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2 **SUPPORTING INFORMATION for**

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4 **Aerosol toxins emitted by harmful algal blooms susceptible to complex air-sea**
5 **interactions**

6
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19 Contents:

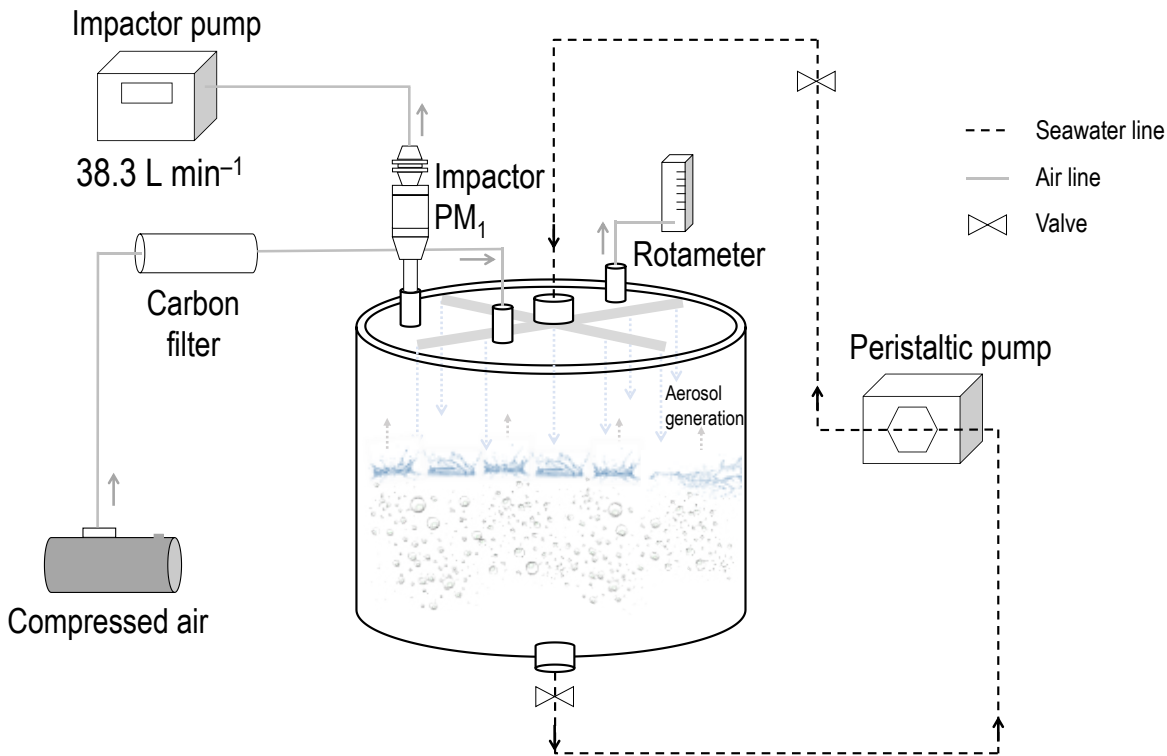
20 Supporting Figures

21 3 pages, 3 Figures

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23 Supporting Table

24 1 page, 1 Table

31 **Supporting Figures**



33 **Figure S1:** 75 L Bubble-bursting aerosol generation tank (plunging-water jet system,
34 seawater and air flow).
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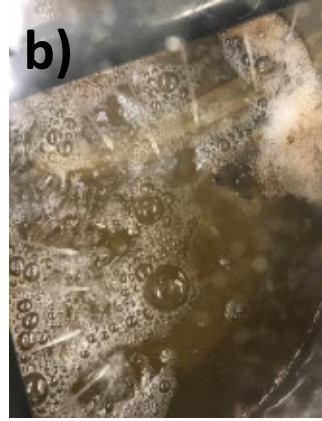
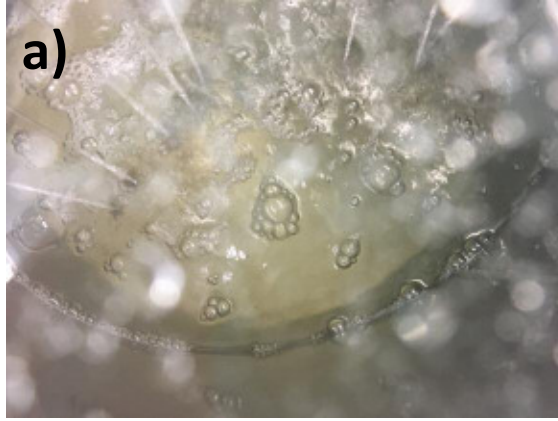


Figure S2. Image of the water surface of the experimental tank in EXP1,2 (a) and EXP3-5 (b). Note the higher amount of foam accumulated on the top right of the experiment conducted with the high biomass levels. These images are representative of the two groups of conducted experiments.

