



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

LU-161
REPLY TO THE ATTENTION OF:

VIA ELECTRONIC MAIL

Mr. Jeffery Danko
Environmental Geologist
Johnson Controls International
1 Stanton Street
Marinette, WI 54143-2542

Subject: Draft Passive Arsenic Sampling Pilot Test Work Plan
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:

Thank you for the productive meeting in Milwaukee on May 16, 2018 and for submitting Tyco's response to U.S. Environmental Protection Agency (EPA) and Wisconsin Department of Natural Resources (WDNR) comments on the *Draft Passive Arsenic Sampling Pilot Test Work Plan and Alternatives Analysis* during that meeting.

Based on Tyco's responses, EPA and WDNR have determined that the Pilot Test Work Plan and full scale proposal found therein for use of diffusive gradient in thin film (DGT) passive samplers to monitor for leaks through the vertical barrier wall (VBW) is not approvable.

Uncertainty remains from the proposal and response to comments about whether the DGTs will be able to positively detect groundwater leaking through the VBW should it be occurring. The pilot methods proposed for DGT deployment against the VBW, the DGT binding gel's questionable ability to bind with all arsenic species found on site, and unknowns about deployment time along the VBW present many opportunities for false negative results or results that will not inform Tyco and the Agencies about the potential for sediment recontamination or surface water quality exceedances. Additionally, the performance criteria used for the arsenic absorption study appears to be arbitrary, and the proposal to use a correction factor for total arsenic concentrations is challenging given that the binding gels may selectively absorb certain arsenic species over others.

At the May 16, 2018, meeting, preliminary discussions were held about Tyco evaluating the installation of a long term, permanent monitoring network along the VBW. Discussions included identifying the zones of highest arsenic mass flux or the most conductive layers along the VBW, as these would pose the most risk to surface water quality exceedances or sediment

recontamination should a leak be occurring. Tyco committed to evaluating this option during the meeting.

Accordingly, EPA denies Tyco's *Draft Passive Arsenic Sampling Pilot Test Work Plan and Alternatives Analysis* and directs Tyco to submit to EPA its evaluation of a permanent monitoring network along the VBW to assess the potential for groundwater leaks through and underneath the VBW within 45 days of receipt of this letter. Tyco may also continue exploring alternative monitoring techniques and discuss them with the Agencies.

Please contact me with any questions or comments regarding this letter. The EPA is willing to meet again or hold a conference call to discuss a path forward for evaluating the VBW and appreciates Tyco's commitment.

Sincerely,



Conor Neal
Geologist and Project Manager
Corrective Action Section 2

Ecc: Joseph Janeczek, Johnson Controls International
Rich Mator, Johnson Controls International
Ryan Suennen, Johnson Controls International
Tammy Moore, US EPA
Angela Carey, WDNR