TO: ENVIRONMENT OVERVIEW & SCRUTINY COMMITTEE - 2nd December,

2003

SUBJECT: RECYCLING OF PLASTICS

FROM: **ENVIRONMENTAL HEALTH**

1. PURPOSE OF REPORT

1.1 To inform Members of the recent Plastics Recycling seminar organized by Warwickshire County Council and held at their Montague Road depot on 29th October, 2003.

2. BACKGROUND

- 2.1 The Environment Overview & Scrutiny Committee, as part of its ongoing scrutiny of recycling, asked for officers to prepare a report on the feasibility of recycling plastics within Warwick District.
- 2.2 Richard Dobbs, Waste Strategy Officer and Heather Parkinson, Recycling Officer attended the seminar which brought together officers from the District, Borough and County Councils as well as collection contractors and reprocessors. The seminar was hosted by Jack Lindsey, Recycling Coordinator at Warwickshire County Council and the group heard presentations on the collection, bulking and storage of plastics and markets for its reprocessing both at home and abroad. A general discussion was then held on the specific problems and opportunities for collecting plastics for recycling in Warwickshire.

3. COLLECTING AND REPROCESSING

- 3.1 Currently, banks for recycling plastics are located at the County Council's Household Recycling Centres (formerly Civic Amenity Sites) Princes Drive, Leamington Spa and Cherry Orchard, Kenilworth in Warwick District and at a number of Rugby's recycling centres. Currently, only PET and HDPE (typically soft drink and milk bottles) are accepted and the plastics collected go to Delleve's reprocessing plant near Stratford. There are some concerns over the plant's long-term ability to accept plastics, however, and the whole of the UK market for plastics can be very unstable. The County Council is, therefore, keen to look at long-term alternatives.
- 3.2 The company which collects plastics from the County Council's sites has recently been awarded funding of some £47,000 to purchase a new screw compaction vehicle with an incorporated baler, and this should be ready to start work in a few weeks. The County Council also has a baler at its Princes Drive site for bulking up the plastic which it collects. The screw compactor is more effective at compressing plastics than other methods and so should improve the collection service. After some discussion, however, it was agreed that the vehicle would not be suitable for collecting plastics from smaller recycling sites (such as supermarket sites) as they do not have the necessary space and storage capacity.

3.3 The logistics of collecting plastics from the kerbside were then considered by the group. Rugby Borough Council reported that their own scheme of emptying static banks and taking the material to its own depot proved to be very expensive. Daventry operate a kerbside scheme which includes plastics, but because of their bulk, they take up a great deal of space on the collection vehicle. As a result, the vehicles have to go to tip (Daventry has its own Materials Recycling Facility – MRF) far more often with very light loads. Fortunately, Daventry is a relatively small District with a concentrated urban population, but the scheme still proves very expensive to operate. On-vehicle shredders have been trialled in other areas, but they have so far proven ineffective and difficult to operate.

4. MARKETS

- 4.1 The group heard a presentation from Mark Gilbert of GW Plastics. Mr Gilbert gave a brief history of the family firm and a detailed snapshot of the domestic and international plastics market over recent months. He stated that, three weeks before the seminar, the market price for post-consumer plastic bottles as low as \$145/tonne. At the time of the seminar it had risen to \$270/tonne (delivered to Hong Kong). PRN (Packaging Recovery Notes effectively trading chips for the packaging industry to help producers and retailers meet their recycling obligations) prices had fallen from £35/tonne last year to only £2.50/tonne this year reducing the financial incentive to recycle plastics. Shipping prices have also risen from \$800/container to \$1200/container.
- 4.2 GW Plastics export a great deal of material to Hong Kong where the market is much better for recycled plastic than in Europe. Although the market in China is still occasionally volatile, there is currently a high demand for material and GW Plastics is seeking to make up a shortfall of 500 tonnes per month. Mr Gilbert assured the group that fixed price contracts could be made available to local authorities guaranteeing a return of £80 to £100 per tonne. This amount would, however, still fall short of the realistic cost of introducing a viable plastics recycling scheme, particularly from the kerbside.
- 4.3 All this makes the market for plastics extremely volatile which can have a major impact on local authority recycling schemes. The key element which determines the viability of schemes is the transportation of the collected material, either from door-to-door and then on to a transfer station or the final bulk haulage of the material to the reprocessor. Because plastic is so light, compaction levels have to be extremely high to make transportation economic. The measures introduced to deal with waste from the County Council's sites are starting to address that problem, but kerbside collections in semi-rural areas where the final reprocessor is some distance away and no local bulking facilities exist is still uneconomic even when the market for plastics is buoyant.

5. POLICY AND BUDGETARY FRAMEWORK

Recycling is a high priority area for the Council with an increasingly high profile and challenging Government targets to be met in both the current financial year and in 2005/6. The achievement of these targets is a key objective under the Corporate Strategy.

5.2 The development and implementation of the Council's Recycling Strategy has significant cost implications, but the services planned or already in place will be in line with current budget forecasts. The introduction of plastics recycling in the District would incur significant additional expenditure. Officers are currently investigating the costs of introducing banks for plastics at the larger recycling centres in the District, but exact figures for supplying and servicing such banks are not yet known.

6. OUTCOME(S) REQUIRED

6.1 It is RECOMMENDED that Members note the contents of this report.

Richard Dobbs Waste Strategy Officer

BACKGROUND PAPERS

None

Areas in District Affected: ALL

Executive Portfolio Area and Holder: Environment – Councillor Mrs Begg.

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