

Environmental Information for Weymouth

Sirotechnics Fireworks are committed to reducing the environmental impact of their full operation, without detracting from the overall impact, joy and sensory experience that a firework display can deliver.

In recent years the following changes have taken place within our operation, making us one of the most sustainable firework businesses in the UK.

- Commitment to only use fireworks without internal plastic since 2021, removing the chance for plastic aerial debris pollution across land and sea.
- All whistles and noise producing firework units contain zero plastic and are sourced from Spain, keeping our carbon footprint low and our quality high vs Far East imports which are used by the majority of the firework industry.
- Removal of Perchlorates from our fireworks, by using responsibly sourced European certified chemicals. Removing the risk for water contamination and ecological degradation.
- Investment in lower weight racking systems, decreasing our transport weight and carbon emissions.
- Zero aluminium foil is used in the set-up of Sirotechnics displays, which is often used to protect stray sparks.
- Recycling of all copper shooting wire, in excess of 1 tonne per annum.
- Recycling of all HDPE plastic tubes. Our associated import wholesale business created this recycling programme and extends it to our customers leading to circa 8 tonnes of plastic being saved from landfill or incineration – equivalent to 2.2 elephants worth of plastic saved per year. We are the only firm offering this service in the UK. (**based on the average weight 3.6 ton) of a female African elephant.*)
- Reducing our environmental noise pollution impact, by removing all firework products that create sound in excess of 100dB from our shows in Weymouth by the time they reach the beach front. (*The equivalent of a leaf blower 99dB*) ((Appendix))
- All outer packaging is recycled.
- Sirotechnics advocates for meaningful change across the firework and entertainment industry sitting on the management committee of the British Pyrotechnics Association, impacting policy and setting higher standards for sustainable business practice.
- Measurement and quantification of the yearly environmental impact of our firework displays, using EnvCalc© and planting trees to offset associated carbon.

According to EnvCalc©, the leading pyrotechnic industry Environmental Calculator, a typical display in Weymouth has the impact of;

Quantity of Carbon Dioxide and Carbon Monoxide (CO₂ + CO) produced by the display itself: 18.43 kg

This is equivalent to the CO₂/CO produced by an average car travelling 145 km

It is also equivalent to a 60kVA generator running for 28.35 minutes

To Mitigate this impact;

It would be necessary to plant 0.1 trees to offset this emission of carbon.

The carbon impact of 1 display is typically less than half an hour of a generator running on an event site – or a 90 mile round trip in a car. The carbon emissions created by 6 firework displays at Weymouth will be offset with the planting on 1 tree.

As a company we believe that our business is a force for good, in the joy, the economic value and the employment we bring to communities, but we also recognise this comes at a cost and we have a responsibility.

We want to be transparent in what we've already done to be more sustainable and are always looking to evolve and for ways to improve and influence our own and our supplier's sustainability strategy and business practices.

APPENDIX

Weymouth Display Sound in dB at 250M

