

PRR Corrective Measures Plan, BASF-Rensselaer, HW#442027

O'Neill, Christopher (DEC) <christopher.oneill@dec.ny.gov>

Mon 9/21/2020 9:22 AM

To: John Douglas Reid-Green <douglas.reid-green@basf.com>; nepler@rouxinc.com <nepler@rouxinc.com>; cmcguckin@rouxinc.com <cmcguckin@rouxinc.com>

Cc: Wayne St Clair <wayne.stclair@basf.com>; Kathryn Sommo <ksommo@rouxinc.com>; Karpinski, Steven (HEALTH) <steven.karpinski@health.ny.gov>; Deming, Justin H (HEALTH) <justin.deming@health.ny.gov>; Fleck, Andrew (DEC) <andrew.fleck@dec.ny.gov>

 1 attachments (901 KB)

BASF-Work Plan.HW.442027.2020-09-01.workplan hw442027 2020-09-01 Roux to DEC - Corrective Measures Plan from 2019PRR Issues.pdf;

Please proceed with the corrective measures from the 2019 Periodic Review Report evaluations for the BASF-Rensselaer site (site #442027), as described in the attached Corrective Measures Workplan, submitted by Roux (BASF's environmental consultant) on September 1, 2020.

Please contact me at 518-376-7605 (mobile) at least 3 workdays prior to the corrective measures field work, so that a NYSDEC site visit may be scheduled during the work.

Chris O'Neill
518-376-7605 (mobile)
518-357-2394 (office)

Corrective Measures Work Plan re: Disapproval of 2019 PRR for Ou1, BASF, hw#442027

Nathan Epler <nepler@rouxinc.com>

Tue 9/1/2020 4:25 PM

To: O'Neill, Christopher (DEC) <christopher.oneill@dec.ny.gov>

Cc: J Wayne St. Clair <wayne.stclair@basf.com>; cmcguckin@rouxinc.com <cmcguckin@rouxinc.com>; John Douglas Reid-Green <douglas.reid-green@basf.com>; Hank Martin <HMartin@elminc.com>; Kathryn Sommo <ksommo@rouxinc.com>

 1 attachments (741 KB)

letter.hw442027.2020-09-1.Signed-BASF-to-DEC.CMWP.2019 PRR for OU1.pdf;

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Mr. O'Neill:

Attached please find a letter addressing the requested Corrective Measures Work Plan for the BASF Rensselaer Site-OU1.

Sincerely,

Nathan Epler, Ph.D., P.G. - NY | Principal Hydrogeologist

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September 1, 2020

Mr. Christopher O'Neill
Professional Engineer 1
New York State Department of Environmental Protection
1130 North Westcott Road
Schenectady, New York 12306

Re: Response to August 11, 2020 NYSDEC Letter, and Corrective Measures Work Plan
BASF, OU1, Rensselaer
NYSDEC Site No. 442027

Dear Mr. O'Neill:

This response letter was prepared by Roux Environmental Engineering & Geology, D.P.C (Roux) on behalf of BASF Corporation (BASF) to respond to the nine comments the NYSDEC/NYSDOH provided on the 2019 Periodic Review Report for OU1. This letter will also serve as the Corrective Measures Work Plan (CMWP) requested by the NYSDEC. BASF is in the process of hiring a contractor to address the cap related repairs and tree removal. Once that work has been scheduled, we will inform the NYSDEC.

Copied below are the comments followed by the responses from Roux on behalf of BASF.

1. The 2019PRR, the May 2019 Roux inspection and the July 2020 NYSDEC site visit identified unacceptable tree growth that needs to be removed.

Response

BASF will remove all of the trees that are in capped areas and take measures to prevent or manage future tree growth.

2. The 2019PRR, the May 2019 Roux inspection and the July 2020 NYSDEC site visit identified damage to the elastocoat cover at the former Building 67 area that needs to be repaired (by a certified installer).

Response

A specialty contractor familiar with the Elastocoat cover system will repair any breaches or cracks in the cover system. Based on visual inspection, the breaches were limited to the outer layer of the cover. Note that the cover system is a three-layer product that provides protection from infiltration even in the event of a breach in the outer layer.

3. The 2019PRR references the "revised site management plan" of December 2019 but the revised site management plan (SMP) remains a draft document since it has not yet been approved by NYSDEC/NYSDOH. References to the revised SMP are not pertinent until it is executed.

Response

Understood. We look forward to your review of the revised SMP. In the meantime we will operate under the approved plan.

4. The 2019 PRR discusses the onsite groundwater treatment system (GWTS) maintenance, operation and monitoring compliance and states that the sampling of the GWTS was changed from weekly to bi-weekly. There is no executed document referenced that approved that monitoring frequency change. The existing discharge permit, which expires in December 2020, has not changed from weekly sampling as best I can tell from the NYSDEC's project file.

Response

Weekly sampling of the of the onsite GWTS will resume.

