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**Supplementary Information for: Exposure to Bioaerosols at Open Dumpsites:
A Case study of bioaerosols exposure from activities at Olusosun Open
Dumpsite, Lagos Nigeria.**

Table S.1. Media preparations and incubating conditions regarding sampled microorganisms

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button sampler attached**

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fumigatus from activities at Olusosun dumpsite to environmental sampling.**

Table S1 Media preparations and incubating conditions regarding sampled microorganisms

Bioaerosols	Agar	Specific growth inhibitor	Incubation Temperature	Duration of incubation
Total Mesophilic bacteria	14 g L ⁻¹ nutrient agar and 10 g L ⁻¹ bacteriological agar	Cycloheximide, 100 mg L ⁻¹	37 °C	48 h
Gram negative bacteria	52 g L ⁻¹ MacConkey Agar	Cycloheximide, 200 mg L ⁻¹	37 °C in the dark	3 -7 days
<i>Aspergillus fumigatus</i>	20 g L ⁻¹ each of malt extract agar and bacteriological agar.	Streptomycin, 50 mg L ⁻¹ and Novobiocin, 10 mgL ⁻¹	40 °C	48 h
Total fungi	20 g L ⁻¹ each of malt extract agar and bacteriological agar.	Streptomycin, 50 mg L ⁻¹ and Novobiocin, 10 mg L ⁻¹	40 °C	48 h

Table S2 Meteorological conditions during ambient sampling

Visit days	Mean air Temperature (°C)	Mean Wind speed (m/s)	Relative humidity %
1	34.5 (32-37)	2.9	72.5
2	35.7 (32-38)	1.5	64.3
3	33.9 (32-36)	2.5	70.0
4	34.5 (32-37)	1.8	70.3
5	34.5 (32-36)	1.7	69.5
6	30.6 (29-32)	1.7	68.3
7	31.3 (30-32)	3.5	75.5
8	32.0 (29-34)	2.3	85.8
9	27.0 (25-29)	2.8	88.0
10	29.5 (28-30)	4.2	73.5
11	31.5 (31-33)	1.2	73.0
12	29.1 (28-30)	2.4	69.5
13	27.8 (26-30)	2.7	72.5

Table S3. Summary of the bioaerosol exposure assessment from activities at Olusosun Dumpsite

Variable	Scavengers	Waste sorters	Waste workers
Tidal volume (ml)	500		
Respiration rate	12 breaths per minute		
Working hours	11 hours		
Total volume of air inhaled (m ³)	3.96		
Total number of total bacteria inhaled (CFU)	1.9 x 10 ⁶	3.8 x 10 ⁵	9.5 x 10 ⁵
Total number of gram negative bacteria inhaled (CFU)	5.54 x 10 ⁶	3.17 x 10 ⁶	3.84 x 10 ⁵
Total number of <i>Aspergillus fumigatus</i> inhaled (CFU)	2.06 x 10 ⁵	2.74 x 10 ⁵	9.11 x 10 ⁴

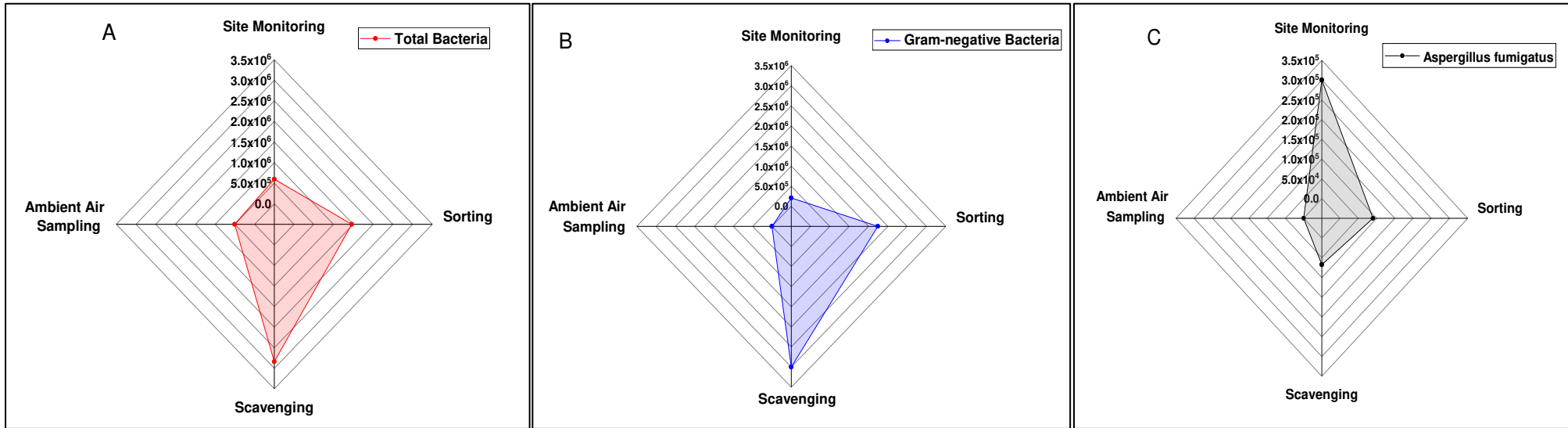


Figure S2. Comparison of exposure of (A) Total Bacteria, (B) Gram-negative (C) *Aspergillus fumigatus* from activities at Olusosun dumpsite to environmental sampling.