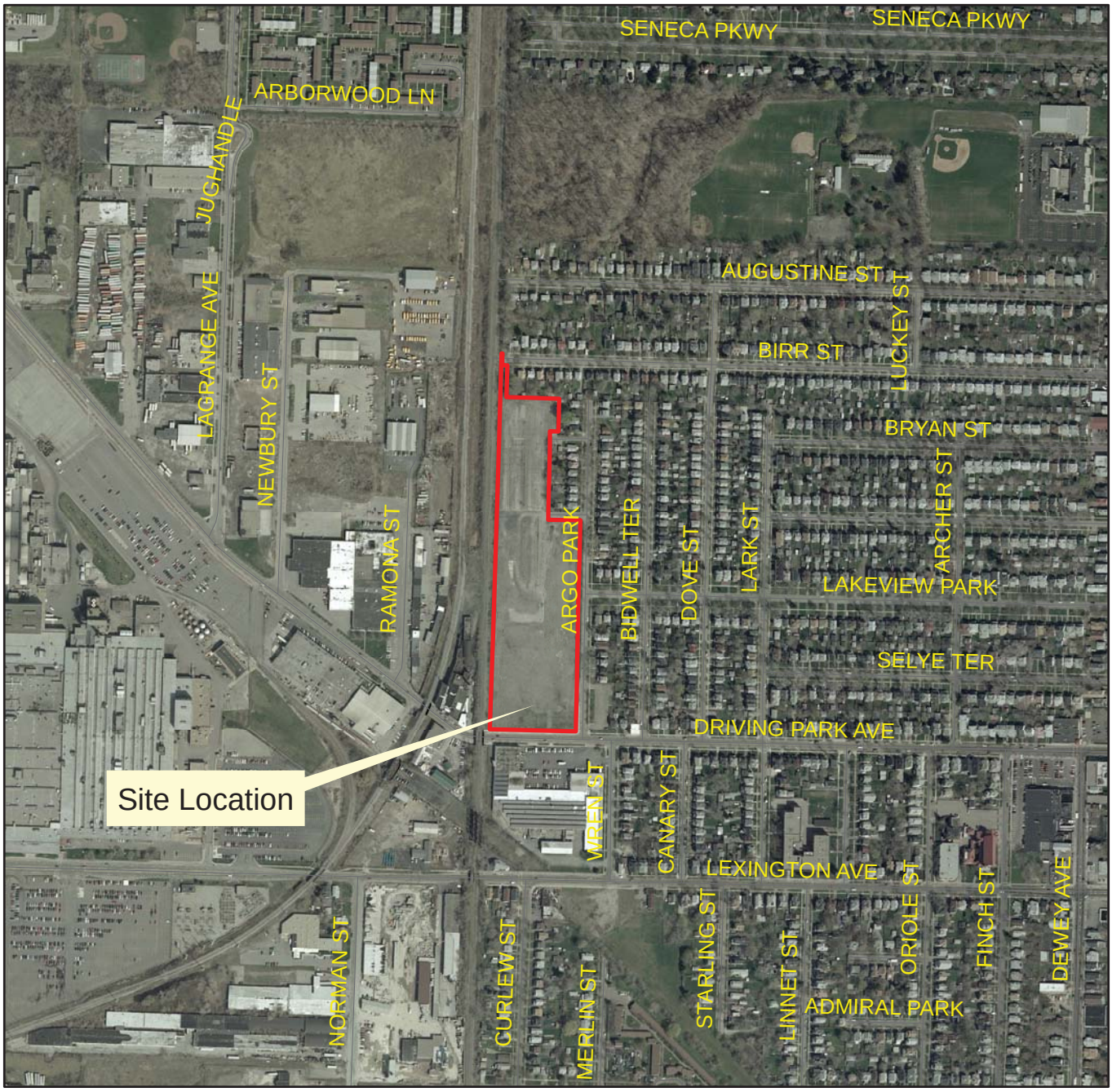
10/6/2016
Date

Robert Schick, P.E., Director
Division of Environmental Remediation

DECLARATION

The selected remedy is protective of public health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.

