Southampton City Council

November 2014

Air Quality Inquiry - Fleet Management Services (FMS)

The Fleet Management Services team are aiming to make efficiencies across fleet services specifically to achieve cost efficiencies, reduce emissions and provide a standard approach to its fleet operations through:

- Investigating cost saving proposals to address the ongoing need to reduce costs and seek cost effective fleet transport that meets the requirements of service users across the Council.
- Continuing to investigate alternative vehicles e.g. electric, hybrid or liquid gas fuels to reduce emissions and support the improvement in air quality in Southampton.
- Investigating and implementing technologies to reduce fleet vehicles, reduce mileage and fuel e.g. route optimisation, fuel options etc.
- Investigating partnership arrangements with other authorities and organisations to create joint efficiencies.
- Improving the vehicle procurement and vehicle disposal strategy.
- Maximising the use of the Council's fleet facilities and other supporting resources.
- Improving safety and compliance through better trained drivers and higher driving standards of the fleet, which in turn reduce vehicle emissions, through more careful driving, and reduce the number of accidents.
- Improving communications to customers of Fleet Management Services.
- Streamlining processes and policies across all service areas with fleet vehicles.

To date, the following measures have been implemented which should have a positive impact on air quality:

- A DVLA licence checking service implemented where drivers no longer have to drive to City Depot for licence checking which saves on fuel and emissions.
- Electric bin hoists (for standard bins) on refuse collection vehicles for vehicles purchased since 2013 which reduces fuel consumption, emissions and noise pollution.
- From 2014 all large vehicles including refuse vehicles have the latest EURO 6 engines which are more fuel efficient and compliant with the latest emission controls.
- New vehicle request form implemented so the minimum specification is provided for the requirement and to reduce unnecessary 'extras' which may have a cost / environmental impact.

Other initiatives being developed include:

- Testing electric/hybrid vehicle demonstrators with a view to exploring the wider use of electric vehicles.
- Investigating the use of vehicle tracking for all vehicles / driver monitoring equipment for all large vehicles to reduce the number of fleet vehicles on the road thus reducing fuel consumption and vehicle emissions.
- New Light Goods Vehicles (LGVs) and refuse vehicles have driver monitoring equipment fitted (although not yet switched on). If operated this equipment can be used to support the reduction of heavy acceleration and emissions and more careful driving as well as protect drivers in the event of accident claims.

In response to the specific questions posed for the enquiry, responses are as follows:

1. What measures is SCC Fleet taking to reduce its emissions and their impact on local air quality?

All Council vehicles have lowest emission engines available and/or are considered suitable for their intended use whilst taking into account cost effectiveness. The newest vehicles in the fleet are fitted with Diesel particulate filters and the majority have the most efficient engines. Above all, new refuse vehicles have the latest Euro 6 diesel engines.

2. What consideration is currently given to vehicle emissions and local air quality when identifying SCC fleet needs?

Fleet Management Services will specify the fuel saving technologies that have minimal emission levels on all new vehicles at the point of procurement. In addition to point 1 above, service areas are also required to put forward a business case for any new vehicle required, with a sign off at Head of Service level in all cases, to ensure that these vehicles match the service requirement but also have the lowest cost / environmental impact.

3. Are there low emission vehicles available to consider for SCC's fleet? Fleet Management Services continually monitors the viability of using more environmentally friendly alternatives such as electric, or hybrid vehicles or making use of low emission fuels such as Liquid Petroleum Gas (LPG) or Liquid Natural Gas (LNG). All Council fleet vehicles have the lowest possible emissions wherever this is practicable and cost effective. Electric vehicles have been tested and the Council has one electric van at present which is intended to be used as a staff pool vehicle.

4. What is preventing SCC from commissioning such vehicles?

Electric vehicles are not available or suitable for all types of usage and at the moment, the required infrastructure is not in place to support the large scale deployment of electric vehicles, e.g. charge points, charging duration and range requirements for the distances vehicles travel on a daily basis. Also, the current SCC policy is that the majority of drivers take their vehicles home and commence their work from home. This current policy would require installation of charge points in staff homes. A review of this policy is currently being undertaken which could lead to more electric vehicles being recommended for purchase and use as part of the fleet. Charging electric vehicles is also problematic at the Council depots due to the time taken to charge batteries and the lack of sufficient space for vehicles during the charging period.

There are currently no large vehicles such as refuse collection vehicles or large vans on the market in the UK. Although larger vehicles in the Council's fleet could make use of LNG or LPG, the recently acquired Euro 6 engines compete favourably with these vehicles on cost, efficiency, and emissions. The cost of the LNG and LPG infrastructure also needs to be considered when looking at a vehicle solution. The wider availability of natural gas as a

vehicle fuel and a corresponding reduction in infrastructure costs and availability may be facilitated through a greater take up by other organisations in the city.

5. The proposed Low Emission Strategy will explore the opportunity to assign a damage cost (in terms of public health) to emissions. This could be applied to procurement procedures to promote the uptake of low emission vehicles. Would you support this and why?

This change would be supported in principle. However, as per point 4 above there are currently no zero emission type vehicles suitable to carry out a majority of the Council's functions in a cost effective and efficient manner. The introduction of such a damage cost could result in significant unjustified additional costs to the Council if zero emission vehicles are not available for use at that time. These type of vehicles will be constantly re-evaluated and trialled to determine future suitability. Zero emission large vehicles are still in an early development stage. When this technology becomes more viable there would be no reason why more vehicles of this type cannot be utilised. It should be noted though that currently electric vehicles cost much more to purchase than conventional alternatives. As with liquid gas fuels account needs to be taken for supporting recharging infrastructure costs. Future technology and infrastructure changes and economies of scale for vehicle purchasing should support the change in the procurement policy to zero emission vehicles. Implementation of electric engines can sometimes have other adverse effect, e.g. how much a truck could carry (extra weight) before becoming overloaded due to battery space, meaning that additional journeys would be required negating the air quality/emissions saved through electric vehicles.

6. What else could SCC do to improve its fleet emissions and what could be done to help you achieve this?

The Council is constantly monitoring and assessing manufacturer's advances in cleaner engine technology in terms of their use for the tasks required of the council fleet. To improve its fleet emissions SCC would also:

- Seek funding grants for implementation of the infrastructure required for implementation of electric vehicles, or LPG/LNG vehicles.
- Reduce the overall fleet size through route optimisation and changes to working practices and patterns of working.
- Research LPG/LNG or hybrid vehicles to replace standard fleet vehicles where considered appropriate and cost effective.
- Work with fleet partners in the city to reduce infrastructure and low emission vehicle purchase and running costs.

The Fleet Management Service recognises the importance of reducing emissions and improving air quality in the city and that further measures need to be taken to support the Council in achieving this to reduce its ranking as one of the highest polluted cities in the UK.