

Application for consideration to apply an exemption to the Refuse Collection Vehicle (RCV) fleet until the fleet is replaced from 1 October 2023.

Report by: Colette Hill, Assistant Director of Neighbourhoods

1. Background

The City Council has a statutory duty to collect domestic household waste from over 92,000 households. Refuse is collected weekly, and recycling fortnightly. There are also weekly collections of food waste from 26,000 properties with a further 25,000 properties due to come on line in September 2021.

The existing collection contract started on 1 October 2011 and was due to end on 30 September 2021, although this has been extended until 30 September 2023. The extension has been applied in order that the new contract can incorporate the changes that are likely to come from the Environment Bill. This includes changes to materials collected and method of collection. There may also be changes to funding through extended producer responsibility and also the introduction of a deposit return scheme.

The fleet is due for renewal in October 2023 - it was last renewed at the start of the contract. We currently have 21 RCVs and with vehicles costing from £180K to £400k for an E-RCV, we need to be clear on what we are delivering and how. The Environment bill is likely to lead to whole round redesign as we change what we are required to collect.

The waste collection fleet will be renewed at the start of the new contract (1 October 2023) and whilst the type and number of vehicles has yet to be determined, the replacement vehicles will at least be Euro6 compliant. Electric RCVs are now coming to market and this option is also being explored.

The existing fleet is suitable for retrofitting to make it Euro6 compliant - EminoX (the fleet is made up of just one model). Whilst we would not retrofit the entire fleet we would need to retrofit 12 vehicles in order to cover the collections in the CAZ. Experience of operating vehicles with these fitted suggests that the exhaust filters clog up when not run at a high temperature for a prolonged time (i.e. 2/3 hours motorway driving a day). The City's RCV fleet does very few miles as the city is so dense, and does limited motorway miles. Therefore such a retrofit solution is considered unsuitable for the RCVs operating in Portsmouth. In addition, as the RCV fleet will be replaced in October 2023 the retrofit funding would be better spent on vehicles with longer lifespans.

2. Clean Air Zone

The Clean Air Zone covers an area which is densely populated and has high number of properties serviced by a communal collection. Some of the communal collections take place 2 or 3 times per week - for refuse and then again for recycling.

See table below for frequency of RCV's entering the CAZ.

Please note where RY crews score 0.5, this indicates a fortnightly collection:

Crew	Monday	Tuesday	Wednesday	Thursday	Friday	Total
BLK1	1	1	1	1	1	5
BLK2	1	1	1	1	1	5
BLK3	1	1	0	1	1	4
REF1	0	0	1	0	0	1
REF5	0	1	0	0	0	1
REF6	0	1	0	0	0	1
RY11	0	0	0.5	0	0	0.5
RY12	0	0.5	0	0	0	0.5
RY22	0	0.5	0	0	0	0.5
RY31	0	0	0.5	0	0	0.5
RY51	0	0.5	0	0	0	0.5
RY6	1	1	1	0	1	4
Glass	1	0	1	0	1	3
Bulky	0	1	0	0	0	1
GWC	1	0	1	1	0	3
Total	6	8.5	7	4	5	30.5

3. Mitigation

Hydro treated Vegetable Oil. We have done some research and are able to change the fuel used in the fleet from diesel to (HVO) fuel. HVO offers a direct fuel swap from diesel to HVO with no infrastructure costs. It is regarded as a fully sustainable fuel.

Emissions data indicates reduction of:

- CO₂e of 90%
- Hydrocarbon of 30%
- Carbon Monoxide of 24%
- Nitrogen Oxide of 9%

The reduction of CO₂e by 90% will contribute to PCC's target of net zero by 2030. Additionally, by using the HVO fuel across the whole fleet, this will contribute to the reduction of NO_x and the overall purpose of the CAZ.

We are also working on a business case to procure an E-RCV to trial ahead of the whole fleet replacement. We would ensure that this vehicle was prioritised to the CAZ. There is still some work to be done on this.

4. Exemption Application

We are applying for an exemption for a core of 9 vehicles with an additional 3 vehicles to allow for swaps due to servicing regime and breakdowns. RCVs are on a strict servicing regime which includes a 6 weekly service so the vehicles do change. We would also use the E-RCV in the CAZ if the purchase goes ahead.

Additionally, the new fleet would be at least Euro6 compliant.

5. Recommendations

- That a time limited exemption - until 30 September 2023, be granted for 12 RCVs in the waste collection fleet.
- That the whole of the RCV fleet transfer to using HVO fuel at the next opportunity (when fuel tank is filled).
- Continue to evaluate and progress the purchase of an E-RCV to trial - ensuring it is used within the CAZ.