Figure 1
DuPont Site - 666 Driving Park Avenue
Rochester, New York



Monroe County 2002 Orthoimagery

N
W E
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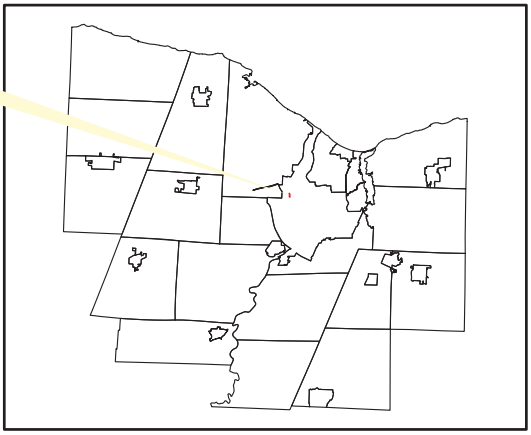
0 250 500 1,000 1,500 2,000
Feet

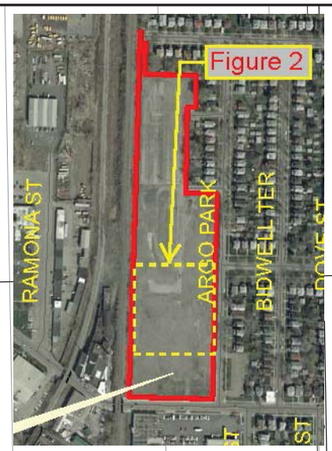
Monroe County, New York

Site Location



SITE TRAILER

DECON PAD



RR1 RR2 RR3 RR4 RR5 RR6 RR7 RR8 RR9 RR10 RR11 RR12 RR13 RR14 RR15 RR16 RR17 RR18 RR19 RR20 RR21 RR22 RR23 RR24

BLDG 44 1937 BLDG 08 1961 BLDG 65 1972 BLDG 09 1965 BLDG 35 1945 BLDG 80 1980 BLDG 79 1978 BLDG 38 1973 BLDG 36 1945 BLDG 30 1975 1938 1918 1936

SUMP

SEWER

Asphalt

UTILITY TRENCH

Partially-Exposed Railroad Tracks

Top of Bank

Toe of Slope

No. 666 Driving Park Avenue

SBL 090.80-01-3.1
Now Or Formerly
E.I. Du Pont De Nemours & Co.

LEGEND:

- PROPERTY LINE
- FORMER BUILDINGS
- C-1 SAMPLE ID
- PROPOSED EXCAVATION AREA (PARSONS, AUGUST 2012)
- ACTUAL EXCAVATION AREA (SEPTEMBER 2012)
- TEST PIT (SEPTEMBER 2012)

EXCAVATION AREAS AND DEPTHS

	AREA (SQ FT)		DEPTH (FT)	
NAME	PROPOSED	ACTUAL	PROPOSED	ACTUAL
RR1	200	200	2'	2'
RR2	100	100	3'	3'
RR3	100	138	3'	3'
RR4	400	400	2'	3'
RR5	100	100	4'	4'
RR6	100	180	7.5'	12'
RR7	91	91	2'	2'
RR8	100	152	7'	7'
RR9	90	135	3'	5'
RR10	100	100	6'	6'
RR11	100	190	2'	2'
RR12	100	100	6'	6'
RR13	100	100	3'	3'
RR14	100	100	4.5'	4.5'
RR15	100	225	4.5'	4.5'
RR16	44	44	4.5'	4.5'
RR17	203	203	6'	7'
RR18	554	1028	2'	4'
RR19	100	100	6.8'	6.8'
RR20	100	100	4'	4'
RR21	100	100	10'	10'
RR22	30	155	4'	4'
RR23	100	150	6'	6'
RR24	230	230	4.5'	4.5'
	3342 sq ft	4421 sq ft		

40 20 0 40 80

SCALE: 1"=40'

FIGURE 2

DuPont
666 DRIVING PARK SITE
ROCHESTER, NEW YORK

EXCAVATION AREAS AND 2012 TEST PIT LOCATIONS

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 PHONE: (315) 451-9560

FILE NAME: P:\DUPONT PROGRAM\ROCHESTER DRIVING PARK\CAD\FIGURES\ASBUILT\446306-AB-SK001.DWG
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