

# Report on the Scrutiny of Recycling Activities

## 1. Terms of Reference

The following Terms of Reference were approved by the Panel at its meeting held on 30th October 2001 (Minute 21 refers):-

"To consider the efficiency and effectiveness of the Council's recycling operations".

The Subgroup Members comprised Councillor M Wardle, A Doubleday, S Ballagher, W Harrison and A Gwynne.

## 2. Method of Review

- 2.1 The Panel visited Bredbury Materials Recovery Facility;
- 2.2 The Panel interviewed Mr Robin Monk (Divisional Manager - Operations) and Ms Laura Cresswell (Recycling Officer).

## 3. Executive Summary

- 3.1 Tameside has, over the last 5 years, made substantial increases in the percentage of its waste that is recycled. From a figure of approximately 3%, 5 years ago, the figure for 1999/2000 is given in the Greater Manchester Waste figures as 13%. The Authority was forecasting further increases in 2000/2001.
- 3.2 A figure of 13% represents approximately 15,000 tonnes of material removed from the waste stream. This figure is made up of 4,500 tonnes of paper collected predominantly by the very successful blue bin scheme and a further 700 tonnes from other Council initiatives such as bring sites, school collections etc. This means the remaining 2/3rds of the recycling is carried out by Greater Manchester Waste Authority. They remove approximately 1,800 tonnes per year of scrap metal, green waste etc., from Civic Amenity Sites and in 1999/2000 they credited Tameside with a notional 8,000 tonnes of soil forming material.
- 3.3 The Council has a specific post of Recycling Officer, whose job it is to promote the recycling of domestic waste. The recycling of trade waste is a split responsibility and is considered by this officer to lie with the Agenda 21 programme run by the Planning Team and the Economic Development Team.
- 3.4 A simplified analysis of the total waste arising in the Borough of approximately 117,000 tonnes showed that 65,000 tonnes are collected by the Council's weekly black bin household collection service, 20,000 tonnes were brought to Civic Amenity Sites with a further 20,000 tonnes arising from markets, street sweeping, grounds maintenance etc. The Council also declared 5,000 tonnes of trade waste collected as part of the refuse collection service from town centre shops and mixed heriditaments.

- 3.5 The Council receives a recycling credit for recycled domestic waste of £26 per tonne. For recycling trade waste, no credit is available. At the transfer station, it is difficult to distinguish between material recycled from domestic waste and that from trade waste, as often material from all sources is delivered in the same vehicle. In the case of Tameside, two transfer stations, Bredbury or Newton Heath are used, thereby also mixing Tameside Waste with that of 3 other authorities, Manchester, Stockport and Trafford.

## Observations:

### 4. Recycling

- 4.1 In December 2000, the Panel visited Bredbury transfer station, which has been developed by the W.D.A. to produce soil-forming material. The original plant was designed to act as a railhead for the onward transfer of waste from Manchester, Stockport, Trafford and Tameside.
- 4.2 The Panel saw that waste on arrival was tipped into a large reception hall. Each Authority having different collection systems means that whereas Tameside waste, for example, was loose, that from Stockport was predominantly contained in black refuse sacks. Private operators, small builders and local businesses also bring waste to this plant which is mixed together with that from the local authorities. Some waste from other transfer stations is also brought to Bredbury. The main operation of the plant is by using a large horizontal toothed drum to break down the waste to reduce its volume, before loading it into the specially constructed rail or road containers or as a treatment to produce soil forming material. The broken down waste can be put through a series of specialist operations such as the use of a magnetic field to remove ferrous waste, centrifuges to remove plastic and aluminium and various screens to size material.
- 4.3 At the time of the visit, no material was being selected for use as soil forming matter. All waste was being transported by train to the East Coast for landfill as part of a major contract between the W.D.A. and Biffa.
- 4.4 The Panel also discovered that the cost of handling waste had, for the last 2 years, risen to Tameside by approximately 3 fold the rate of inflation. The cost alone exemplifies how important it is to devise means by which waste is minimised and that sent for landfill reduced. In terms of waste produced in Tameside, this has remained static for the last 2 years and is now set to reduce, mainly due to the transfer of the housing function outside of Council control.
- 4.5 Early in 2000, the Environment Agency claimed that the soil forming material remained a controlled waste and was sufficiently unstable for deposition, other than at registered landfill sites. From approximately May 2000, no soil forming material had been produced by Greater Manchester Waste and the Panel recognise that, if this situation remained until 31st March 2001, this would have a serious effect on the percentage of recycling claimed by Tameside, i.e. a reduction of nearly 40% in the

1999/2000 recycling tonnage.