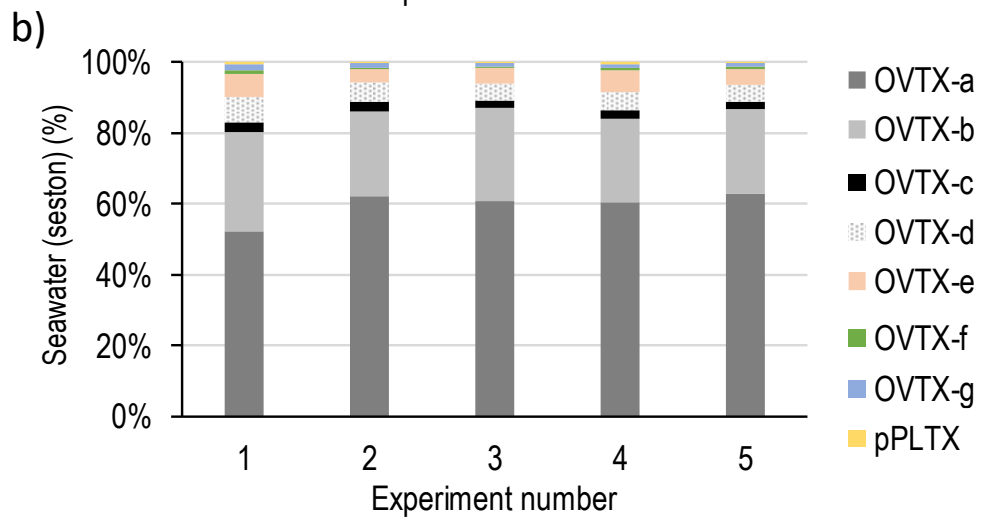
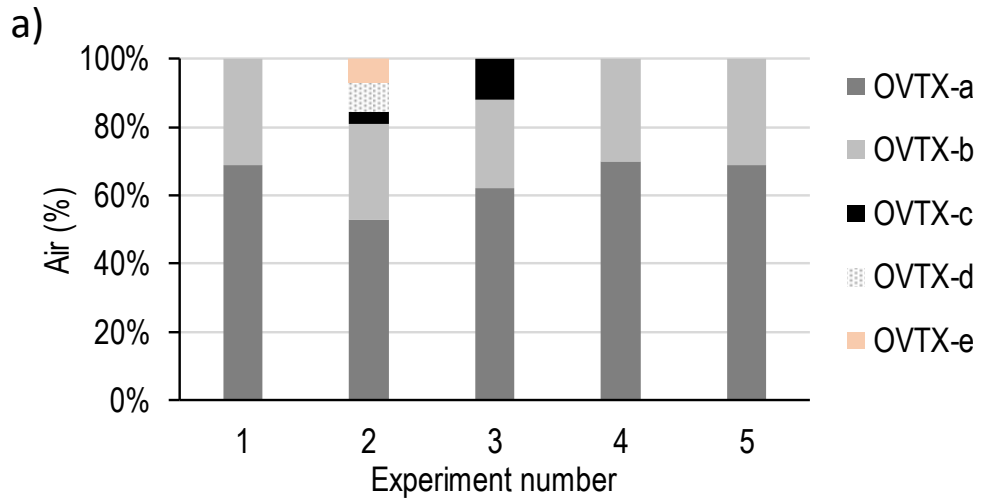


Figure S3: Toxin profile detected in the a) aerosol samples and b) seawater samples (seston) obtained at the end of the bubbling experiments.

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Supporting Table

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Table S1: Cell abundance and toxin concentration in the water (seston) before and after the bubble-bursting experiments and mass and air concentrations of toxins on the obtained PM₁ aerosol.

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Experiment number	Running time	Water (seston)				Air	
		Before bubbling cell $L_{\text{water}}^{-1} \pm \text{SD}$	After bubbling cell $L_{\text{water}}^{-1} \pm \text{SD}$	Before bubbling $\text{pg}_{\text{toxin}} L_{\text{water}}^{-1} \pm \text{SD}$	After bubbling $\text{pg}_{\text{toxin}} L_{\text{water}}^{-1} \pm \text{SD}$	Mass of toxins in filter (ng)	Total toxin concentration $\text{pg}_{\text{toxin}} L_{\text{air}}^{-1}$
1	0.75 hours	$0.72 \times 10^5 \pm 1.44 \times 10^4$	$1.82 \times 10^5 \pm 3.64 \times 10^4$	$3.52 \times 10^6 \pm 7.58 \times 10^3$	$6.23 \times 10^6 \pm 5.72 \times 10^5$	119	69.01
2	4 hours	$1.35 \times 10^5 \pm 2.70 \times 10^4$	$1.05 \times 10^5 \pm 2.10 \times 10^4$	$4.86 \times 10^6 \pm 2.73 \times 10^5$	$3.64 \times 10^6 \pm 6.02 \times 10^5$	664	49.13
3	21 hours	$3.26 \times 10^6 \pm 6.52 \times 10^5$	$3.83 \times 10^6 \pm 7.66 \times 10^5$	$2.30 \times 10^8 \pm 1.79 \times 10^5$	$2.93 \times 10^8 \pm 3.00 \times 10^7$	191	3.93
4	21 hous	$4.69 \times 10^6 \pm 9.38 \times 10^5$	$5.21 \times 10^6 \pm 1.04 \times 10^6$	$1.33 \times 10^8 \pm 1.43 \times 10^7$	$3.15 \times 10^8 \pm 4.44 \times 10^7$	144	3.03
5	21 hous	$3.52 \times 10^6 \pm 7.04 \times 10^5$	$3.15 \times 10^6 \pm 6.30 \times 10^5$	$1.87 \times 10^8 \pm 2.83 \times 10^7$	$2.34 \times 10^8 \pm 1.57 \times 10^7$	138	3.15

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