

Wiltshire Council

Environment Select Committee

26 June 2018

Briefing Note: Waste Plastic in Wiltshire Roads

Background

1. Following a motion put forward at [Full Council on 22 May 2018](#) by Cllr Brian Mathew and Cllr Steve Oldrieve, calling for Wiltshire Council to undertake a feasibility study into the method of using waste plastics in road repair, resurfacing, and road building programmes, the matter was referred to the Overview and Scrutiny Management Committee (OSMC).
2. At [5 June 2018 OSMC](#), the Committee resolved for the matter to be considered by the Environment Select Committee (ESC), asking ESC to consider the proposal using the evidence available at its forthcoming meeting (on 26 June).

Main considerations

3. The process of using plastic waste in roads is accomplished by 100% plastic waste material being made into pellets, these pellets then replace part of the bitumen in any asphalt mix. Generally, between 3-10kg of plastic waste is used per ton of asphalt.
4. This process usually operates via one management company. For example, a local authority supplies plastic waste to the company. The company then coordinate with a manufacturer, who create the plastic pellets and the asphalt mix. The final product is then an asphalt mix with plastic waste replacing the bitumen. This service is then procured from Councils, as part of their 'Road Maintenance' programme.
5. As relayed by Cllr Mathew at 22 May Full Council, Canada, India and Turkey currently use plastic waste in road maintenance, with Australia and New Zealand due to embark on such a programme soon.
6. Closer to home, several local authorities have been using plastic waste as part of their road maintenance programmes, some of these being: Gloucestershire County Council and Cumbria County Council.

Initial options that could be considered

7. The environmental impact of plastic waste is understood, and the need to recycle it is appreciated. The introduction of waste plastic into road surfacing materials is being trialled by some other highway authorities; however it is

understood that there have been some issues. In view of the safety implications of highway maintenance, care has to be taken with the materials used on our roads. Replacing a failed road surfacing is very expensive.

8. Last year Council officers sought the advice of our specialist contractors on the possibility of using plastic material in pothole repairs, but the potential problems of workability and durability indicated that there may be issues with doing this.
9. It would be possible to carry out a desk top exercise to determine the cost and implications of a trial in Wiltshire, but this would be subject to staff being available to consider the practical and safety issues.

Proposal:

In light of the above comments, the Environment Select Committee establishes a Rapid Scrutiny exercise to consider how feasible it would be for Wiltshire Council to use plastic waste, as part of its road maintenance programme.

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