

Releases into the Air from the Primary & Secondary Incinerators (Release Point references A1 & A2)
Reporting of Periodic Emissions Monitoring Data for period from July - December 2021

| | Primary Incinerator (Release Point reference A1) | | | | | Secondary Incinerator (Release Point reference A2) | | | | |
|---|--|--|-----------------|-----------------------|------------------------|--|--------------------------------|-----------------|-----------------------|------------------------|
| | Test Date | Test Method & sample time | Uncertainty (%) | Result ^[1] | ELV ^[2] | Test Date | Test Method & sample time | Uncertainty (%) | Result ^[1] | ELV ^[2] |
| HF ^[3] mg/m ³ | 3/8/21 | BSISO15713 1520 – 1720 | 8.8 | 0.88 | 2 mg/m ³ | 4/8/21 | BSISO15713 1602 – 1802 | 8.9 | 0.37 | 2 mg/m ³ |
| Cd + Tl ^[4] mg/m ³ | 30/7/21 | BS EN 14385 1005 - 1205 | 16.2 | 0.00068 | 0.05 mg/m ³ | 5/8/21 | BS EN 14385 0932 – 1132 | 17.3 | 0.00075 | 0.05 mg/m ³ |
| Hg ^[5] mg/m ³ | 30/7/21 | BS EN13211 1005 - 1205 | 24.1 | 0.00054 | 0.05 mg/m ³ | 5/8/21 | BS EN13211 0932 – 1132 | 25.0 | 0.00028 | 0.05 mg/m ³ |
| Metals ^[6] mg/m ³ | 30/7/21 | BS EN14385 1005 - 1205 | 20.4 | 0.054 | 0.5 mg/m ³ | 5/8/21 | BS EN14385 0932 – 1132 | 23.1 | 0.013 | 0.5 mg/m ³ |
| PAHs ^[7] ug/m ³ | 5/8/21 | BSISO1133 1016 - 1216 | 21.1 | 0.9 | - | 5/8/21 | BSISO1133 1214 - 1414 | 21.2 | 2.6 | - |
| PCBs ^[8] ng/m ³ | 30/7/21 | BS EN 1948 1229 – 1829 | 21.7 | 0.0012 | - | 4/8/21 | BS EN 1948 1231 – 1831 | 21.1 | 0.00076 | - |
| Dioxins ^[9] ng/m ³ | 30/7/21 | BS EN 1948 1229 - 1829 | 21.3 | 0.0094 | 0.1 ng/m ³ | 4/8/21 | BS EN 1948 1231 – 1831 | 21.9 | 0.0096 | 0.1 ng/m ³ |
| Dioxins ^[9] ng/m ³ | 23/11/21 | BS EN 1948 11:38 - 11:40 , 12:05 - 18:03 | 21.1 | 0.0227 | 0.1 ng/m ³ | 25/11/21 | BS EN 1948 10:34 - 11:38 | 21.5 | 0.0517 | 0.1 ng/m ³ |

[1] All values are expressed at the following conditions: 273K, 101.3kPa, 11% v/v oxygen, dry gas without correction for uncertainty.

[2] ELV means Emission Limit Value.

[3] HF means hydrogen fluoride.

[4] Cd+Tl means cadmium and thallium including the gas, vapour and solid phases of the metals and their compounds, in total, expressed as the metals.

[5] Hg means mercury including the gas, vapour and solid phases of the metal and its compounds, in total, expressed as the metal.

[6] Metals means antimony, arsenic, chromium, cobalt, copper, lead, manganese, nickel & vanadium including the gas, vapour and solid phases of the metals and their compounds, in total, expressed as the metals.

[7] PAHs means polyaromatic hydrocarbons.

[8] PCBs means dioxin-like PCBs.

[9] Dioxins means dioxins and furans expressed as the TEQ based upon the I-TEF scheme for toxic equivalence.

Results of Continuous Dioxin Sampling

Primary Incinerator (Release Point reference A1)

Secondary Incinerator (Release Point reference A2)

Sample Period (dates)

Average Concentration (I-TEQ) ng/m³

Sample Period (dates)

Average Concentration (I-TEQ) ng/m³

Following the issuing of License number WDL/06/2003/V6 the requirement for continuous dioxin sampling was removed. Both lines will now have quarterly periodic sampling of dioxins in place of continuous sampling.

Continuous Monitoring discontinued in the Secondary in agreement with EPU. Quarterly Periodic sampling will replace this.

Releases into the Air from the Primary & Secondary Incinerators (Release Point references A1 & A2)

Reporting of Periodic Emissions Monitoring Data for period from July - December 2021 (continued)

| Results of periodic emissions monitoring for dioxins and furans using different TEF-schemes | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|-------------|
| Release Point | I-TEQ | | WHO-TEQ _{human/mammals} | | WHO-TEQ _{fish} | | WHO-TEQ _{birds} | | Sample Date |
| | Congeners<LoD assumed to be zero ng/m ³ | Congeners<LoD assumed to be at LoD ng/m ³ | Congeners<LoD assumed to be zero ng/m ³ | Congeners<LoD assumed to be at LoD ng/m ³ | Congeners<LoD assumed to be zero ng/m ³ | Congeners<LoD assumed to be at LoD ng/m ³ | Congeners<LoD assumed to be zero ng/m ³ | Congeners<LoD assumed to be at LoD ng/m ³ | |
| A1 | 0.0091 | 0.0094 | 0.0088 | 0.0090 | 0.0089 | 0.0091 | 0.0142 | 0.0144 | 30/7/21 |
| A2 | 0.0096 | 0.0096 | 0.0092 | 0.0092 | 0.0100 | 0.0100 | 0.0174 | 0.0174 | 4/8/21 |
| A1 | 0.0227 | 0.0227 | 0.0214 | 0.0214 | 0.02247 | 0.0227 | 0.0324 | 0.0324 | 23/11/21 |
| A2 | 0.0517 | 0.0517 | 0.0463 | 0.0463 | 0.0542 | 0.0542 | 0.0873 | 0.0873 | 24/11/21 |

| Results of periodic emissions monitoring for dioxin-like PCBs using different TEF-schemes | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|-------------|
| Release Point | UK-COT | | WHO-TEQ _{human/mammals} | | WHO-TEQ _{fish} | | WHO-TEQ _{birds} | | Sample Date |
| | Congeners<LoD assumed to be zero ng/m ³ | Congeners<LoD assumed to be at LoD ng/m ³ | Congeners<LoD assumed to be zero ng/m ³ | Congeners<LoD assumed to be at LoD ng/m ³ | Congeners<LoD assumed to be zero ng/m ³ | Congeners<LoD assumed to be at LoD ng/m ³ | Congeners<LoD assumed to be zero ng/m ³ | Congeners<LoD assumed to be at LoD ng/m ³ | |
| A1 | 0.0012 | 0.0012 | 0.0012 | 0.0012 | 0.000057 | 0.000057 | 0.0018 | 0.0018 | 30/7/21 |
| A2 | 0.00076 | 0.00076 | 0.00076 | 0.00076 | 0.000036 | 0.000036 | 0.0012 | 0.0012 | 4/8/21 |