

From: James, Andrew G - DNR
Sent: Thursday, October 24, 2019 10:23 AM
To: 'Miller, Roger'
Cc: Michael.Moore@gapac.com
Subject: RE: Buth Oil Facility (Former) - BRRTS # 02-05-563707

Roger,

Thank you for your email and for speaking with me this morning regarding the Buth Oil Facility (Former) and the potential need for a cap maintenance plan included with your closure request. As I understand it, a cap would be required over the soil contamination for infiltration and due to the fact that the investigation was conducted under impervious conditions. The cap would not need to address the non-industrial direct contact exceedances because the property is zoned industrial with no foreseeable change in the zoning. I cannot speak for the closure committee and you have provided technical context as to why a cap may not be necessary. Should you choose to forego a cap maintenance plan with your closure request, I will present your argument to the committee, underlining your technical reasoning. If the committee feels that a cap is necessary, we can just include a cap maintenance plan as part of the required revisions. Please let me know if I can be of further assistance.

Thanks,

Andy

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Andrew James

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From: Miller, Roger <rmiller@geiconsultants.com>
Sent: Wednesday, October 23, 2019 4:02 PM
To: James, Andrew G - DNR <andrew.james@wisconsin.gov>
Cc: Michael.Moore@gapac.com
Subject: RE: Buth Oil Facility (Former) - BRRTS # 02-05-563707

Hi Andy,

Checking back with you on our question about the Buth Oil Facility (Former) case closure documentation (see email below). I wanted to make sure I did not possibly miss your reply. I have had some sporadic issues with my internet and email connections over the last week or so—working good now.

Thank you,

GEI

ROGER A. MILLER, P.G., C.P.G.
Senior Hydrogeologist
920.455.8657 cell: 920.737.6373
3159 Voyager Drive, Green Bay, WI 54311



From: Miller, Roger
Sent: Tuesday, October 15, 2019 1:52 PM
To: James, Andrew G - DNR <andrew.james@wisconsin.gov>
Cc: Michael.Moore@gapac.com
Subject: RE: Buth Oil Facility (Former) - BRRTS # 02-05-563707

Hi Andy,

I received your voice message and email below. In the original closure request, we presented the technical rationale for relying on natural attenuation as the performance standard for closure and inclusion of the site in the GIS database for tracking purposes. The data and site conditions did not tip the scales in our view to also justify a cap maintenance plan to protect against infiltration, but we wanted to double-check this with you before resubmitting the closure packet with the requested additional two rounds of groundwater data.

Discussion from the Case Closure Form

A soil sample collected from GP-6 (2 to 3 ft) and estimated to be from below the water table contained concentrations of benzene, ethylbenzene, and naphthalene above nonindustrial direct contact RCLs, and benzene, ethylbenzene, naphthalene, trimethylbenzenes and xylenes at concentrations exceeding groundwater pathway RCLs. Benzene also exceeded its groundwater pathway RCL in Borings GP-3 (1.5 to 2 ft [remaining post-construction portion of tested interval]) and the shallower sample at GP-6 (1.5 to 2 ft [remaining post-construction portion of tested interval]) with low-level detections of 35.8 and 30.0 ug/kg, respectively (the laboratory reported these results with a J-flag, indicating that the corresponding value was between the laboratory method detection limit and the reporting limit). These detections are estimated to be at or slightly above the water table, perhaps only by 0.5 feet.

Residual impacts continue to naturally attenuate within a zone of absorbed and dissolved-phase impacts in fine-grained saturated soil beneath and near the former Buth Oil ASTs. Field screening and laboratory testing of groundwater and soil samples support the conclusion that residual petroleum impacts are localized and have naturally attenuated over the last several decades on the site within approximately 50 feet downgradient of the former ASTs.

Residual petroleum impacts do not exceed industrial direct contact RCLs applicable to the former Buth Oil site (Lot 3). Accordingly, a surface engineering control is not warranted to protect against direct

contact exposure. Similarly, a surface engineering control is not considered necessary to protect against migration of residual impacts at and below the water table, because data indicate natural attenuation will be effective in preventing exposure through the groundwater pathway in the native clay soil beneath the parking lot.

Petroleum distribution at the former Buth Oil facility is interpreted to have ceased prior to about 1960. Accordingly, residual petroleum impacts have been naturally attenuating for approximately 60 years, including approximately 20 years during which residual impacts were not covered by a paved parking lot (~1960 - 1980). Even without a surface cap, infiltration is unlikely to appreciably affect the slow rate of groundwater flow in the saturated clay soil, estimated to be approximately 1 foot/year.

Based on the technical considerations above, an engineered surface barrier is not considered warranted to protect public health and the environment at this industrially-zoned site.

Please let us know if this approach looks reasonable to you and we will resubmit the closure packet with the above justification and include the last two rounds of groundwater testing results at BW-3 and BW-4 (previously emailed to you). I will also call you to touch base on this, but thought it best to give you some context first.

Thank you,

GEI ROGER A. MILLER, P.G., C.P.G.
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From: James, Andrew G - DNR <andrew.james@wisconsin.gov>
Sent: Tuesday, October 1, 2019 7:48 AM
To: Miller, Roger <rmiller@geiconsultants.com>
Subject: [EXT] RE: Buth Oil Facility (Former) - BRRTS # 02-05-563707

Hi Roger,

I left you a voicemail Thursday 9/26, regarding your question but I just wanted to make sure you got this information. A cap maintenance plan, if chosen as a remedial approach, would be required as part of the GIS packet. If one isn't provided in section D at the time of submittal, the closure committee would request this prior to issuing the remaining actions needed letter. Hope this was helpful. Let me know if you have other questions.

Thanks,
Andy

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Andrew James

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From: Miller, Roger <rmiller@geiconsultants.com>
Sent: Thursday, September 26, 2019 1:17 PM
To: James, Andrew G - DNR <andrew.james@wisconsin.gov>
Subject: RE: Buth Oil Facility (Former) - BRRTS # 02-05-563707

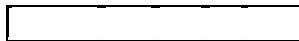
Hi Andy,

Per my voice message, I wanted to clarify the GIS packet information for Buth. Please give me a quick call when you can.

Thanks,

GEI

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From: James, Andrew G - DNR <andrew.james@wisconsin.gov>
Sent: Tuesday, September 24, 2019 2:36 PM
To: Miller, Roger <rmiller@geiconsultants.com>
Subject: [EXT] Buth Oil Facility (Former) - BRRTS # 02-05-563707

Hi Roger,

I was just checking on the progress of this site. The last Semi-Annual report stated you intended to submit for closure in August.

Thanks,

Andy

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Andrew James

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