

ECM

environmental compliance monitoring, inc.

August 2, 2013

Mr. Scott Deyette
Chief, Inspection Unit
Remedial Bureau C
Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233-7014

**RE: Operable Unit 1 & 2 Ground Water Treatment System Decommissioning Plan
Former Kay Fries Site; Stony Point, New York
Site No. 344023
ECM Project # 1192**

Dear Mr. Deyette:

Environmental Compliance Monitoring Inc. (ECM), on behalf of Evonik Corporation, has prepared this workplan in response to the New York State Department of Environmental Conservation (NYSDEC) request for the decommissioning and closure of the Operable Unit 1 (OU1) Ground Water Treatment System (GWTS) components (i.e., filtration system, storage tanks and carbon units) and recovery Trenches 1 and 2. Additionally, this workplan addresses the decommissioning of the Operable Unit 2 (OU2) ground water interceptor sump treatment system and abandonment of select ground water monitoring wells in OU1 and OU2.

1.0 OU1 GWTS, TRENCH 1 AND TRENCH 2 AND MONITORING WELL DECOMMISSIONING

The May 2013 Periodic Review Report (PRR) recommended the permanent cessation and decommissioning of the OU1 GWTS. During the July 15, 2013 site meeting between the NYSDEC, Evonik and ECM, the NYSDEC requested a decommissioning and closure workplan for the OU1 GWTS and trenches based on the favorable results of the Monitored Natural Attenuation (MNA) program completed during the 2012 monitoring period (as reported in the PRR for the period January 2012 through March 2013). The location of the GWTS trailer and Trenches 1 and 2 are depicted on Figure 1. Presented below are the planned decommissioning activities.

1.1 TRENCHES 1 AND 2 DECOMMISSIONING

The NYSDEC agreed with the proposal for cessation of Trenches 1 and 2 and requested a workplan for decommissioning of the trenches and monitoring wells.

Recovery Trenches 1 and 2 are constructed with a horizontal lateral piping 13 feet below grade, which is connected to central recovery sumps (Figure 1). The sumps contain two submersible transfer pumps for transfer of ground water to the GWTS and level controls, which activated the pumps. Trench 1 and Trench 2 decommissioning activities are presented below.

- Disconnect the electricity to the sumps and within the GWTS trailer, disconnect the sump pumps from the influent transfer piping (remove if possible), and removal of the level controls.
- The transfer piping to the GWTS will be accessed in the valve junction boxes, disconnected and capped.
- The trench horizontal lateral piping will be decommissioned by grouting of the piping through the trench cleanouts located at the surface. The grout will be pumped into the pipe lateral cleanouts until the piping and trench cleanouts are filled to the surface.
- The concrete sumps and valve junction boxes will be backfilled to the existing grade with crushed stone and/or certified clean fill material and compacted to prevent settling.

1.2 GWTS TRAILER AND COMPONENTS DECOMMISSIONING

The GWTS components, (storage tanks, carbon units, filtration system, pumps and piping) were properly drained and rendered free of liquid during the 2010 deactivation of the system. The components will be dismantled and either recycled or sent off-site for proper disposal. The details on the decommissioning are presented below.

