

## SUPPLEMENTARY MATERIAL

Table S1: Five most dominant phytoplankton species, their abundances (cells  $10^3 \text{ L}^{-1}$ ) and their relative contribution (%) to the total phytoplankton community (in descending order) in the dumping site and the nearby site. In bold characters, the relative contributions above 50%.

	Dumping site	cells $\text{L}^{-1}$	%	Nearby site	cells $\text{L}^{-1}$	%
10 April	<i>Leptocylindrus mediterraneus</i>	16,150	28,20%	<i>Chaetoceros affinis</i>	4410	14.86%
	<i>Chaetoceros affinis</i>	12,380	21,62%	<i>L. minimus</i>	7490	13.08%
	<i>Leptocylindrus danicus</i>	6400	11,18%	<i>L. mediterraneus</i>	4370	7.63%
	<i>Navicula sp.</i>	5310	9,27%	<i>L. danicus</i>	2160	3.77%
	<i>Leptocylindrus minimus</i>	3850	6,72%	<i>Thalassiosira sp.</i>	2040	3.56%
10 July	<i>L. minimus</i>	7500	52,59%	<i>L. minimus</i>	6600	46.39%
	<i>Nanoflagellates</i>	2760	19,35%	<i>Nanoflagellates</i>	2107	14.81%
	<i>Pseudo-nitzschia multiseriis</i>	820	5,75%	<i>L. mediterraneus</i>	1760	12.37%
	<i>C. affinis</i>	380	2,66%	<i>P. multiseriis</i>	720	5.06%
	<i>Guinardia striata</i>	320	2,24%	<i>C. affinis</i>	360	2.53%
10 October	<i>Nanoflagellates</i>	105,665	72,10%	<i>C. affinis</i>	17547	45.66%
	<i>C. affinis</i>	24,200	16,51%	<i>L. minimus</i>	3427	8.92%
	<i>P. multiseriis</i>	3800	2,59%	<i>Nanoflagellates</i>	3173	8.26%
	<i>L. mediterraneus</i>	3040	2,07%	<i>L. mediterraneus</i>	3067	7.98%
	<i>Skeletonema costatum</i>	2180	1,49%	<i>S. costatum</i>	2360	6.14%
11 January	<i>C. affinis</i>	12,760	38,57%	<i>C. affinis</i>	13840	38.54%
	<i>Lauderia annulata</i>	3900	11,79%	<i>L. minimus</i>	2773	7.72%
	<i>Guinardia flaccida</i>	2740	8,28%	<i>Bacteriastrium furcatum</i>	2360	6.57%
	<i>Thalassiosira rotula</i>	1980	5,99%	<i>P. multiseriis</i>	2040	5.68%
	<i>Coccolithophores</i>	1560	4,72%	<i>Lauderia annulata</i>	1733	4.83%
11 April	<i>P. multiseriis</i>	99,850	61,87%	<i>P. multiseriis</i>	145133	63.54%
	<i>Nanoflagellates</i>	18,940	11,74%	<i>Nanoflagellates</i>	35900	15.72%
	<i>L. danicus</i>	9310	5,77%	<i>Prorocentrum micans</i>	12867	5.63%
	<i>Prorocentrum micans</i>	7610	4,72%	<i>L. danicus</i>	9533	4.17%
	<i>C. affinis</i>	6540	4,05%	<i>C. affinis</i>	7100	3.11%
11 July	<i>Thalassiosira sp.</i>	4740	29,04%	<i>P. multiseriis</i>	6667	22.78%
	<i>P. multiseriis</i>	2480	15,20%	<i>C. affinis</i>	5507	18.82%
	<i>Chaetoceros decipiens</i>	2160	13,24%	<i>C. decipiens</i>	4400	15.03%
	<i>L. danicus</i>	1600	9,80%	<i>L. danicus</i>	2560	8.75%
	<i>C. affinis</i>	1540	9,44%	<i>Thalassiosira sp.</i>	1360	4.65%
11 October	<i>C. affinis</i>	18,140	45,37%	<i>C. affinis</i>	11920	43.42%
	<i>L. danicus</i>	3780	9,45%	<i>P. multiseriis</i>	3067	11.17%
	<i>Asterionellopsis glacialis</i>	3220	8,05%	<i>L. danicus</i>	2347	8.55%
	<i>P. multiseriis</i>	2080	5,20%	<i>Dactyliosolen fragilissimus</i>	2080	7.58%
	<i>Dactyliosolen phuketensis</i>	1560	3,90%	<i>Thalassionema nitzschioides</i>	1440	5.25%
12 January	<i>C. affinis</i>	5930	21,45%	<i>C. affinis</i>	6960	26.66%
	<i>L. annulata</i>	5150	18,63%	<i>Cylindrotheca closterium</i>	3987	15.27%
	<i>S. costatum</i>	2630	9,51%	<i>S. costatum</i>	3547	13.59%
	<i>Guinardia flaccida</i>	2620	9,48%	<i>P. multiseriis</i>	2100	8.04%
	<i>L. minimus</i>	2570	9,29%	<i>L. minimus</i>	1953	7.48%

Table S2 : One-way ANOVA with the biological and physicochemical parameters (as dependant variables) which presented significant differences (values in bold with statistical significance at  $p < 0.05$ ) versus the dumping period and the site (as independent variables). Only parameters with significant differences are presented (Chl-a, N total phytoplankton abundance, S number of phytoplankton species).

