

Appendix B – Low-pH and High-pH Events Reported by Defendant as MSGP Violations

Date(s) of Event	Lowest or Highest pH Reported Downstream in the Stream (Standard Units, “S.U.”)	Defendant’s Statements to EPA Regarding Low-pH and High-pH Events¹
191 days from November 23, 2019, through June 30, 2020	Lowest: 2.89	Break in seam at bottom of concrete structure of Stream culvert. Leak in the main wastewater drain line that runs underground from the Mustard Building basement to the Pump House. Leak in a process line from a tank located on the southern side of the Mustard Building.
July 27, 2020	Lowest: 4.47	Water seepage through pavement cuts downhill of the tank farm.
July 28, 2020	Lowest: 4.74	The sump pump that conveys wastewater from the Reverse Osmosis (“RO”) Room to the Barrel House drains failed and wastewater accumulated in the RO Room, eventually overtopping the containment berms and flowing into CBY-11.
August 29, 2020	Lowest: 3.85	No source identified.
October 13, 2020	Lowest: 4.03	No source identified.
November 22, 2020	Lowest: 3.73	No source identified.
December 17, 26, and 27, 2020	Lowest: 3.08	Repairs of a manhole and flume structure adjacent to the Pump House which were used as part of the wastewater conveyance system.
December 29, 2020	Lowest: 1.67	No source identified.

¹ Defendant provided these statements regarding high- and low-pH events to EPA in letters reporting Defendant’s noncompliance with the 2015 Multi-Sector General Permit for Discharges Associated with Industrial Activity (“MSGP”) and 2021 MSGP. The 2015 and 2021 MSGP require that permittees report noncompliance that may endanger health or the environment as well as the cause of the noncompliance, among other information.

Date(s) of Event	Lowest or Highest pH Reported Downstream in the Stream (Standard Units, "S.U.")	Defendant's Statements to EPA Regarding Low-pH and High-pH Events¹
January 28 through 31, 2021	Lowest: 1.44	A pipe in the Pump House froze causing wastewater to back up into the wastewater lines and into an existing flume manhole through which it leaked into the surrounding soil above the unnamed brook culvert.
March 11 through 15, 2021	Lowest: 1.76	No source identified.
June 10 and 11, 2021	Lowest: 3.37	No source identified.
June 30 and July 2, 2021	Lowest: 3.68	No source identified.
October 14, 2021	Lowest: 3.05	No source identified.
January 16 through 18, 2022	Lowest: 3.21	Broken boiler valve, excess boiler make-up water, burst frozen pipes.
March 1, 2022	Lowest: 4.31	No source identified.
March 8, 2022	Lowest: 3.76	Power outage, generator malfunction, acetator foaming overflow not contained ("small amount" of foam "appears to have made it" into CBY-17).
April 10 and 11, 2022	Lowest: 3.87	Related to large amount of rain and something occurring within vicinity of "wastewater area."
April 19, 2022	Lowest: 4.24	Pipe break in the Reverse Osmosis room. New employee removed spill mat covering drain and liquid flowed into CBY17.
January 23, 2023	Lowest: 4.14	Snow removal activities, with snow containing "residuals" being piled adjacent to CBY-17.
January 28 through 30, 2023	Lowest: 4.07	No source identified.
February 6, 2023	Lowest: 3.82	Sink pipes burst in the Vinegar Building, pumps inactive due to power failure, failure of secondary containment.
March 14, 15, 17, 18, and 20, 2023	Lowest: 3.50	Rain and snow, and wastewater pickup cancelation, caused overflow from wastewater system and backup in facility garage.

