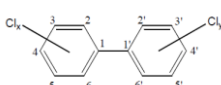


## Supplementary Material

Aldhafiri S. *et al.*, Natural Attenuation Potential of Polychlorinated Biphenyl-Polluted Marine Sediments,  
Polish Journal of Microbiology, 2018, Vol. 67, No 1

**Table S1**

PCB congener concentrations (ng/g dry weight) in sediments collected from seven stations from Shuwaikh harbor. The hatched cells represent levels below the experimental detection limit (DL).

|  |          | Sample ID  | Sample ID  | Sample ID  | Sample ID  | Sample ID   | Sample ID   | Sample ID  |           |
|---|----------|------------|------------|------------|------------|-------------|-------------|------------|-----------|
| PCB congener  | Cl atoms | W1         | W2         | W3         | W4         | W5          | W6          | W7         | TOTAL PCB |
|   |          | 4 detected | 5 detected | 9 detected | 2 detected | 35 detected | 27 detected | 3 detected |           |
| 28 & 31   | 3        | < DL       | < DL       | < DL       | < DL       | 14.55       | < DL        | < DL       | 14.55     |
| 33  | 3        |            |            |            |            | 2.88        |             |            | 2.88      |
| 44  | 4        |            |            |            |            | 14.64       |             |            | 14.64     |
| 49  | 4        |            |            | 1.72       |            | 18.86       | 11.14       |            | 31.73     |
| 52  | 4        | 21.76      |            |            |            | 53.66       | 14.26       |            | 89.68     |
| 70  | 4        |            |            | 1.93       |            | 21.86       | 4.64        |            | 28.42     |
| 74  | 4        |            |            |            |            | 5.01        |             |            | 5.01      |
| 82  | 5        |            |            |            |            | 4.70        | 3.77        |            | 8.47      |
| 87  | 5        |            | 1.58       | 1.55       |            | 34.76       | 18.51       |            | 56.40     |
| 95  | 5        |            |            |            |            | 45.35       | 14.35       |            | 59.70     |
| 99  | 5        |            | 1.69       | 1.53       |            | 42.95       | 13.64       |            | 59.81     |
| 101   | 5        |            |            |            |            | 78.56       | 27.47       |            | 106.03    |
| 105   | 5        |            |            | 0.84       |            | 19.30       | 20.25       |            | 40.39     |
| 110   | 5        | 3.44       | 2.95       | 2.89       | 1.79       | 76.38       | 31.94       | 0.68       | 120.06    |
| 118   | 5        | 2.54       | 2.69       | 2.56       | 1.79       | 65.54       | 30.69       | 0.72       | 106.51    |
| 128   | 6        |            |            |            |            | 13.50       | 15.24       |            | 28.74     |
| 132   | 6        |            |            |            |            | 21.18       | 22.89       |            | 44.08     |
| 138   | 6        |            |            |            |            | 83.61       | 81.78       |            | 165.39    |
| 149   | 6        |            | 2.80       | 2.48       |            | 2.69        | 26.43       | 0.65       | 35.06     |
| 151   | 6        |            |            | 1.01       |            | 13.91       | 7.18        |            | 22.10     |
| 153   | 6        |            |            |            |            | 74.28       | 29.22       |            | 103.50    |
| 156   | 6        |            |            |            |            | 8.62        | 9.72        |            | 18.34     |
| 169   | 6        |            |            |            |            |             |             |            | 0         |
| 170   | 7        |            |            |            |            | 15.11       | 9.90        |            | 25.01     |
| 171   | 7        |            |            |            |            | 4.37        | 3.04        |            | 7.41      |
| 177   | 7        |            |            |            |            | 7.94        | 3.92        |            | 11.86     |
| 180   | 7        |            |            |            |            | 33.72       | 11.37       |            | 45.09     |
| 183   | 7        |            |            |            |            | 7.41        | 3.36        |            | 10.78     |
| 187   | 7        |            |            |            |            | 14.55       | 4.73        |            | 19.28     |