- Influent and Effluent Storage Tanks – These storage tanks are constructed of polyethylene plastic. The tanks are empty and will be cut into manageable sections for transport off-site for recycling and/or proper disposal.
- Carbon Units – Three carbon units are housed in the ancillary carbon unit trailer adjacent to the GWTS trailer. The carbon within the units will be evacuated and transported off-site for regeneration and re-use. The carbon unit interiors will be inspected and cleaned if necessary. Cleaning fluids will be transported off-site for proper disposal. The carbon steel vessels will be cut into sections and transported off-site for recycling and/or proper disposal. The carbon unit trailer will be transported off-site for potential re-use or recycled as scrap metal.
- GWTS Trailer – The GWTS trailer houses two carbon steel equalization tanks, backwash filtration vessel, two transfer pumps, pressure gauges, and polyethylene piping and valves. Equipment that can be salvaged will be removed and reused or recycled. The GWTS trailer will be transported off-site for proper demolition and recycling. The pumps will be evaluated for potential reuse. The GWTS system control panel containing system controls and electronic circuitry was confirmed by the automation engineer (Cimation) to be mercury and lead free and will be decommissioned with the GWTS trailer.
- Equipment Storage Trailer – One ancillary storage trailer is located next to the GWTS trailer and the carbon unit trailer. The trailer was used to store GWTS equipment inventory and spare parts. The equipment will be removed from the storage trailer and transported to the ECM office. The trailer will be transported off-site for potential reuse or recycled as scrap metal.

1.3 MONITORING WELL AND PIEZOMETER ABANDONMENT

As previously discussed with the NYSDEC, the former INSL-X property is planned for re-development. As a result, monitoring wells located within the development plan footprint and proximal to Trenches 1 and 2 will be abandoned concurrently with the decommissioning of Trenches 1 and 2.

Monitoring wells utilized to collect ground water quality data and synoptic water levels surrounding Trench 1 and 2 that will not be monitored as part of the MNA ground water monitoring program will be properly abandoned. The wells will be abandoned by pressure grouting the well casings from the base of the well to the surface by a licensed well driller. Applicable NYSDEC well abandonment forms will be completed subsequent to the well closures and submitted to the NYSDEC in the final decommissioning report. The wells surrounding Trenches 1 and 2 to be abandoned are presented below (Figure 1).

| Trench 1 | Trench 2 |
|---|---------------------|
| PZ-1 through PZ-9 | PZ-10 through PZ-14 |
| TB-4*, TB-6*, TB-8*, TB-10, TB-16*, and TB-17 | TB-5A* |
| MW-25, MW-26, MW-28, MW-33S, MW34S, MW-35, MW-44, and MW-45 | MW-32 and MW-61 |

* - Will attempt to locate these wells; if located, wells will be properly abandoned.

2.0 OU2 INTERCEPTOR SUMP DECOMMISSIONING

In the Record of Decision (ROD) for OU2, the NYSDEC determined that the installation of a ground water interceptor sump and treatment via aeration was the most appropriate remedial action for the volatile organic compounds (VOCs) impacting ground water within OU2. During June 2000, the NYSDEC approved the remedy for the OU2 interceptor sump installation. The interceptor sump treatment system commenced operation during December 2000 and was effective at reducing VOC to not detectable levels through May 2004. Due to the effective operation of the interceptor sump, the NYSDEC approved closure of the sump on a permanent basis in the NYSDEC letter dated July 8, 2004. The interceptor sump operations were terminated during June 2004; however the system components remain in the sump and will be decommissioned as outlined below.

2.1 INTERCEPTOR SUMP DECOMMISSIONING

The interceptor sump components consisted of a six foot wide by eight foot deep precast concrete sump, a blower and electrical control panel. The sump was located west of the railroad tracks, at the base of the railroad escarpment. Access to the sump was limited due to the location below the railroad tracks. Figure 2 depicts the location of the interceptor sump. Access in the area of the sump is severely limited to heavy equipment. The OU2 interceptor sump will be decommissioned in-place as outlined below.

- The electrical panel for the blower system will be disconnected and the panel and blower will be transported off-site for proper disposal.
- The diffuser piping installed at the base of the sump will be removed from the sump and properly transported for off-site disposal.

- The interceptor sump will be abandoned in-place by filling the sump to grade with crushed stone and/or certified clean fill material, properly compacted and rendered inactive.
- The security fence surrounding the interceptor sump will be removed.

