

2 August 2018

MEMORANDUM

| то: | Payson Long | LOCATION: | NYSDEC Albany, New York |
|----------|--|-----------|-------------------------|
| FROM: | James Hayward, P.E. | | |
| SUBJECT: | Monitoring Well Reduction; 1 Adams Boulevard National Heatset Printing Site Babylon, New York Contract/Work Assignment No: D007624-16 | | |

EA Engineering, P.C., and its affiliate EA Science and Technology (EA) were tasked by the New York State Department of Environmental Conservation (NYSDEC) under Work Assignment No. D007624-16 to perform site management activities at the National Heatset Printing Co. State Superfund Site. At the request of the NYSDEC, EA has prepared this memorandum to summarize the monitoring well network trends for the quarterly groundwater sampling at 1 Adams Boulevard, and optimize the quarterly sampling based on the historical data.

The goal of this task was to optimize the quarterly sampling network that is used to evaluate system performance and provide an overview of the available data to date.

BACKGROUND AND RATIONALE

Site Description

The National Heatset Printing Co. site is currently a Class 2 site listed on the NYSDEC Registry of Inactive Hazardous Waste Sites (Site No. 152140). The site is located at 1 Adams Boulevard in the Hamlet of Farmingdale, Town of Babylon, Suffolk County, New York, and is identified as Block 1.00 and Lot 20.001 on the Town of Babylon Tax Map No. 132.20-1-3.2. A site location map is provided in **Figure 1**. The site is currently owned by 1 Adams Boulevard Realty Corporation, managed by Finklestein Realty, and leased by Sundial Brands. The site contains one 90,000 square foot warehouse on a 4.5-acre lot. The site is in an industrial area and is bounded by railroad tracks to the north, Adams Boulevard and an industrial property to the south, an industrial property to the east, and an industrial property to the west.

In early 2014, the interior of the industrial building was remodeled to accommodate a new tenant (Sundial Brands). The remodeling consisted of sealing the concrete floor and installing pallet-racking throughout the building. Sundial's warehouse is very active, and the floor is used for storage of loaded pallets, which are moved in/out of the facility using forklifts. As a result, the original soil vapor monitoring points inside the building are frequently inaccessible and potentially compromised due to the floor sealing and storage of Sundial products.



Site Monitoring

Groundwater monitoring is being performed on a quarterly basis, in accordance with the Site Management Plan (EA 2013)¹, to assess the performance of the remedy. The network of monitoring wells was installed to monitor both upgradient and downgradient groundwater conditions at the site. The onsite groundwater monitoring well networks and their trend graphs are shown in **Figures 2 and 3**. Offsite monitoring wells and their trend graphs are shown in **Figures 4 and 5**. The network of onsite and offsite wells were designed and installed throughout multiple phases of the remedial design. A total of 35 wells were installed including 17 monitoring well clusters of 1 shallow and 1 deep well. Deep wells were installed to a maximum of 90 feet (ft) below ground surface, which is the depth of the top of the clay confining layer. Shallow wells were installed to a maximum of 30 ft below ground surface. All wells were constructed with 10 ft of screen. Well locations were selected based on the soil boring and groundwater investigations which took place throughout the remedial design and field observations.

Groundwater Data Summary

Historical groundwater data from 2010 to 2018 were evaluated to determine reduction trends in contaminants of concern (COCs) and if asymptotic conditions are present within the aquifer. Trend graphs prepared for volatile organic compound concentrations in site groundwater are presented in **Figures 2, 3, 4, and 5**. Monitoring wells show a general decreasing trend across the site, and the groundwater plume is well defined.

CONCLUSIONS AND RECOMMENDATIONS

Analytical data to date has established the groundwater plume and produced reducing trends in COCs at the site. As a result, EA recommends modifying the quarterly groundwater sampling schedule. EA recommends to sample 9 monitoring wells that are used to evaluate the treatment system effectiveness on a quarterly basis. The selected monitoring wells are depicted on **Figures 6A and 6B**, and detailed as follows:

Onsite Monitoring Wells

- MW-1S/D (upgradient)
- MW-14S/D
- MW-15S/D.

Offsite Monitoring Wells

- MW-2S/D
- MW-3D.

It is recommended that during the second quarter of each year, an annual groundwater sampling event be completed at the 35 wells associated with the site.

¹ EA Engineering, P.C. and Its Affiliate EA Science and Technology (EA). 2013b. *National Heatset Printing Co. State Superfund Site. Suffolk County, Babylon, New York. Final Engineering Report. NYSDEC Site No. 152140.* August.



If you have any questions or require additional information, please do not hesitate to contact James Hayward at 315-565-6555.