- 4.6 Subsequent questioning showed that the W.D.A. were in the process of seeking a Judicial Review of the Environment Agency's decision. However, subsequent to the visit, the papers produced by the W.D.A. showed that it employed a consultant, Professor E. Stentiford of Leeds University, to research further stages of treatment for the waste, including composting to improve the quality of the soil forming material.
- 4.7 During the visit, it was also outlined to the Panel that a large percentage of the soil forming material relies on the relatively large percentage of paper products in the waste stream. The Panel recognises that there was the potential of conflict between the production of soil forming material and Tameside's continued success in removing paper at source from domestic waste.
- 4.8 Up until the end of 2000, the W.D.A. has only spread soil-forming material on sites they owned and in the districts of Trafford, Manchester, Oldham and Tameside. Tameside's site is at Ash Road, Droylsden and material was spread there in 1999 to a thickness of approximately 1 metre. The Environmental Health Department had little information as to whether this site was now producing any methane or leachates from the waste. It was of concern to the Panel that no definitive monitoring appeared to be taking place or any results available. Similarly, W.D.A. reports appeared to provide no firm specification or composition for "soil forming material", but only lobby the E.U. for the material to be 'recognised'.
- 4.9 Reference to the Greater Manchester Waste Recycling Plan and Appendices relevant to Tameside indicated a number of variances in population, weights of waste, projected increases and composition which the Panel felt required checking and reconsidering. The Panel wished to see these figures checked and amended if necessary, as they considered accurate information is essential to ensuring that any recycling policies are targeted effectively and efficiently.
- 4.10 Amongst the figures was the suggestion that 4,000 tonnes of disposable nappies entered the Tameside waste stream. This is based on some national research. The Panel felt, on consideration, this figure was probably lower but still in the order of 2,500 tonnes. The greatest objection to disposable nappies is the cover which, being made of plastic, appeared to be non-biodegradable. The Panel considered that at a national level, pressure should be brought upon the suppliers of these products to make them totally biodegradable. Whilst understanding their value in the modern environment, the concept of a nappy laundering and recycling system proposed by a Co-operative, was seen as an alternative. The Panel was informed that the Economic Development Section were responsible for supporting this private initiative which the Panel considered should be encouraged.
- 4.11 Overall, discussions showed that, whilst Council had a very proactive policy to increase recycling, the actual detail of the policy appeared to rely more on opportunism and cost than on environmental consideration. By way of example, major initiatives have been to recycle paper in an opportune way, which because of the most excellent price obtained for the sale of the paper, was virtually cost neutral. Aluminium cans were also being pursued, again it was felt because of their very high scrap value.

- 4.12 In contrast, from environmental considerations, the Panel learned that waste paper does have a potential for composting, which can be carried out without an extra energy resource being used for a separate collection. Similarly, aluminium cans could and were being removed from the waste stream as part of a sorting process at the transfer station, as was ferrous scrap.
- 4.13 Looking into the composition of typical waste, it was seen that traditional materials such as ash, clinker etc., which made up the bulk of waste in the first half of the last century, were now non-existent, but also current trends had very much reduced the weight of glass and tin, with corresponding increase in the new materials, such as plastics. The continued development of the "throwaway" society was also changing wastes with reference being made to mobile 'phones, electronic goods, chipboard furniture etc. From an environmental viewpoint, the Panel felt the Council's recycling initiatives should be reassessed particularly with reference to plastics as they were on the increase, they made up a large percentage of the volume of domestic waste collected and if removed at source, could reduce, the number of refuse collection vehicles deployed. It was also felt that plastics, by and large, would not break down when landfilled and is thus are a long-term problem. The Panel learned that the latest initiative by the Recycling Section was to find alternative uses for glass in that there was an increasing market resistance to the purchase of cullett, as use for glass for packaging food products had declined considerably. Most bottles now arrived in foreign imports of wine, beers etc.
- 4.14 Generally, the Panel was not convinced that glass in waste would not continue to drop in quantity due to improvements in glass technology producing thinner sections and alternative products such as plastic translucent bottles being cheaper overall when distribution weights were being considered.
- 4.15 The Panel were impressed by the action being taken to pulverise glass extracted from the waste stream to form construction materials, ranging from separation of the finest material to create inert filler through a range of sizes equivalent to sand and finally, as an aggregate replacement with the larger sized material. It was accepted that this was still in the development phase and markets were yet to be found for the products. One concern of the Panel was with regard to the cost and energy required to pulverise the glass and whether the sale price of the material would be sufficient for the process to be economically viable.
- 4.16 The Panel questioned the budget provision for recycling in the Borough. Council policy currently was to seek break-even recycling initiatives. The best example being the blue bin paper scheme that covers all collection costs. The Panel were, however, informed that recycling did receive financial support in terms of the recycling officers' costs and probably that for the delivery of the blue bins, their maintenance and the advertising or marketing costs in connection with the scheme. It is unlikely that other materials collected for recycling can be made self-financing.
- 4.17 Some authorities were already experiencing charges for the collection of glass cullett, rates for cardboard as low as £10 per tonne and for some scrap metals such as tinned steel, insufficient interest from purchasers and the requirement of financial support.
- 4.18 Reference was made to other authorities contacted in connection with recycling

