

Comment by Nutfield Conservation Society (Interested Party 20043186)
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GAL Operational Waste Management Strategy – April 2024

Since we have a particular interest in the climate warming impacts to be expected from rising passenger numbers at Gatwick, including those arising from waste disposal, we have attempted to assess those impacts using the figures provided by GAL in their Operational Waste Management Strategy dated April 2024.

We have used figures taken from table 4.1 (Estimated tonnes of waste in 2047 without the Project, and 67.2 million passengers per annum) and table 4.2 (Estimated tonnes of waste in 2047 with the Project, and 80.2 million passengers per annum). We have focused on the emissions from incineration of waste at Newhaven and Basingstoke (Chineham), taking Newhaven as the representative for both incinerators as they were built in the same time period. We have therefore disregarded and subtracted the Category 3 food waste, assuming that this will continue to be sent for anaerobic digestion. We have included the entirety of the Category 1 hazardous food waste, and have assumed that 40% of the remaining waste will be incinerated, in line with current stated practice. We assume, optimistically, that 60% of the waste which is not Category 3 food waste will be recycled, in line with GAL's stated aspiration to recycle in excess of 50% of the operational waste.

Thus we calculate as follows:

Annual operational waste without the Project in 2047 (67.2 mppa)

Total waste excluding Cat. 3 food waste:	15,513.96
Less Cat. 1 hazardous food waste:	2,377.14

	13,136.82 tonnes
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40% of 13,136.82 tonnes to be incinerated	5,254.72
Plus all Cat.1 hazardous food waste	2,377.14

Total to be incinerated	7,631.86 tonnes
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Annual operational waste with the Project in 2047 (80.2 mppa)

Total waste excluding Cat 3 food waste	21,701.56
Less Cat. 1 hazardous food waste	3,325.24

	18,376.32 tonnes
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40% of 18,376.32 tonnes to be incinerated	7,350.52
Plus all Cat 1 hazardous food waste	3,325.24

Total to be incinerated	10,675.76 tonnes
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Difference in tonnage of incinerated waste between “with” and “without” Project
10,675.76 - 7,631.86 = 3,043.90 tonnes per annum.

To calculate the resultant GHG emissions we have taken data from the Pollution Inventory 2023 and Annual Performance report submitted by the Newhaven incinerator operator (Veolia) and released by the Environment Agency under Open Licence.

In 2023 the CO₂e emitted per tonne of waste combusted at Newhaven was 912 kgs, of which 51.80% was assumed to be biogenic and 48.2% fossil CO₂e. Although the Cat 1 hazardous food waste may be reasonably assumed to have a somewhat higher biogenic content, GAL's Operational Waste Management Strategy states that contamination with metals and plastics can sometimes exceed 15%, and we consider therefore that it would be unreasonable to guess at its exact biogenic proportion for the purposes of this exercise.

At 67.2 million passengers per year in 2047, the waste incinerated at Newhaven could be expected to yield in the region of 6,960 tonnes of CO₂e, of which 48.2% (3,354.72 tonnes) would be fossil CO₂e.

At 80.2 million passengers per year in 2047, the waste incinerated at Newhaven could be expected to yield in the region of 9,736 tonnes of CO₂e, of which 48.2% (4,692.75 tonnes) would be fossil CO₂e.

The points to be made here are that: (a) the consequences of expansion at Gatwick will not be confined to Gatwick, and (b) these consequences are optional, being dependent on the decision whether or not to allow such expansion.

A further point to note is that, of course, these emissions are cumulative. We have shown only a snapshot view of the 2047 situation based on data provided by GAL and Veolia. It may be possible to model the cumulative waste totals and emissions if GAL provide a step by step, year on year, modelling of the waste arisings.

It should be noted also that Gatwick's waste arisings do and will contribute to other reported emissions from the Newhaven incinerator. The contributions in any one year may seem too small to be significant in this context, but the cumulative effect should not be ignored.

In 2023 the Newhaven incinerator processed 211,911 tonnes of delivered waste, emitting 1,925kgs of particulates, 1.12kgs of mercury, and 209,296kgs of NO_x, in addition to the 193,302 tonnes of CO₂e. These are the figures reported to the Environment Agency. Many other chemical compounds are emitted which are not required to be reported.

We hope that these indirect and cumulative emissions resulting from present operations and any future expanded operations at Gatwick will all be taken into consideration when assessing whether a DCO should be granted.