

# **Supporting Information**

## **Local environmental pollution strongly influences culturable bacterial aerosols at an urban aquatic Superfund site**

M. ELIAS DUEKER<sup>1,2</sup>, GREGORY D. O'MULLAN<sup>3,2</sup>, ANDREW R. JUHL<sup>2</sup>,

KATHLEEN C. WEATHERS<sup>4</sup>, MARIA URIARTE<sup>5</sup>

**Supporting Information Summary:** 1 page, 2 tables

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<sup>1</sup> Corresponding author email: med2109@columbia.edu

<sup>2</sup> Lamont Doherty Earth Observatory

<sup>3</sup> Queens College CUNY

<sup>4</sup> Cary Institute of Ecosystem Studies

<sup>5</sup> Columbia University

**Supplemental Table 1.** Mean meteorological conditions during bacterial fallout sampling at Newtown Creek (NTC, Brooklyn, NY, USA) and the comparison site, Louis Valentino Pier (LVP, Brooklyn, NY, USA).

|                                             | NTC                           | LVP                           |
|---------------------------------------------|-------------------------------|-------------------------------|
| <b>Exposure Days</b>                        | 5                             | 5                             |
| <b>Exposure Events</b>                      | 11                            | 16                            |
| <b>Temperature (°C)</b>                     | 20.7 ± 3.7                    | 18.3 ± 1.9                    |
| <b>Relative Humidity (%)</b>                | 45.1 ± 6.8                    | 77.1 ± 5.4                    |
| <b>Wind Speed (m s<sup>-1</sup>)</b>        | 2.9 ± 0.4                     | 1.7 ± 0.5                     |
| <b>Coarse Aerosols (m<sup>-3</sup> air)</b> | 4.1 (± 0.9) x 10 <sup>5</sup> | 4.1 (± 1.1) x 10 <sup>5</sup> |

**Supplemental Table 2.** Genera known to contain human pathogens detected in water and air at Newtown Creek (NTC, Brooklyn, NY, USA). Genera assigned using Ribosomal Database Project (RDP), 80% confidence threshold.

|                         | Aerosols | Surface Water |
|-------------------------|----------|---------------|
| <i>Acinetobacter</i>    | x        | x             |
| <i>Aerococcus</i>       | x        |               |
| <i>Aeromonas</i>        |          | x             |
| <i>Bacillus</i>         | x        |               |
| <i>Brevundimonas</i>    | x        |               |
| <i>Citrobacter</i>      |          | x             |
| <i>Comamonas</i>        |          | x             |
| <i>Enterobacter</i>     |          | x             |
| <i>Enterococcus</i>     |          | x             |
| <i>Exiguobacterium</i>  | x        |               |
| <i>Francisella</i>      |          | x             |
| <i>Kocuria</i>          | x        |               |
| <i>Massilia</i>         | x        |               |
| <i>Microbacterium</i>   | x        | x             |
| <i>Micrococcus</i>      | x        |               |
| <i>Nocardiopsis</i>     | x        |               |
| <i>Paenibacillus</i>    | x        |               |
| <i>Paracoccus</i>       | x        |               |
| <i>Pseudomonas</i>      | x        | x             |
| <i>Psychrobacter</i>    | x        | x             |
| <i>Rhodococcus</i>      | x        |               |
| <i>Roseomonas</i>       | x        |               |
| <i>Sphingobacterium</i> | x        |               |
| <i>Sphingomonas</i>     | x        |               |
| <i>Staphylococcus</i>   | x        |               |
| <i>Streptomyces</i>     | x        |               |
| <i>Vibrio</i>           |          | x             |