|              |    |              |              |              |             |               |               |             |                |
|--------------|----|--------------|--------------|--------------|-------------|---------------|---------------|-------------|----------------|
| <b>191</b>   | 7  |              |              |              | 1.35        |               |               |             | <b>1.35</b>    |
| <b>194</b>   | 8  |              |              |              | 4.50        | 4.08          |               |             | <b>8.58</b>    |
| <b>195</b>   | 8  |              |              |              | 5.83        |               |               |             | <b>5.83</b>    |
| <b>201</b>   | 8  |              |              |              | 2.63        |               |               |             | <b>2.63</b>    |
| <b>205</b>   | 8  |              |              |              | 4.13        | 3.43          |               |             | <b>7.56</b>    |
| <b>206</b>   | 9  |              |              |              |             |               |               |             | <b>0</b>       |
| <b>208</b>   | 9  |              |              |              |             |               |               |             | <b>0</b>       |
| <b>209</b>   | 10 | <b>49.44</b> |              |              | 20.38       | 41.41         |               |             | <b>111.23</b>  |
| <b>TOTAL</b> |    | <b>77.17</b> | <b>11.70</b> | <b>16.51</b> | <b>3.58</b> | <b>838.72</b> | <b>468.38</b> | <b>2.05</b> | <b>1418.10</b> |

**Table S2**Surrogate (<sup>13</sup>C-labeled) PCB recovery data (%).

|                     | Sample ID | Sample ID | Sample ID | Sample ID | Sample ID | Sample ID | Sample ID |
|---------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| <sup>13</sup> C-PCB | W1        | W2        | W3        | W4        | W5        | W6        | W7        |
| 28                  | 88        | 58        | 73        | 67        | 77        | 77        | 97        |
| 52                  | 70        | 42        | 60        | 59        | 75        | 78        | 86        |
| 101                 | 99        | 55        | 73        | 73        | 93        | 109       | 100       |
| 138                 | 80        | 44        | 59        | 61        | 74        | 88        | 79        |
| 153                 | 133       | 66        | 85        | 88        | 107       | 113       | 113       |
| 180                 | 115       | 69        | 90        | 93        | 110       | 128       | 125       |
| 209                 | 91        | 56        | 80        | 85        | 82        | 109       | 110       |

**Uncultured bacteria (DGGE gel bands recovered from the sediment samples):**

- DEFINITION Uncultured bacterium DGGE gel band F17 16S ribosomal RNA gene, partial sequence. ACCESSION KU663378
- DEFINITION Uncultured bacterium DGGE gel band F18 16S ribosomal RNA gene, partial sequence. ACCESSION KU663379
- DEFINITION Uncultured bacterium DGGE gel band F19 16S ribosomal RNA gene, partial sequence. ACCESSION KU663380
- DEFINITION Uncultured bacterium DGGE gel band F21 16S ribosomal RNA gene, partial sequence. ACCESSION KU663381
- DEFINITION Uncultured bacterium DGGE gel band F22 16S ribosomal RNA gene, partial sequence. ACCESSION KU663382
- DEFINITION Uncultured bacterium DGGE gel band R23 16S ribosomal RNA gene, partial sequence. ACCESSION KU663383
  
- DEFINITION Uncultured bacterium DGGE gel band R\_23 16S ribosomal RNA gene, partial sequence. ACCESSION KU663384
- DEFINITION Uncultured bacterium DGGE gel band F241 16S ribosomal RNA gene, partial sequence. ACCESSION KU663385
- DEFINITION Uncultured bacterium DGGE gel band R\_24 16S ribosomal RNA gene, partial sequence. ACCESSION KU663386
- DEFINITION Uncultured bacterium DGGE gel band F27 16S ribosomal RNA gene, partial sequence. ACCESSION KU663387
- DEFINITION Uncultured bacterium DGGE gel band F28 16S ribosomal RNA gene, partial sequence. ACCESSION KU663388
- DEFINITION Uncultured bacterium DGGE gel band R\_28 16S ribosomal RNA gene, partial sequence. ACCESSION KU663389
- DEFINITION Uncultured bacterium DGGE gel band F30 16S ribosomal RNA gene, partial sequence. ACCESSION KU663390
- DEFINITION Uncultured bacterium DGGE gel band R31 16S ribosomal RNA gene, partial sequence. ACCESSION KU663391
- DEFINITION Uncultured bacterium DGGE gel band S 16S ribosomal RNA gene, partial sequence. ACCESSION KU663392

**Sequences of DGGE bands recovered from the biphenyl enrichment Culture:**

DEFINITION *Paenibacillus* sp. W21A 16S ribosomal RNA gene, partial sequence.  
ACCESSION KU682428

DEFINITION *Paenibacillus* sp. W21B 16S ribosomal RNA gene, partial sequence.  
ACCESSION KU682429

DEFINITION *Paenibacillus* sp. W24 16S ribosomal RNA gene, partial sequence.  
ACCESSION KU682430