

Supplementary Data

Table S1. Physical characteristics of effluent samples in two seafood processing facilities (SPF) in Tema, Ghana during 2021 and 2022

| Date of sample collection | pH | | Temperature (°C) | |
|---------------------------|-------|-------|------------------|-------|
| | SPF-1 | SPF-2 | SPF-1 | SPF-2 |
| 04-05-2021 | 5.78 | 6.02 | 25.3 | 25.5 |
| 11-05-2021 | 5.61 | 5.92 | 25.9 | 25.6 |
| 18-05-2021 | 5.94 | 6.04 | 26.2 | 26.0 |
| 24-05-2021 | 6.01 | 5.93 | 26.8 | 27.0 |
| 01-06-2021 | 5.84 | 6.04 | 26.3 | 26.1 |
| 08-06-2021 | 6.12 | 6.08 | 25.4 | 25.1 |
| 15-06-2021 | 6.43 | 6.12 | 25.1 | 25.4 |
| 29-06-2021 | 6.08 | 6.44 | 25.6 | 25.9 |
| 01-07-2021 | 5.95 | 6.32 | 26.2 | 26.5 |
| 06-07-2021 | 5.66 | 5.87 | 27.1 | 27.4 |
| 13-07-2021 | 5.59 | 6.09 | 27.9 | 28.2 |
| 20-07-2021 | 5.14 | - | 26.9 | - |
| 27-07-2021 | 5.57 | 6.32 | 27.4 | 27.9 |
| 09-03-2022 | 5.71 | 5.83 | 28.1 | 27.7 |
| 15-03-2022 | 5.18 | 5.79 | 27.9 | 27.5 |
| 22-03-2022 | 5.38 | 5.84 | 28.1 | 27.8 |
| 12-04-2022 | 5.65 | 5.91 | 27.6 | 27.4 |
| 19-04-2022 | 5.17 | 5.82 | 27.9 | 27.7 |
| 26-04-2022 | 5.39 | 6.08 | 27.0 | 26.8 |
| 10-05-2022 | - | 6.14 | - | 26.1 |
| - No sample | | | | |

Table S2. Mean values of pH and temperature from the effluent samples collected from the two seafood processing facilities (SPF) in Tema, Ghana during 2021 and 2022.

| Parameter | Mean | SD | Min | Max | Mann Whitney U test | p-value |
|-----------------|-------|------|------|------|---------------------|---------|
| pH | 5.86 | 0.32 | 5.14 | 6.44 | 72 | 0.00161 |
| Temperature(°C) | 26.74 | 0.98 | 25.1 | 28.2 | 190.5 | 0.7812 |

The Mann Whitney U test was used to test for significant difference in pH and temperature of samples from SPF-1 and SPF-2.

The test statistic from the analysis revealed statistically significant difference in pH level between SPF-1 and SPF-2 (p-value = 0.0012). On the contrary, the analysis revealed no statistically significant difference in temperature levels between both sites (p-value = 0.7812).