One way ANOVA	FACTOR	Lavene's		ANOVA			Kruskal-Wallis		Post-hoc for Dumping period			Post-hoc for Site			
		Test	p	df	F	p	Statistic	p	Period pairs	Statistic	p	1	2	3	4
Ln(Chla)	Dumping Period	5.64	0.01	2.00	9.39	0.00			Pre-dumping/During-dumping	-0.94	0.00				
									Pre-dumping/Post-dumping	-1.00	0.00				
									During-dumping/Post-dumping	-0.06	0.98				
Ln(N)	Site	0.76	0.56	4.00	0.13	0.97									
S	Dumping Period	0.14	0.87	2.00	8.19	0.01			Pre-dumping/During-dumping	-5.63	0.01				
									Pre-dumping/Post-dumping	-1.73	0.32				
									During-dumping/Post-dumping	-3.90	0.01				
Diatoms/Di-noflags ratio	Site	0.33	0.86	4.00	1.37	0.27									
EI	Dumping Period	7.04	0.00	2.00	20.66	0.00			Pre-dumping/During-dumping	-17.32	0.00				
									Pre-dumping/Post-dumping	-53.61	0.00				
									During-dumping/Post-dumping	-36.30	0.00				
NO2+ NO3	Site	0.62	0.65	4.00	0.31	0.87									
NO2+ NO3	Dumping Period	0.47	0.63	2.00	0.02	0.99									
NO2+ NO3	Site	0.81	0.53	4.00	3.98	0.01						2	0.75		
												3	0.09	0.17	
												4	0.22	0.12	0.01
NO2+ NO3	Dumping Period	0.71	0.50	2.00	1.16	0.32						5	0.06	0.03	0.00
															0.49
NO2+ NO3	Site	1.94	0.13	4.00	6.75	0.00						2	0.61		
												3	0.12	0.04	
												4	0.00	0.01	0.00
NO2+ NO3	Dumping Period	0.71	0.50	2.00	1.16	0.32						5	0.03	0.10	0.00
															0.36

NO3	Dumping Period	1.74	0.19	2.00	1.20	0.31									
		Site	3.14	0.03	4.00	6.34	0.00								
								2	0.78						
								3	0.23	0.14					
								4	0.00	0.00	0.00				
							5	0.07	0.12	0.00	0.13				
SN	Dumping Period	0.04	0.96	2.00	0.73	0.49									
		Site													
								2	1.00						
								3	0.38	0.10					
								4	0.82	0.88	0.02				
							5	0.63	0.69	0.02	1.00				
PO4	Dumping Period	0.37	0.69	2.00	5.96	0.01	Pre-dumping/During-dumping	-0.04	0.03						
							Pre-dumping/Post-dumping	-0.07	0.00						
							During-dumping/Post-dumping	-0.03	0.09						
	Site	0.69	0.60	4.00	1.22	0.32									
N:P	Dumping Period	4.18	0.02	2.00	10.14	0.00	Pre-dumping/During-dumping	6.42	0.01						
							Pre-dumping/Post-dumping	11.64	0.00						
							During-dumping/Post-dumping	5.22	0.02						
	Site	1.66	0.18	4.00	1.05	0.40									
SiO4	Dumping Period	2.17	0.13	2.00	4.04	0.03	Pre-dumping/During-dumping	0.67	0.01						
							Pre-dumping/Post-dumping	0.48	0.09						
							During-dumping/Post-dumping	-0.19	0.40						
		Site	2.58	0.05	4.00	4.90	0.00								
								2	0.78						
							3	0.32	0.21						
							4	0.01	0.02	0.00					
							5	0.03	0.06	0.00	0.61				
DO	Dumping Period	0.48	0.62			6.29	0.04	Pre-dumping/During-dumping	-6.86	0.40					
								Pre-dumping/Post-dumping	-13.14	0.04					
								During-dumping/Post-dumping	-6.28	0.47					
	Site	1.84	1.14			1.24	0.87								
PSU	Dumping Period	4.76	0.02			8.15	0.02	Pre-dumping/During-dumping	5.67	0.65					
								Pre-dumping/Post-dumping	14.67	0.02					
								During-dumping/Post-dumping	9.00	0.13					
	Site	0.36	0.83			1.96	0.74								