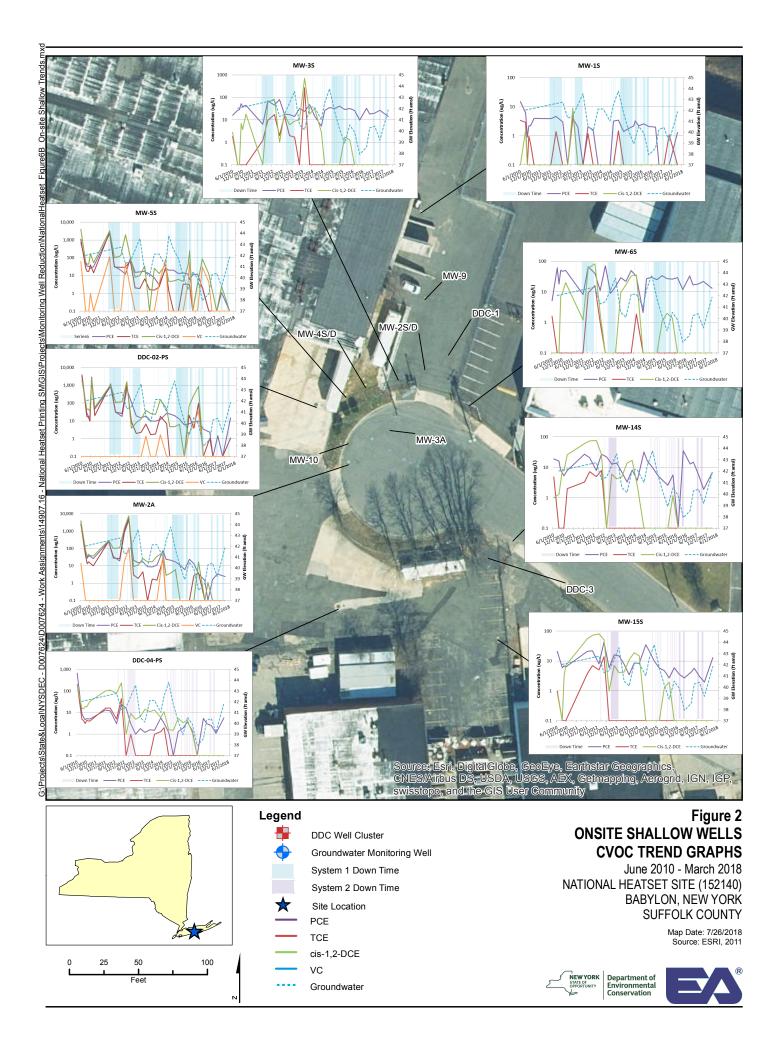
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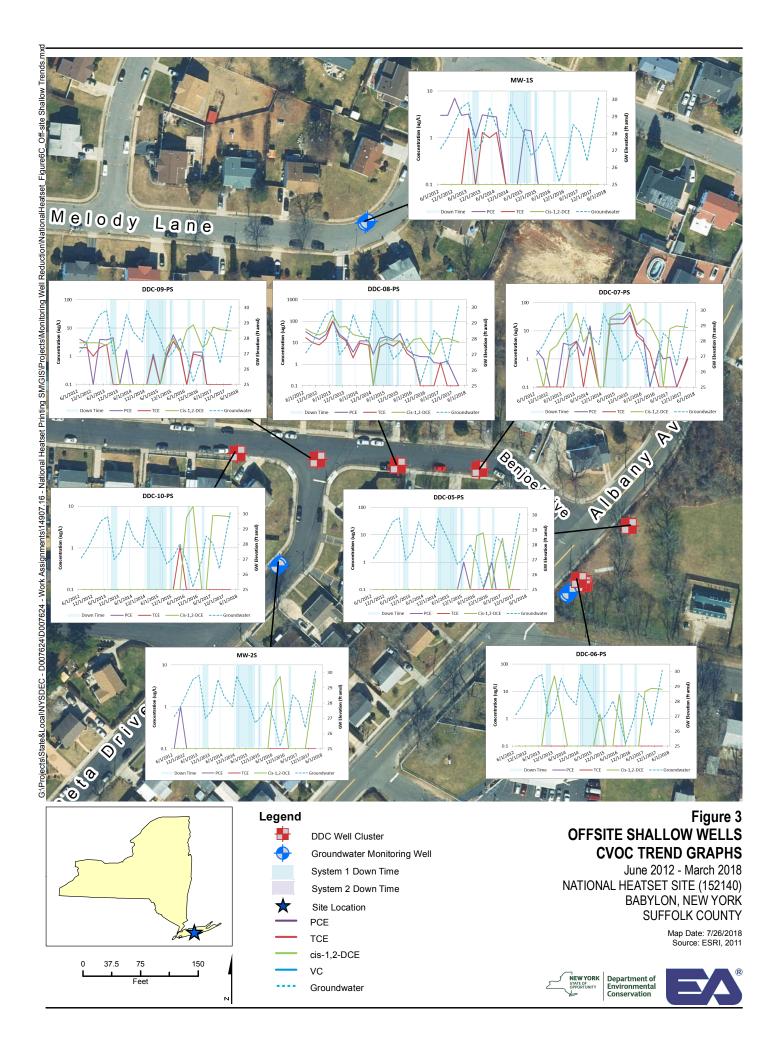
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