5. The 2019PRR GWTS effluent data tables illustrate that the 'bi-weekly' sampling of the GWTS began in February 2017. The effluent data tables have no indication of reasons for several months (March 2017, May 2018, August 2018, September 2018, October 2018 and March 2019) having only one sample for the month.

Response

The gaps in sampling were due to the system being down. The table below summarizes the reasons that the GWTS was not sampled at the required frequency. BASF subcontractors worked to reduce downtime events such that these became less frequent after 2018 and early 2019.

Dates	System downtime/Inability to collect samples
March 3, 2017	- Issues at Well EW-6: electrical system required rebuild, delay in obtaining parts and pump - Mechanical problems with pump at Well 12/16, delay in obtaining pump - Pumps received in late March
May 7-14, 2018	- Fault in air stripper blower required off-site maintenance
August 8, 2018	- Power outage/down pole associated with National Grid – August 8 through 15 - Caused mechanical problems with pumps P201 and P301; required replacement
September 21-25, 2018	- Continued mechanical problems with P-301, requiring multiple rebuilds - Carbon changeout
October 2-3, 2018	- Air stripper maintenance/cleaning
March 2019	- Evaluation of a Zero Gravity Filtration system to address solids

6. The 2019 PRR discusses the sampling results for the GWTS and appendix tables present those results. The text states that iron and manganese concentrations have exceeded their permitted discharge limits on 5 to 13 times each year since 2016. The text states that the GWTS is being evaluated for operational improvements but there is no specific timeline for such an evaluation.

Response

During the Remedial Investigation of OU1, inorganic metals, such as iron and manganese were detected in groundwater at concentrations exceeding the NYSDEC class GA Groundwater Standards and/or NYS Sanitary Code Part 5, Subpart 5-1 Public Water Systems. These metals are naturally-occurring in shallow groundwater beneath OU1 and are not believed to be associated with an onsite source of contamination. The GWTS was not designed to remove these metals, because the treated water is discharged onsite through infiltration galleries, and no offsite migration of impacted groundwater is occurring.

BASF will evaluate options for possible modifications to the GWTS to address these metals before the new discharge permit is issued.

7. The 2019PRR data tables exceedances are summarized below in Table 1:

PERMIT EXCEEDANCES	SAMPLE DATES
pH	1/3/17; 1/24/17; 1/31/17; 2/7/17
Bis-(2ethylhexyl)phthalate	10/17/17; 1/16/18; 2/7/18
Iron	12/20/16; 12/27/16; 1/3/17; 1/10/17; 1/17/17; 1/2/18; 1/16/18; 2/27/18 (unfiltered); 3/30/18; 4/24/18; 10/17/18; 12/4/18; 12/18/18; 1/8/19; 1/23/19; 2/7/19; 4/30/19
Manganese	11/1/16; 11/8/16; 11/15/16; 11/22/16; 1/31/17; 6/20/17; 11/7/17; 11/21/17; 12/5/17; 12/19/17; 2/7/18; 3/30/18; 4/10/18; 4/24/18; 9/28/18; 10/17/18; 3/22/19

Response

The above table provided by the NYSDEC in the letter indicate that there were exceedances of pH permit requirements only during early 2017, and exceedances of Bis-(2ethylhexyl)phthalate only 3 times in 2017 and 2018; indicating that the issue has been addressed by the GWTS operators.

The iron and manganese exceedances are discussed above in the response to comment #6.

8. The 2019PRR Appendix A IC/EC Certification Form has Box 2 checked as “yes” for all ICs/ECs in place and functioning as designed, yet, as described above, there were several issues with the engineering controls for the site. Answering “no” to this question would have required the submittal of a Corrective Measures Work Plan.

Response

BASF recognizes that there were issues with the engineering controls as discussed in this letter but considered them to be routine maintenance items that would be addressed under the existing SMP. The responses to the issues—as addressed in this letter—constitute the requested CMWP and will be addressed by Site contractors responsible for maintaining the OU1 engineering controls by the end of October.

9. In addition, the photographs from the May 2019 Roux site inspection, included as Appendix B in the 2019PRR, and the photographs from the July 2019 NYSDEC site visit illustrated 2 piles of waste tires on the site, which likely constitutes improper disposal of waste tires. The text of the 2019PRR does not mention the tire piles as a potential issue with compliance with NYSDEC Solid Waste regulations.

Response

The tires noted in the photographs were previously used for anchoring tarps covering soil piles and were inadvertently left at the Site by the excavation contractor during the removal of source material associated with the Former Building 81 area. These materials will be removed by the same contractor who will be responsible for tree removal and cap repair.

BASF endeavors to correct the issues noted by the NYSDEC as deficiencies in the 2019 PRR by the end of October by implementing this Corrective Measures Work Plan.

We greatly appreciate your assistance in this matter. If you have any questions, or require additional information, do not hesitate to contact Nathan Epler at nepler@rouxinc.com.

Sincerely,

ROUX ENVIRONMENTAL ENGINEERING AND GEOLOGY, D.P.C.


Nathan Epler, Ph.D.

Principal Hydrogeologist/P.G.-NY


Charlie McGuckin, P.E.

Principal Engineer

