

The only information available on chemical contaminants on the Kent coast was generated by the 2015 chemical contaminants monitoring programme. A copy of the 2015 results is provided below:

| Local Authority | Production Area | Site name | Collection period | Sample type | GR or *NGR for sample | Fera LIMS no. | Test undertaken |
|-----------------|---------------------------|----------------|-------------------|---|-----------------------|---------------|-----------------------------------|
| Canterbury CC | N Kent | Whitstable Bay | 19/01/2015 | Pacific Oysters, (Crassostrea Gigas) | 5122207, 00100200 | S15-000677 | Heavy metals & PAHs only |
| Swale BC | Thames, North Kent, Swale | Swale Outer | 09/02/2015 | Mussels | TR06136863 | S15-038351 | Dioxins/PCBs, heavy metals & PAHs |

Table 1: Summary of PCDD/F and PCB WHO-TEQ, and ICES-6 concentrations

| | |
|--|---------------|
| FERA LIMS Sample No. | S15-038351 |
| Sample Details: | Mussels |
| Fat content (% whole) | |
| WHO TEQ 2005 pg/g whole | |
| Dioxin | 0.20 |
| non ortho-PCB | 0.28 |
| ortho-PCB | 0.02 |
| Sum of WHO TEQs (upper) | 0.50 |
| | |
| WHO TEQ 2005 pg/g Fat | |
| Dioxin | 23.20 |
| non ortho-PCB | 44.72 |
| ortho-PCB | 2.12 |
| Sum of WHO TEQs (upper) | 70.04 |
| | |
| SUM of ICES 6 µg/kg whole (upper) | 354.39 |

| | |
|---------------------------------|--------|
| SUM of ICES 6 µg/kg fat (upper) | 354.39 |
|---------------------------------|--------|

Table 2: PAH concentrations (µg/kg whole weight)

| FERA LIMS No. | S15-000677 | S15-038351 |
|---------------------------------|-----------------|-------------|
| Description | Pacific Oysters | Mussels |
| µg/kg whole weight | | |
| acenaphthylene | 1.85 | 1.98 |
| acenaphthene | <0.26 | <0.3 |
| fluorene | 0.60 | 0.66 |
| phenanthrene | 3.41 | 3.21 |
| anthracene | 1.05 | 0.97 |
| fluoranthene | 9.90 | 8.01 |
| benzo[c]fluorene | 0.43 | 0.49 |
| pyrene | 8.94i | 7.73i |
| benzo[ghi]fluoranthene | 2.74 | 2.77 |
| benz (a) anthracene | 2.54 | 2.51 |
| benzo[b]naphtho[2,1-d]thiophene | 0.57 | 0.67 |
| cyclopenta[c,d]pyrene | 0.06 | 0.07 |

RESPONSE EIR 245 Annex 1

| | | |
|------------------------------|--------------|--------------|
| chrysene | 2.79 | 2.58 |
| 5-methylchrysene | <0.06 | <0.02 |
| benzo[b]fluoranthene | 7.10 | 5.20 |
| benzo[j]fluoranthene | 1.87 | 1.93 |
| benzo[k]fluoranthene | 3.23 | 2.03 |
| benzo[e]pyrene | 7.32 | 8.97 |
| benzo[a]pyrene | 2.49 | 2.37 |
| indeno[1,2,3-cd]pyrene | 1.45 | 1.64 |
| dibenz[ah]anthracene | 0.42 | 0.34 |
| benzo-[g,h,i]perylene | 2.09 | 3.28 |
| anthanthrene | <0.1 | 0.13 |
| dibenzo[a,l]pyrene | <0.1 | <0.1 |
| dibenzo[a,e]pyrene | <0.16 | 0.38 |
| dibenzo[a,i]pyrene | 0.13 | <0.1 |
| dibenzo[a,h]pyrene | <0.1 | <0.1 |
| coronene | 0.13 | 0.58 |
| | | |
| PAH 4 Sum Lower µg/kg | 14.92 | 12.66 |
| PAH 4 Sum Upper µg/kg | 14.92 | 12.66 |

Table 3: Heavy metal concentrations (mg/kg whole weight)

| Fera LIMS Sample No. | S15-000677 | S15-038351 |
|----------------------|-----------------|------------|
| Sample type | Pacific Oysters | Mussels |
| Cr | 0.22 | 0.36 |
| Mn | 4.57 | 2.82 |
| Co | 0.066 | 0.181 |
| Ni | 0.2 | 0.36 |
| Cu | 80.9 | 0.91 |
| Zn | 344 | 10.9 |
| As | 1.2 | 1.39 |
| Se | 0.489 | 0.327 |
| Ag | 4.93 | 0.015 |
| Cd | 0.348 | 0.153 |
| Hg | 0.031 | 0.035 |
| Pb | 0.163 | 0.261 |