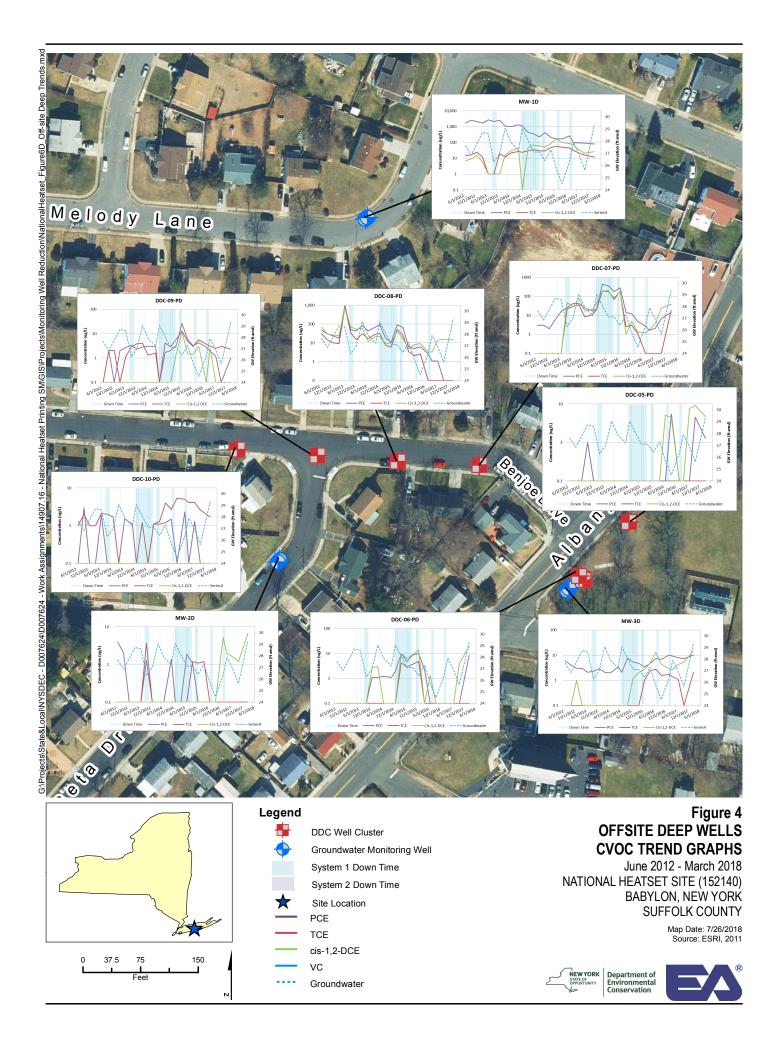
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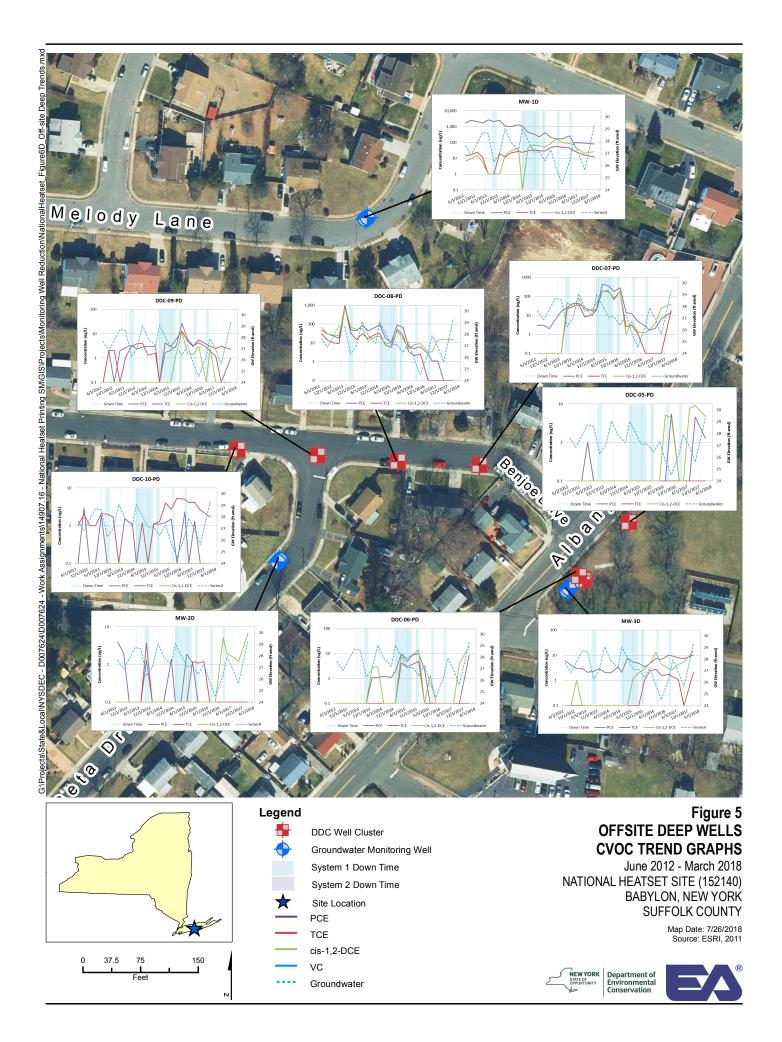
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