

1 **Supporting Information**

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3 **Persistence of endogenous SARS-CoV-2 and pepper mild mottle virus RNA in wastewater**  
4 **settled solids**

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6 Laura Roldan-Hernandez<sup>1</sup>, Katherine E. Graham<sup>1</sup>, Dorothea Duong<sup>2</sup>, Alexandria B. Boehm<sup>1</sup>

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8 <sup>1</sup> Department of Civil and Environmental Engineering, Stanford University, 473 Via Ortega,  
9 Stanford 94305, California, United States

10 <sup>2</sup> Verily Life Sciences, South San Francisco, 94080, California, United States

11  
12 Corresponding Author:

13 Alexandria B. Boehm, 650-724-9128, aboehm@stanford.edu

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15 **Number of pages: 5**

16 **Number of Tables: 3**

17 **Table S1: Search terms and statistics for literature review; Persistence of SARS-CoV-2 and PMMoV**  
 18 **in wastewater or environmental waters.**

Virus	Search engine and field	Search terms	Number of papers identified	Number of papers included	Number of k extracted	References
SARS-CoV-2	Web of science core collection  Search field = title	SARS-CoV-2 AND wastewater AND persistence OR decay OR stability	9	5	21	1-5
PMMoV	Web of science core collection  Search field = abstract	PMMoV OR Pepper Mild Mottle Virus AND wastewater or environment* AND persistence OR decay OR stability OR viability	6	1	3	6

19 k = first-order decay rate constant

20 **Table S2: Primers and probes for RT-ddPCR assays**

Assay target	Primer/Probe Sequence (5'-3')		Aplicon length (bp)	Reference
SARS-CoV-2 N1	Forward	GACCCCAAATCAGCGAAAT	72	Lu et al. <sup>7</sup>
	Reverse	TCTGGTACTGCCAGTTGAATCTG		
	Probe	ACCCCGCATTACGTTTGGTGGACC (5' FAM/ZEN/3' IBFQ)		
SARS-CoV-2 N2	Forward	TTACAAACATTGGCCGCAA	62	Lu et al. <sup>7</sup>
	Reverse	GCG CGACATTCCGAAGAA		
	Probe	ACAATTTGCCCCCAGCGCTTCAG (5' HEX/ZEN/3' IBFQ)		
BCoV	Forward	CTGGAAGTTGGTGGAGTT	85	Decaro et al. <sup>8</sup>
	Reverse	ATTATCGGCCTAACATACATC		
	Probe	CCTTCATATCTATACACATCAAGTTGTT (5' FAM/ZEN/3' IBFQ)		
PMMoV	Forward	GAGTGGTTTGACCTTAACGTTTGA	68	Haramoto et al. <sup>9</sup> and Zhang et al. <sup>10</sup>
	Reverse	TTGTCGGTTGCAATGCAAGT		
	Probe	CCTACCGAAGCAAATG (5' HEX/ZEN/3' IBFQ)		

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**Table S3: Characteristics of POTWs and primary settled solid samples**

Description	POTW A	POTW B
Name	San José-Santa Clara Regional Wastewater Facility	Sacramento Regional Wastewater Treatment Plant
Population served	1.4 million	1.6 million
Flow (MGD)	110	124
Average residence time in the sewer network (hours)	4-18	15
Preliminary treatment (upstream of primary clarifiers)	Addition of FeCl <sub>3</sub> at the headworks, bar screening, and grit removal	Addition of NaOCl and calcium nitrate at the headworks, bar screening, addition of FeCl <sub>3</sub> , and grit removal
Average residence time of solids in the primary clarifier (hours)	1-2	1
Type of sample	24-hour composite (500 mL gathered every 4 hours)	grab
Percent of solid (%) in primary settled solid samples	14.1	16.6

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