

From: [Neal, Conor](#)
To: [Janeczek, Joseph](#)
Cc: [DuFresne, Kristin I - DNR](#); [Finn, Molly](#); [Clarizio, Richard](#); [Mator, Richard](#); [Danko, Jeff](#); [Suennen, Ryan](#)
Subject: RE: Tyco Groundwater Quality and Elevation Monitoring recommendations
Date: Tuesday, June 20, 2017 2:52:38 PM
Attachments: [RE Annual Report Recommendations.msg](#)
[2016 BWGWMPU recommendations Ltr to Tyco.pdf](#)

I apologize for multiple emails. I realize I did not attach the email referenced in the letter. Both documents attached here.

Conor

From: Neal, Conor
Sent: Monday, June 19, 2017 2:04 PM
To: Janeczek, Joseph <jjaneczek@tyco.com>
Cc: DuFresne, Kristin I - DNR <Kristin.DuFresne@wisconsin.gov>; Molly Finn (Finn.Molly@epa.gov) <Finn.Molly@epa.gov>; Clarizio, Richard <Clarizio.Richard@epa.gov>; Mator, Richard <rmator@tyco.com>; 'Danko, Jeff' <jdanko@tycoint.com>; Suennen, Ryan <ryansuennen@tycoint.com>
Subject: Tyco Groundwater Quality and Elevation Monitoring recommendations

Joe,

Please find attached EPA's response to Tyco's recommendations listed in the 2016 Barrier Wall Groundwater Monitoring Annual Report, submitted in May 2017.

Conor Neal
Geologist
Land & Chemicals Division
US EPA, Region 5, LU-MC-16J
77 West Jackson Blvd
Chicago, IL
(312) 886-7193

From: Neal, Conor
To: ["Danko, Jeff"](#)
Subject: RE: Annual Report Recommendations
Date: Monday, June 05, 2017 3:55:00 PM

Jeff,

Thank you for the reminder. I had the chance to review and discuss your recommendations. EPA approves of the following recommendations made in the 2016 Barrier Wall Groundwater Monitoring Annual Report:

- Collecting transducer data every hour (reduced from every 30 minutes) at each location, and
- Relocating the transducers in the MW105/MW040 well cluster to the MW106/MW003 well cluster to improve data usability.

We are still considering the third recommendation from the Report.

Let me know if you have any questions.

Have a good week in the field,

Conor

Conor Neal
Geologist
Land & Chemicals Division
US EPA, Region 5, LU-MC-16J
77 West Jackson Blvd
Chicago, IL
(312) 886-7193

From: Danko, Jeff [mailto:jdanko@tycoint.com]
Sent: Monday, June 05, 2017 12:17 PM
To: Neal, Conor <Neal.Conor@epa.gov>
Subject: Annual Report Recommendations

Conor:

I am heading to the site this week for some of the field work – water levels and river sampling. Was wondering if you had made a decision on the changes to the transducer data collection rate and the relocation of the couple of transducers? If possible, I would like to try to squeeze in the modifications during this trip. I understand if you are not ready to approve the recommendations at this time.

Jeff Danko
Environmental Project Geologist

262-951-6888

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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

REPLY TO THE ATTENTION OF:

June 19, 2017

LU-16J

VIA ELECTRONIC MAIL

Mr. Joseph Janeczek, PE, ARM
Director – Global Environmental Programs
& Corporate Social Responsibility / EHS
Johnson Controls

Subject: Tyco Groundwater Quality and Elevation Monitoring
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. Janeczek:

In Tyco's May 2017 submittal of the 2016 Barrier Wall Groundwater Monitoring Annual Report (Report) to the United States Environmental Protection Agency (EPA), Tyco made three recommendations related to its groundwater elevation and quality monitoring methods, specifically:

1. Move transducers in MW105/MW040 to the MW106/MW003 well cluster because surface water seepage occurs at the former, limiting their data usability.
2. Reduce the frequency of collecting transducer data from every 30 minutes to every hour at each well they are installed in to allow for better usability of the data and to reduce the large amount of data collected.
3. Commencement of annual groundwater sampling activities in 2017.

Items 1 and 2 were approved by EPA in an email on June 5, 2017 from Mr. Conor Neal (EPA) to Mr. Jeff Danko (Tyco) (attached) because, 1) the MW105/MW040 well cluster is located in the middle of Stanton Street and cannot be converted to stick-up wells, and 2) water level data from monitoring wells and the river stage show that changes in water levels will not be missed by reducing data collection frequency to hourly.

Tyco's third recommendation is based on the provision in the approved 2015 Barrier Wall Groundwater Monitoring Plan Update that states "sampling frequency will be decreased to annually (during the spring quarter) of 2017, unless increasing trends in total arsenic concentrations are observed; in which case, semi-annual groundwater sampling will continue for at least 1 additional year. The sampling frequency for the site will be re-evaluated during the 2018 5-year review." As of the most recent sampling event in October 2016, 13 wells have an insufficient number of data points to evaluate a trend, 4 wells have an increasing trend in arsenic concentration, 8 wells have a decreasing trend, and 29 wells have no trend. According to the EPA's Unified Guidance on Statistical Analysis of Groundwater Monitoring Data at RCRA

Facilities, "a lack of trend should correspond to a time series plot fluctuating randomly about a constant mean level, with no visually apparent upward or downward pattern." EPA is concerned by the overwhelming majority of monitoring wells that have either an increasing trend, insufficient data to evaluate a trend, or have randomly fluctuating arsenic concentrations over time. As such, EPA does not approve of Tyco's recommendation to commence annual groundwater sampling activities in 2017. Tyco must plan to collect semi-annual groundwater samples through the remainder of the current 5-year review period. Tyco and EPA can re-evaluate sampling frequency again during the 2018 5-year review.

Please feel free to contact me by telephone at (312) 886-7193 or email at neal.conor@epa.gov should you have any questions in regards to this matter.

Sincerely,



Conor Neal, Geologist and Project Manager
Corrective Action Section 2
Remediation and Reuse Branch
Land and Chemicals Division
U.S. EPA, Region 5

Ecc: Kristin DuFresne, WDNR
Molly Finn, Acting Section Chief, RRB CAS2
Richard Clarizio, USEPA
Richard Mator, Tyco International
Jeff Danko, Tyco International
Ryan Suennen, Tyco International