2.2 OU2 MONITORING WELL ABANDONMENT

During 1994 and 1995, several phases of remedial investigation were conducted within the OU2 section of the site. To assess ground water quality within OU2, 12 monitoring wells were installed. The findings of the OU2 investigation concluded that marginal levels of PCE and TCA were the only VO compounds detected in select wells within OU2 and were naturally attenuating. The NYSDEC recently required monitoring of MW-53, MW-54, MW-55, and MW-60S (NYSDEC 2011 PRR approval letter dated April 23, 2012), as a result of PCE reported in these wells during the 2011 comprehensive OU1 and OU2 monitoring event.

Eight of the monitoring wells, which are no longer used to assess ground water quality in the OU2 section of the site will be properly abandoned as presented below and depicted on Figure 2.

| OU1 Monitoring Wells |
|--|
| TB-1A* and TB-2* |
| MW-30, MW-52*, MW-56, MW-57, MW-58, and MW-60D |

* - Will attempt to locate these wells; if located, wells will be properly abandoned.

The OU1 GWTS and OU2 interceptor sump decommissioning and monitoring well and piezometer abandonment activities will be photo documented and a final decommissioning report will be submitted to the NYSDEC.

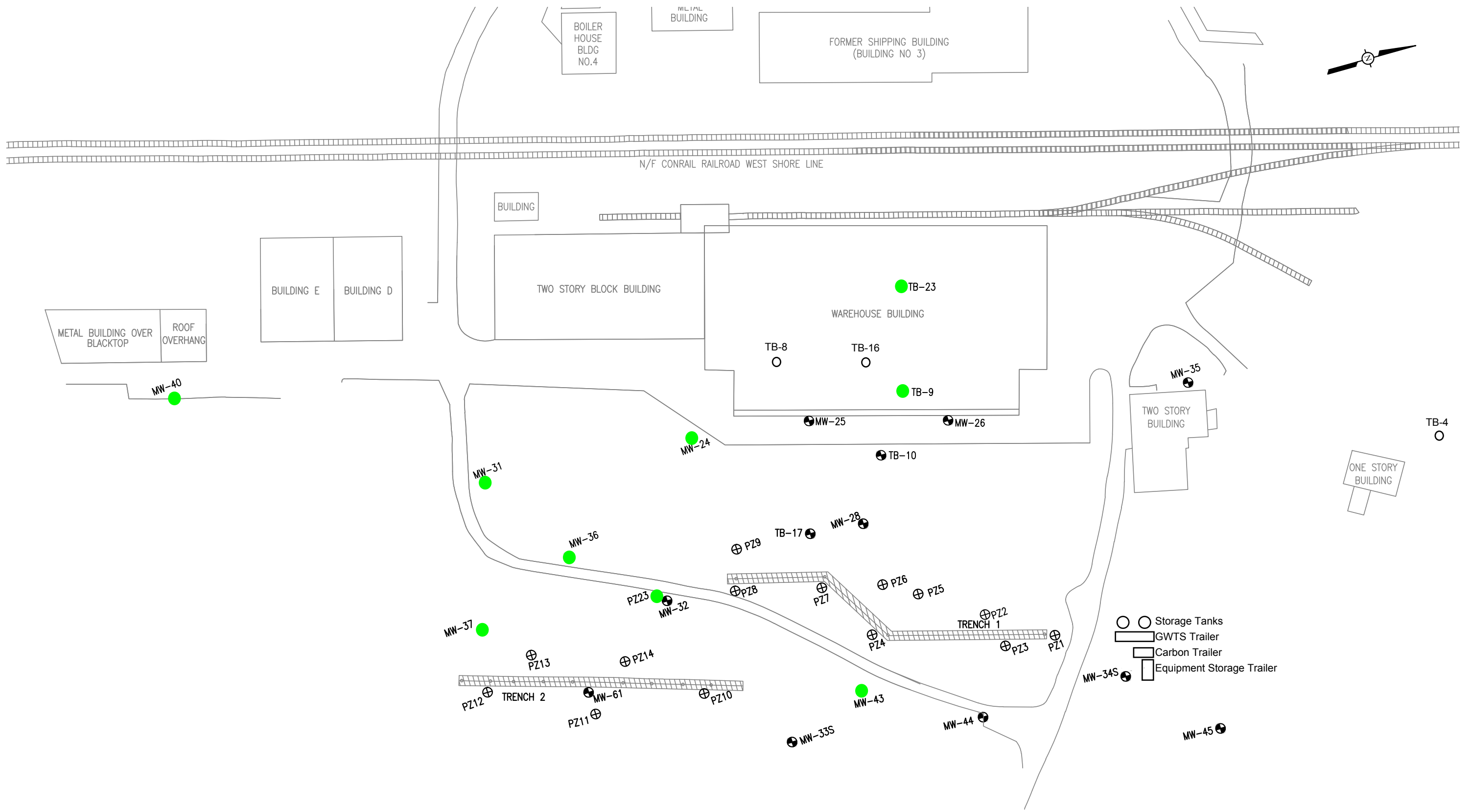
If you have any questions relative to the information presented above, or other matters please call ECM at (908) 874-0990 or Andrew Kruczek of Evonik at (732) 735-0204.

