

August 18, 2020

Mr. Christopher Black  
U.S. Environmental Protection Agency, Region 5  
Land, Chemicals and Redevelopment Division  
77 West Jackson Blvd, LR-16J  
Chicago, IL 60604-3590

RE: Bi-Weekly Summary Report for Pump Down Program  
Tyco Fire Products LP Site  
Marinette, WI

Dear Mr. Black:

The information provided herein is a summary of activities conducted at the Tyco Fire Products LP (Tyco) site associated with the Pump Down Program (PDP) for the former Salt Vault and 8<sup>th</sup> Street Slip areas. The PDP is required as part of the Administrative Order on Consent between Tyco and the U.S. Environmental Protection Agency (USEPA). This summary report covers the period from August 1, 2020 through August 14, 2020.

### **Summary of Work during Reporting Period**

Work conducted during the reporting period included:

- Collection of manual water level readings at the designated monitoring points and extraction wells on August 5<sup>th</sup> and 13<sup>th</sup>, 2020. The average water level, based on the most recent water level measurements (August 13, 2020) during the reporting period, in the former Salt Vault was 580.80 feet above mean seal level (ft. AMSL), or 2.90 feet above the target level. The average water level in the former 8<sup>th</sup> Street Slip was 576.13 ft. AMSL, or 1.77 feet below the target level. A cumulative summary of manual water level readings and corrected elevations is attached as Table 1.
- During pumping operations, total groundwater recovery rates in the former Salt Vault and 8<sup>th</sup> Street Slip areas averaged 10.41 gallons per minute (gpm) from the six extraction wells when operated. The extraction wells within the Salt Vault have been continuously operating during the reporting period with the exception of short-term cessation during the week / weekends until the holding tanks can be emptied. Also note, during this reporting period, operations of the extraction wells

within the 8<sup>th</sup> Street Slip area have been operated on a more intermittent basis to maintain water levels which are presently below target levels.

- Off-site transportation of recovered groundwater was conducted during the reporting period Monday through Friday of each week.

A summary of pumping and disposal operations for the 2020 season is provided below.

#### **Summary of Pump Down Operations (August 13, 2020)**

|                         | Gallons Pumped | Gallons Treated at GWTS <sup>1</sup> | Gallons Transported for Off Site Disposal |
|-------------------------|----------------|--------------------------------------|---|
| This Period             | ~68,700        | ~0                                   | ~68,700                                   |
| 2020 Operations to Date | ~731,480       | ~0                                   | ~730,980                                  |

All quantities are estimated

#### **Issues Encountered During Reporting Period**

Policies and procedures are being evaluated on an ongoing basis to address the COVID-19 outbreak. Otherwise, no issues were encountered during the reporting period that require resolution.

#### **Issues To Be Resolved During Next Reporting Period**

No issues that require resolution have been identified at this time with the exception that policies and procedures are being evaluated on an ongoing basis to address the COVID-19 outbreak.

#### **Anticipated Work During Next Reporting Period**

The PDP extraction system consisting of the wells within the Salt Vault will be operated on a continuous basis. Extraction wells within the 8<sup>th</sup> Street Slip will be operated on an intermittent basis to maintain water levels below target elevations. Finally, manual water level measurements will continue to be collected from the designated monitoring wells and extraction wells on a weekly basis.

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<sup>1</sup> GWTS – Groundwater Treatment System

If you have any questions regarding this report, please contact me at 262-349-2528 or [jeffrey.howard.danko@jci.com](mailto:jeffrey.howard.danko@jci.com).

Sincerely,



Jeffrey Danko  
EHS Manager – Environmental Remediation

Attachments:

Table 1 –Pump Down Program Groundwater Elevation Monitoring

cc: Angela Carey – WDNR  
Trevor Moen - WDNR  
Rick Bethel – Johnson Controls  
Ryan Suennen – Tyco Fire Products  
Heather Ziegelbauer – Jacobs  
Kirk Kapfhammer – Endpoint Solutions





**Table 1. 2020 Pump Down Program Groundwater Elevation Monitoring**  
 Tyco Fire Products LP, Marinette, Wisconsin

|                  |       |
|------------------|-------|
| Target Elevation | 577.9 |
|------------------|-------|

