

Good Morning. I'm Steve, a resident of Portland. I would like to put on record my concerns for Portland's natural heritage from this proposal.

Portland is one of those unique places in Britain gifted with a truly stunning natural environment. Within the overall context of the biodiversity that exists in Britain, its flora and fauna are exceptional¹. This is recognised by the fact that almost 50% (48.3%) of its 1150 Hectares are designated as being of either international, national or county importance for the scientific interest in the biodiversity these sites host.

But we already know that these sites are deteriorating. If we take as an example the land under the ownership of Portland Port which surrounds the proposal site. They own or occupy six units of SSSI covering some 77.8Ha, of Isle of Portland and Nicodemus Heights SSSIs, much of which is coincident with the SAC. Only 10.26% of this is in Favourable Condition, according to the last survey. This compares with around 37% in Favourable condition for the Isle of Portland SSSI as a whole, just below the national average. Of this landholding around 36% (28Ha) was considered to be in Unfavourable Declining condition². These surveys were last conducted around 2011, so it is quite likely that the decline has continued. The fact is that Portland Port has shown little regard for the biodiversity over which they are custodians, on behalf of us all.

And now they intend to allow an incinerator with an 80m smokestack to be hosted on their land directly adjacent to most of the sites I have just mentioned, adding further pressure to these already fragile habitats. This will discharge all over and along Verne Common (Unit 33) and East Weares (Unit 34), the units that provide the backdrop to the seascape of the island from

¹ As a consequence of s41 NERC, 2006, the Government has published a list of 943 living organisms it considers to be of principal importance for the purpose of preserving or enhancing biodiversity. Of the 943 species listed c. 185 have been recorded on or around Portland that is 19.6% of the total list.

² These data were derived from [Natural England's designated sites website](#).

across Weymouth Bay. And when Portland is enveloped in cloud, an occurrence of increasing frequency - you may have seen the pictures - the discharge becomes locked in and is concentrated into these areas.

The impact of airborne pollution on these sensitive sites cannot be understated. The open scrub-boulder scree areas on the undercliffs, especially on East Weares, have no equal anywhere on the South Coast, and are perhaps unique with their combination of Southern Oceanic and Mediterranean-Atlantic **bryophytes and lichens not known elsewhere in Britain**. Consequently, great weight should be given to the importance of this habitat, because of these well-developed lower plant communities.

The Lower Plants take up essential elements directly from the air and have strong absorption capacities; they are recognised as biomonitors (our canaries in the coalmine) because of their susceptibility to air pollutants. They are especially vulnerable to increases in atmospheric nitrogen. The waste incinerator would emit just under 3 tonnes of oxides of nitrogen weekly, above Unit 33 and 34, directly impacting upon the SAC. There is a high potential for this development to have adverse effects as only a small exposure to these pollutants is needed to have a deleterious impact. These species and their populations are genetically unique and irreplaceable — their loss is irreversible.

A further concern is the SAC's calcareous grassland habitat. This supports the rare **Cretaceous** form of **Silver studded blue butterfly**, a priority species, now unique to Portland, having evolved to fill a unique ecological niche here. And, which together with the **Adonis Blue** and **Chalkhill Blue butterflies** are reliant upon our calcareous grasslands for their complex life-cycle which depend on specific larval food-plants and symbiotic relationship with specific ant species.

Increased air pollution can have a devastating impact on this habitat. Pollutants released by the incinerator will lead to increased soil enrichment, increasing the likelihood that more competitive ranker grasses will dominate the food plants that the butterflies and other invertebrates rely on. With the loss of their food plants, they will die out. Research also shows many lepidoptera species rely on 'scent plumes'³ to find mates and food. Chemicals released when burning RDF could mask these scent plumes resulting in butterflies and moths being unable to find mates to reproduce, or locate their food sources.

Portland has a very special and unique biodiversity. It relies on its pristine air quality. The emissions from this development will likely damage these features. And in the ecological emergency we are currently experiencing we can ill afford to increase the pressures on these sensitive flora and fauna. Please refuse this planning application.

722 words

³ NOTES: Females release pheromones that are detected by chemosensory sensilla on the antennae of males - often at very low concentrations.

Similarly, plants release chemical cues that are detected in a similar way.

These scent plumes can be disrupted by pollution.