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April 17, 2023	Lowest: 3.60	Crack in wastewater line allowed entry of groundwater, exceeding wastewater storage.
May 15, 2023	Lowest: 3.52	Gasket broke on a tank, releasing tank contents into excavation area where a cracked wastewater pipe was being repaired. Dewatering activities.
June 18 and 19, 2023	Lowest: 3.28	During a power failure, open valves allowed excessive volumes of wastewater to flow to the wastewater tank, which overflowed. The secondary containment around the wastewater building did not contain the overflowing water.
July 9, 2023	Lowest: 4.65	No source identified.
July 23, 2023	Lowest: 4.45	No source identified.
August 31, 2023	Lowest: 3.55	No source identified.
September 13, 2023	Lowest: 3.66	Wet weather caused wastewater tanks to overflow.
September 27, 2023	Lowest: 3.54	No source identified.
January 14 through 17, 2024	Lowest: 3.55	Excessive water entered the wastewater system during wet weather and related impacts to transportation of wastewater offsite.
Eight days from April 4 through 15, 2024	Lowest: 2.76	Break in the fire suppressant line sent excess water to the wastewater system, resulting in an overflow.
April 21, 2024	Lowest: 4.01	Malfunctioning pump in Pump House, resulting in overflow of wastewater.
May 19 through 21, 2024	Lowest: 3.47	Internal liner for concrete tanks located in the Pump House may have experienced a limited breach resulting in potential seepage to the surrounding area.

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88 days from July 2 through November 15, 2024	Lowest: 2.25	Residuals from historic releases, cracks in CBY17 concrete sump, broken clamp for fitting connecting pipes, loose pipe fitting.
January 20, 21, and 22, 2025	Lowest: 3.43	Canceled wastewater pickups and overflow of wastewater storage system.
January 27, 2025	Lowest: 4.28	No source identified.
February 11, 13, and 14, 2025	Lowest: 2.80	Residuals from historic releases.
February 19, 21, and 27, 2025	Lowest: 3.21	Reduced wastewater storage while tank was taken offline for work, overtopping of tank in Pump House and compromised area in floor of Pump House.
March 7, 2025	Lowest: 3.90	Error in installation of new pumps, resulting in overflow of tank in Pump House.
July 7, 2025	Lowest: 3.4 3	Process materials released from broken pipe on the roof of the Vinegar Building, collected in roof drains, then flowed to Stream after Defendant cleared roof drains.
July 22 and 23, 2025	Lowest: 3.49	Standing water, residuals from historic releases, cracks in piping, and culvert in need of resurfacing.
August 13, 18, and 21, 2025	Lowest: 3.47	Pump failure, leading to release of foam from piping on the roof of the Vinegar Building to, ultimately, the Stream.
September 22, 23, 29, 30, and October 1, 2025	Highest: 13.23	Quikrete Hydraulic Cement discharged to the Stream during a repair of the culvert.
October 6 and 7, 2025	Highest: 10.96	Quikrete Hydraulic Cement discharged to the Stream during a repair of the culvert.
December 1, 2025	Lowest: 4.68	No source identified.

Date(s) of Event	Lowest or Highest pH Reported Downstream in the Stream (Standard Units, "S.U.")	Defendant's Statements to EPA Regarding Low-pH and High-pH Events ¹
December 9, 2025	Lowest: 3.35	Break in fire suppressant line during excavation causing overtopping of the Pump House tanks. Defendant pumped water out of the excavation into the parking lot area, after which it flowed to the Stream.
December 26, 2025	Lowest: 1.97	No source identified.
December 29 and 30, 2025	Lowest: 2.50	Failure of pump in groundwater collection well, causing overtopping of secondary containment in RO Room. Melting snow and ice conveyed residual low-pH material released from former garage and RO Room.
January 27 and 28, 2026	Defendant reported that due to low temperatures, pH data from the Downstream location was either unreliable or that pH monitoring was temporarily suspended. On January 28, 2026, the pH reading at CBY17 was 4.41 s.u.	"Crimping" occurred at the bottom of a tank in the Tank Farm, releasing 1,500 to 2,000 gallons of vinegar from the tank. This product release flowed into the former garage and then to the storm drain system.