| Well ID                                | July 29, 2020 |  | August 5, 2020 |  | August 13, 2020 |  |
|--|---------------|--|----------------|--|-----------------|--|
|  | DTW           | Corrected Groundwater Elevation (for equivalent fresh water) | DTW            | Corrected Groundwater Elevation (for equivalent fresh water) | DTW             | Corrected Groundwater Elevation (for equivalent fresh water) |
| MW001M                                 | 6.65          | 580.52   | 7.02           | 580.15   | 7.28            | 579.89   |
| MW001S                                 | 5.62          | 581.64   | 5.98           | 581.28   | 6.39            | 580.87   |
| MW002M-R                               | 8.77          | 581.81   | 9.17           | 581.40   | 9.54            | 581.03   |
| MW002S-R                               | 8.66          | 581.66   | 9.00           | 581.32   | 9.40            | 580.92   |
| MW031M                                 | 6.01          | 582.05   | 6.48           | 581.57   | 6.93            | 581.12   |
| MW031S                                 | 6.69          | 582.21   | 7.18           | 581.72   | 7.67            | 581.23   |
| MW113S                                 | 8.63          | 581.66   | 9.01           | 581.28   | 9.39            | 580.90   |
| MW113M                                 | 9.14          | 581.16   | 9.53           | 580.77   | 9.76            | 580.54   |
| MW115P                                 | 6.68          | 582.41   | 7.08           | 582.01   | 7.38            | 581.71   |
| MW115S                                 | 7.75          | 581.25   | 7.79           | 581.21   | 8.42            | 580.58   |
| MW116P                                 | 8.27          | 581.65   | 7.84           | 582.08   | 8.12            | 581.80   |
| MW116S                                 | 7.57          | 582.35   | 8.54           | 581.38   | 9.02            | 580.90   |
| MW119D                                 | 6.30          | 582.44   | 6.28           | 582.46   | 6.28            | 582.46   |
| EW-3                                   | NM            | -  | NM             | -  | NM              | -  |
| EW-10                                  | 24.58         | 563.17   | 24.66          | 563.09   | 24.66           | 563.09   |
| EW-11                                  | 24.03         | 563.28   | 22.99          | 564.32   | 27.56           | 559.74   |
| EW-13                                  | 24.98         | 560.76   | 4.60           | 581.21   | 22.24           | 563.51   |
| EW-14                                  | 21.56         | 565.15   | 9.47           | 577.29   | 21.31           | 565.40   |
| MW034M                                 | 11.11         | 577.14   | 12.02          | 576.23   | 12.29           | 575.96   |
| MW034S                                 | 11.54         | 576.68   | 12.19          | 576.03   | 12.52           | 575.70   |
| MW036M                                 | 12.18         | 576.41   | 12.29          | 576.30   | 12.78           | 575.80   |
| MW036S                                 | 11.62         | 576.65   | 11.70          | 576.57   | 12.18           | 576.09   |
| MW038M                                 | 9.27**        | 576.76   | 9.49           | 576.54   | 10.07           | 575.96   |
| MW038S                                 | 10.98**       | 576.73   | 11.24          | 576.47   | 11.89           | 575.82   |
| MW120D                                 | 5.97          | 582.68   | 5.73           | 582.92   | 5.93            | 582.72   |
| MW120M                                 | 11.96         | 577.04   | 12.12          | 576.88   | 12.18           | 576.82   |
| MW120S                                 | 11.43         | 577.16   | 11.40          | 577.19   | 11.66           | 576.93   |
| EW-2                                   | NM            | -  | NM             | -  | NM              | -  |
| EW-8                                   | 8.90          | 577.88   | 9.37           | 577.41   | 14.03           | 572.74   |
| EW-9                                   | 8.31          | 577.39   | 19.42          | 566.26   | 20.25           | 565.43   |
| MW004M                                 | NM            | -  | NM             | -  | NM              | -  |
| MW004S                                 | 4.39          | 584.19   | 4.94           | 583.64   | 5.05            | 583.53   |
| MW032M                                 | 4.89          | 583.34   | 5.24           | 582.99   | 5.39            | 582.84   |
| MW032S                                 | 6.47          | 581.89   | 6.27           | 582.09   | 6.12            | 582.24   |
| MW033M                                 | 3.42          | 585.40   | 3.98           | 584.83   | 4.06            | 584.75   |
| MW033S                                 | 3.11          | 584.06   | 3.69           | 583.48   | 3.80            | 583.37   |
| MW039M                                 | NM            | -  | NM             | -  | NM              | -  |
| MW039S                                 | 1.85          | 584.24   | 2.39           | 583.70   | 2.49            | 583.60   |
| MW035M                                 | NM            | -  | NM             | -  | NM              | -  |
| MW035S                                 | 4.89          | 582.78   | 4.84           | 582.83   | 4.89            | 582.78   |
| MW037M                                 | NM            | -  | NM             | -  | NM              | -  |
| MW037S                                 | 4.33          | 582.75   | 4.20           | 582.88   | 4.31            | 582.77   |
| SG4                                    | 6.04          | 582.81   | 5.96           | 582.89   | 5.91            | 582.94   |
| <b>Rough Target Elevation Calc SV*</b> |               | 581.63   |                | 581.21   |                 | 580.80   |
| <b>Rough Target Elevation Calc 8S*</b> |               | 576.82   |                | 576.53   |                 | 576.13   |
| <b>Target Elevation (NAVD88)</b>       |               | 577.90   |                | 577.90   |                 | 577.90   |
| <b>SV Variance</b>                     |               | 3.73   |                | 3.31   |                 | 2.90   |
| <b>8S Variance</b>                     |               | -1.08  |                | -1.37  |                 | -1.77  |

**Notes:**

Measurements were collected from top of casing (TOC). All depth measurements are in feet.

Elevations are reported in feet above mean sea level (AMSL) relative to the North American Vertical Datum 1988 (NAVD88)

Shaded = Well part of evaluation during Drawdown and Interim Phases

**Bold** = Well part of Target Elevation calculation

- = Information not applicable or not collected

Area Definitions - SV - Salt Vault, 8SS - 8th Street Slip

\*Wells identified for target elevation calculation are for during the drawdown and interim phases. Only wells outside the steepest portion of the cone of depression will be included in the calculation

of the average elevations. The average elevation of all suitable measured wells will be considered the calculated elevation to compare against the target elevation. The number of post-drawdown

phase wells used for this calculation may be reduced and will be determined based on results observed during the drawdown phase.

\*\*MW038M and MW038S measurements for July 29, 2020 are updated in this table as they were later corrected; the measurements had been swapped in the field and reported incorrectly the bi-weekly summary report through, July 31, 2020.

ID = identification; DTW = depth to water

NM = Not Measured; MW = Monitoring Well