

**From:** Neal, Conor <Neal.Conor@epa.gov>  
**Sent:** Wednesday, September 04, 2019 11:38 AM  
**To:** Jeffrey Howard Danko  
**Cc:** Carey, Angela J - DNR; Moore, Tammy  
**Subject:** Agency approval - Addendum to 2015 Barrier Wall Groundwater Monitoring Plan Update  
**Attachments:** Addendum to 2015 Barrier Wall GW Monitoring Plan Update EPA approval sent 09042019.pdf

Jeff,

Please find attached the EPA and WDNR conditional approval of Tyco's June 24, 2019 Addendum to the 2015 Barrier Wall Groundwater Monitoring Plan Update.

If you have any questions please contact me at 312-886-7193.

Thank you,  
Conor

**Conor Neal**  
Geologist  
Land, Chemical & Redevelopment Division  
US EPA, Region 5, LR-16J  
77 West Jackson Blvd  
Chicago, IL  
(312) 886-7193



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF

Mr. Jeffrey Danko  
EHS Manager – Environmental Remediation  
Johnson Controls  
5757 N. Green Bay Ave  
Milwaukee, WI 53209

RE: Addendum to 2015 Barrier Wall Groundwater Monitoring Plan Update  
Tyco Fire Products LP, Stanton Street Facility, Marinette, Wisconsin  
EPA RCRA Administrative Order Docket No. RCRA-05-2009-0007  
EPA Facility ID WID 006 125 215

Dear Mr. Danko

The United States Environmental Protection Agency (EPA) and Wisconsin Department of Natural Resources (WDNR) have reviewed Jacobs Engineering Group's June 24, 2019 submittal of the Addendum to 2015 Barrier Wall Groundwater Monitoring Plan Update (Addendum) on behalf of Tyco Fire Products LP. The Agencies approve of the Addendum with the following conditions:

### **Section 2**

The Agencies agree with the underwater inspection frequency proposed. Underwater surveys should be conducted every five years at a minimum and will not exceed 5 years. Areas of deficiency or concern will be inspected more frequently.

### **Section 3.3.1**

While the NOAA river and barometric gages historically show similar river level and barometric pressure fluctuations to the onsite stream gage and barometer, it is critically important to use Site data for this evaluation. River level fluctuations are roughly 0.5 feet or less, and groundwater fluctuations are even less. Since the objective of the SeriesSEE evaluation is to measure the hydraulic connection between the river and groundwater at the wall, data from both hydraulic systems should be collected at the Site.

### **Section 3.3.2 Footnote 10**

A trend analysis may indicate that significant changes to the magnitude of the observed hydraulic response are measured over time. Since visual surveys are planned for every 5 years, evaluating the amplitude factor and RMS error in each well over time will supplement visual surveys.

### **Section 4 Footnote 13**

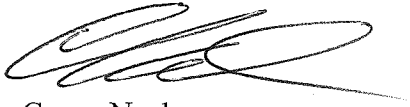
This footnote is not clear. To clarify - Is Tyco proposing to reduce arsenic sampling to annual for the years 2020, 2021, 2022, and 2023, and then transition to twice per five-year review period? If

an increasing trend is observed outside of the VBW then Tyco will evaluate whether leakage is occurring using other lines of evidence. Is this correct? If so, the Agencies agree with this decision. If not, please clarify.

The lines of evidence (or "other factors" as described in footnote 13) should include consideration of other potential arsenic migration pathways such as flooding events where surface water and contained groundwater mix and discharge beyond the limits of the walls. A reconsideration of sampling frequency should occur if increasing trends persist.

Please contact me if you have any questions about this conditional approval.

Sincerely,

A handwritten signature in black ink, appearing to read 'Conor Neal', with a stylized, cursive script.

Conor Neal

Ecc: Angela Carey, WDNR  
Tammy Moore, EPA