**Defra Biomass Screening Tool calculations summary for proposed biomass boiler installation at Trojanwood Ltd, Bourne Road, Pode Hole, Spalding, PE11 3LW**

**17/07/2026**

| Emission Rates produced from Biomass | | PM10 | NOx |
|---|---|---|---|
| | | g/s | g/s |
| GF175 | Existing B1 | **0.01682** | **0.0343** |
| | | | |

| Approx Stack Coordinates | Nearest Grid reference | | Background concentrations for South Holland 2026 estimates | | | |
|---|---|---|---|---|---|---|
| Easting = 521897 | E | N | PM10 | NOx | NO2 | Data set Line no |
| Northing = 321910 | 521500 | 321500 | 13.150169 | 6.767698 | 5.385725 | 438 |

| | | | |
|---|---|---|---|
| Building height | 5.685 | m | - Heighest building within 40 metres (5 tmes stack height) |
| Stack diameter | 0.2 | m | |
| Stack height | 8 | m | |

Target Rates from Biomass Screening tool comparison for individual Combustion Stacks

| | PM10 | | NO2 (NOx) Annual | | NO2 (NOx) 1-hour | |
|---|---|---|---|---|---|---|
| | Target emission | Boiler emission rate | Target emission | Boiler emission rate | Target emission | Boiler emission rate |
| GF175 | 0.0245 | 0.0168 | 0.1295 | 0.0343 | 0.0658 | 0.0343 |

Boiler emissions are grater thank calculated target emission rate

Boiler emissions are lower thank calculated target emission rate

## PM 10 Emissions from Biomass Combustion Stacks - Combined installations

The annual emissions from a 500m × 500m square (the threshold emissions density) that may give rise to an exceedance of the annual mean objective (in Scotland) / 24-hour mean objective (Rest of UK) for PM10 for a particular background concentration.

| | |
|---|---|
| Location: | England (Rest of UK) |
| Area Type: | Village |

PM10 Annual mean background concentration (include roadside contribution at relevant receptors): **17**

Threshold Emission Density: **9550** kg/year

| Emission Rates | PM10 g/s | PM10 g/hr | Total Hours in year | Estimated (realistic) Annual Use | | | Max. Emissions (100% runtime) |
|---|---|---|---|---|---|---|---|
| | | | | % | Run Hours | kg/year | kg/year |
| GF175 | 0.01682 | **60.552** | 8760 | 30% | 2628.0 | **159.1** | 530.4 |

Installation of proposed biomass boiler GF175, will produce approximately 159.1 kg of PM10 emissions annually

The proposed installations have a theoretical maximum capacity to produce up to 530.4 kg/year of PM10 emissions annually

The local area square (500 m x 500 m) threshold for PM10 is 9550 kg/year