From: Michalets, Linda M - DNR

**Sent:** Monday, June 03, 2024 8:21 AM

**To:** Stephen Meer, P.E.; Joshua Neudorfer; Eric Ogden; 'Anne Viner'; Brunette,

Margaret M - DNR; Nobile, Trevor W - DNR

**Subject:** BRRTS #02-41-107191 Biogenesis Enterprises Review - virtual-only

# Hello All,

In preparation for our meeting on Wednesday afternoon, I am providing a list of items, below, that the DNR has determined represent data gaps that need to be addressed to complete the site investigation of the former Biogenesis Enterprises site, 610 W. Rawson Avenue, Oak Creek, as well as information that should be provided to further evaluate the vapor risk.

Unfortunately, I am going to have to switch this meeting to virtual only, as I have come down with a cold and do not want to pass it on to my coworkers or anyone else. Alternatively, if you would like to delay the meeting to keep it in-person, let me know.

In May 2019, soil excavations were conducted to remediate areas with high concentrations of petroleum and/or chlorinated volatile organic compounds (PVOCs and/or CVOCs) and PCBs. The DNR also conditionally approved moving soil with lesser contamination from the north side of the property for reuse on other areas of the property during redevelopment. Since redevelopment, four rounds of groundwater monitoring have occurred using the network of 13 water table wells and two piezometers. The DNR has the following comments, based on the data provided in Sigma's *Groundwater Monitoring Update*, dated February 15, 2024, and previous information provided.

### Soil

Provide the status of the green space caps constructed after redevelopment. Per the DNR's April 29, 2019 soil management approval letter, a work plan must be submitted that describes confirmation soil sampling to be conducted to confirm that material reused within the green space areas during redevelopment does not pose a risk via the direct contact pathway. If laboratory analytical results indicate that shallow soil in any green space area presents a direct contact risk, additional remedial actions must be proposed to mitigate the direct contact risk in the identified area.

# Groundwater

- Additional groundwater monitoring is needed in the southwest portion of the property, including appropriate natural attenuation parameters, to support Sigma's conclusion that natural attenuation of CVOCs is occurring.
- Monitoring well SMW-6 should be sampled at least one more time to confirm a decreasing benzene trend in groundwater.
- The degree and extent of per- and polyfluoroalkyl substances (PFAS) contamination in groundwater must be defined and evaluated considering the suggested preventive action limits and enforcement standards established by the Wisconsin Department of Health and Safety.
- Additional monitoring wells may need to be installed and/or analyzed for PFAS to define the
  extent of the contaminant plume.
- The extent of 1,4-dioxane in groundwater is not yet defined, particularly to the north and west.
   Additional sampling is needed, and additional monitoring wells may be necessary, to define the extent off-site.

• It must be demonstrated that contaminants and their breakdown products in groundwater have been sufficiently reduced to the point that contamination is not migrating beyond the property or properties that are identified as having a continuing obligation for groundwater contamination at closure, per Wis. Admin. Code § NR 726.05(6)(c). It has not yet been determined whether off-site properties are impacted at concentrations that exceed regulatory standards.

#### Vapor

For a full understanding of the vapor risk associated with residual CVOCs and preferential pathways, provide an interior building layout, particularly office spaces. Provide a description of where utilities enter the building and confirm that no utilities pass through residual contamination that remains in the southwest corner of the property.

# **VPLE Status**

The DNR must concur that the site investigation is complete prior to issuance of a full or partial VPLE certificate of completion.

We look forward to discussing these issues with you as a Teams meeting on Wednesday afternoon. Let me know if you have any questions or concerns before that time.

Thank you, Linda

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# **Linda Michalets**

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