Pease Wastewater Treatment Facility SARS-CoV-2 Biomarker Results Summary

Report Date: August 26, 2022; Sampled by: AW, August 24, 2022
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Dates Sampled for this Monitoring Period:

Wednesday, August 24, 2022*
Wednesday, August 17, 2022
Wednesday, August 10, 2022
Wednesday, August 3, 2022
Wednesday, July 27, 2022
Wednesday, July 20, 2022
Wednesday, July 13, 2022
Wednesday, July 6, 2022
Wednesday, June 29, 2022

*New samples since last report

Method: A 24-hour composite sample was taken from August 23-24, 2022. This sample was preprocessed and extracted using a solids separation, Ceres Nanoscience viral concentration, and Kingfisher extraction approach. Two viral markers (N1 and N2) were quantified via Bio-Rad QX200 ddPCR.

Results: Neither the N1 nor N2 viral biomarkers were detected in the composite sample taken August 23-24, 2022 (Table 1). The viral biomarker signal declined to below detection limits, with this facility being the lowest among all facilities participating in the NH wastewater surveillance program this week (Figure 1).

Table 1: Sample date and biomarker results. "BDL" represents values below the quantified limits of instrument detection of 172 copies/100 mL wastewater.

	SARS-CoV-2 Biomarkers	
Sample Date	N1 copies/100mL	N2 copies/100mL
08/24/2022*	BDL	BDL
08/17/2022	369	447
08/10/2022	209	273
08/03/2022	253	404
07/27/2022	311	407
07/20/2022	652	711
07/13/2022	BDL	201
07/06/2022	214	205
06/29/2022	1,049	1,045

*New samples since last report

For more detailed information regarding local, county, and statewide COVID-19 infections, please refer to the data reported through the New Hampshire Division of Health and Human Services website https://www.covid19.nh.gov/dashboard.

Since June 6, 2022, the minimum values for SARS-CoV-2 measured in New Hampshire were below analytical detection limits (BDL) while the maximum reported N1 and N2 values across reporting facilities have been 4,651 and 4,939 copies/100 ml wastewater, respectively. For the 15 participating facilities the week of August 22, the maximum values measured are 2,470 and 2,389 copies/100 ml wastewater for N1 and N2, respectively.

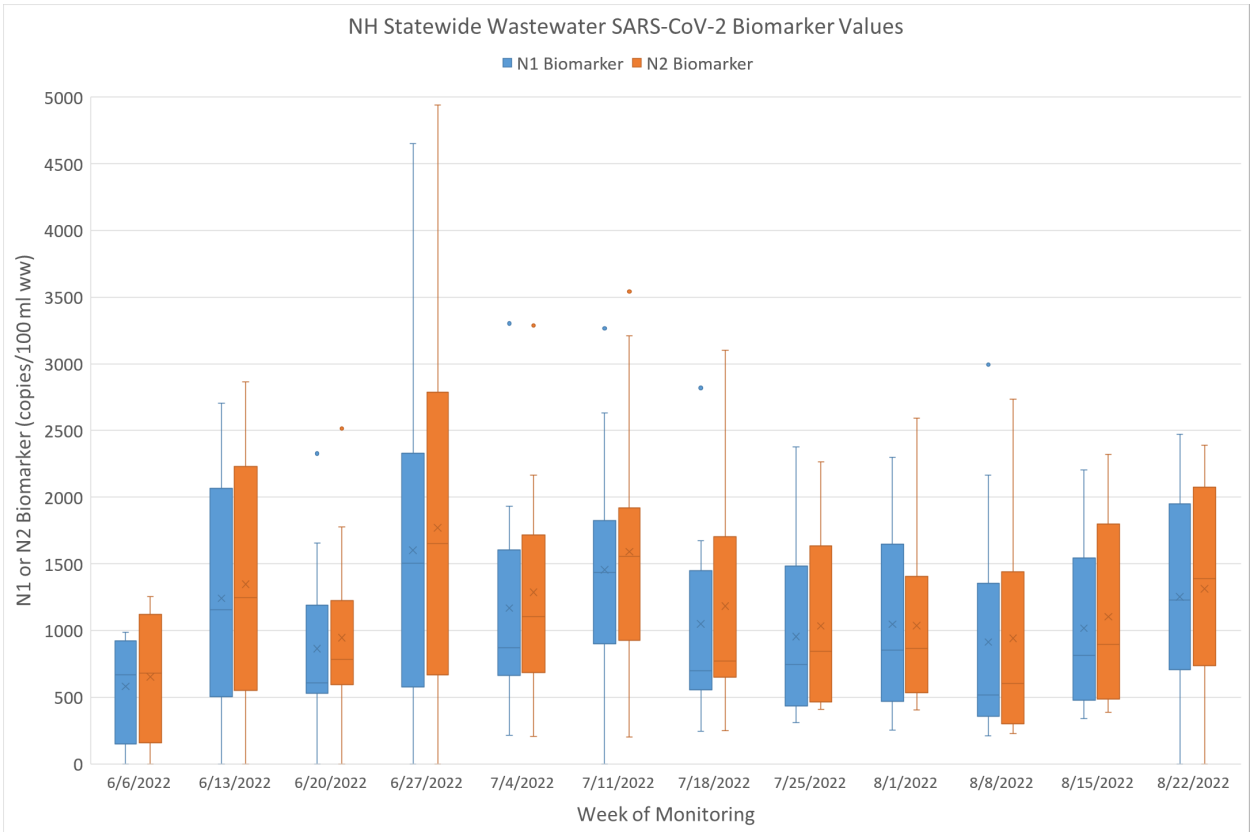

Figure 1. Range of SARS-CoV-2 biomarker values measured at participating wastewater facilities since the NH wastewater surveillance program began in early June 2022.