Environmental Compliance Monitoring, Inc.

Bruce Manganiello

Bruce Manganiello
Operations Manager

cc: A. Kruczek, Evonik
P. Magee, MBC Contractors Inc.
S. Taylor, TaylOrd Environmental
ECM File – 1192- L



Legend:

- ⊕ Existing Shallow Monitor Well to be Abandoned
- ⊕ Existing Piezometer to be Abandoned
- Monitoring Wells to be located
- MNA/MW-31 WP Wells To Remain
- TB-5A
- TB-6
- Storage Tanks
- ▭ GWTS Trailer
- ▭ Carbon Trailer
- ▭ Equipment Storage Trailer

| | |
|--------------------|---------------------|
| SCALE: 1" = 64' | CHECKED BY: CB |
| DATE: 7/12/2013 | PROJECT NO: 1192 |

Former Kay Fries Site
50 Holt Drive
Stony Point, NY

ECM
environmental compliance monitoring, inc.
349 Route 206, Hillsborough, New Jersey, 08844 908-874-0990

Figure 1
Operable Unit 1
GWTS, Trenches 1/2 and Monitoring Well Locations

○ TB-2

○ TB1A



CHURCH
FORMER RESEARCH LABORATORY
(BUILDING NO 2)

FORMER
ADMINISTRATION
BUILDING (BLDG NO 1)
OFFICIALS

MW-57

MW-56

MW-30

○ MW-52

BOILER
HOUSE
BLDG
NO.4

1 STORY
METAL
BUILDING

MW-54

FORMER SHIPPING BUILDING
(BUILDING NO 3)

MW-53

MW-55

■ Interceptor Sump Location

N/F CONRAIL RAILROAD WEST SHORE LINE

BUILDING

MW-60D

MW-58

MW-60S

BUILDING E

BUILDING D

TWO STORY BLOCK BUILDING

WAREHOUSE BUILDING

METAL BUILDING OVER
BLACKTOP

ROOF
OVERHANG

TWO STORY
BUILDING

ONE STORY
BUILDING

Legend:

- ⊕ Existing Shallow Monitor Well to be Abandoned
- ⊖ Existing Piezometer to be Abandoned
- Monitoring Wells to be located.
- MNA Monitoring Program Wells To Remain

| | |
|----------|--------------|
| SCALE: | CHECKED BY: |
| 1" = 64' | CB |
| DATE: | PROJECT NO.: |
| 1/2013 | 1192 |

Former Kay Fries Site
50 Holt Drive
Stony Point, NY

ECM

environmental compliance monitoring, inc.
349 Route 206, Hillsborough, New Jersey, 08844 908-874-0990

Figure 2
Operable Unit 2
Interceptor Sump and Monitoring Well Locations