initiatives. Findings indicated that the majority of authorities now provided some financial support to recycling from the Council general fund with a rough average being in the order of £2.50 per household. That approximates with 100,000 households in Tameside to the not inconsiderable sum of £250,000. Reviewing costs in other authorities had seemed to indicate that the major amount of cost was incurred as soon as an extra-dedicated collection service was introduced for a recycled material. Costs then increased for the collection of a range of recycled materials, proportionally this was relatively small compared with the introduction of a service. The conclusion of the Panel was that Tameside having commenced collection rounds specifically for paper, could extend the service to collecting a variety of other separated materials for a relatively small increase in cost.

- 4.19 Different authorities operate a range of collection methods for salvaged materials. At one end of the spectrum, some authorities collected all recyclable materials mixed in a single container, which may or may not be a specialist container, issued for the purpose [ i.e. one authority asked people to put their recyclable material in old carrier bags]. Compare this with authorities that issue a multi sectioned specialist container and collect individual recyclable materials in a multi-compartmented vehicle.
- 4.20 Authorities collecting all the material together then required sorting tables or mechanical separation methods. Costs related to collecting all recyclables, unsorted in general appeared cheaper than operating several collection rounds.
- 4.21 The Panel considered that Council policy should be financially to support recycling with a specific budget at a level based on population and weight of material collected.
- 4.22 Irrespective of the collection method adopted for recycling where it utilises bring sites or collection rounds, energy is consumed with resulting additional pollution. As well as financial considerations, the Panel felt that insufficient attention had been given to energy requirements in connection with recycling and if this were audited and measured, they could well change the Council's strategy on some recycling issues
- 4.23 The Panel considered that, given the distance the waste was being transported and then landfilled, the Manchester area should investigate the viability of a large incineration plant. The Panel saw as advantages from such an operation; reduction of energy use through less transportation, energy produced from the burning, little landfill disposal and the possibility of salvaging and marketing more waste, including ash or clinker. The Panel were mindful of pollution from flue gases but considered these could be kept within acceptable limit by good design and management. The Panel wished to visit an incineration plant in another area to see first hand, the potential benefits and disadvantages.
- 4.24 During the Scrutiny, it was highlighted that the Council's Agenda 21 policies and their implementation were not wholly linked to recycling policies and implementation. This arose when questions were asked about recycling office paper, market waste etc. where it would appear these initiatives had been solely developed by the Agenda 21 programme. The Panel wished to see full co-operation between the 2 activities as it was felt there could be many opportunities being missed by staff operating independently in the two programme areas.

## 5. Trade Waste

- 5.1 The Panel received information from Groundwork, Bury of a business environment association which actively sought to redirect one business' waste for the benefit of another. This was achieved by publicising monthly, all the waste product from each firm interviewed, such as empty containers, pallets, off-cuts and matching them with companies requiring similar materials. The Panel were informed that his type of activity is lead in this Borough by the Economic Development section. The Panel gained an impression from the Recycling Officer, that there was little co-operation between the work of the Economic Development section, the Recycling Officer and the Trade Waste section of Environmental Services.
- 5.2 Whilst considerable emphasis is made in Council policy and the business plans of Environmental Health to inform private householders of waste minimisation strategies, the Panel were informed that no such exercise has ever taken place with local industry, shopkeepers or businesses, mainly because it was not in the job description of the Recycling Officer, nor a priority of the Business Development section.
- 5.3 The avoidance of waste appeared to the Panel of significantly more value, both in terms of Agenda 21 and the avoidance of landfill than recycling as a priority. The Panel are of the opinion that the Council should increase the resources allocated to advising the virtues of waste minimisation and that this should be directed as much, if not more, at industry as well as private householders. No figures were available as to the tonnage of waste produced in the Borough from businesses, but in all likelihood this is only a marginally smaller quantity to that from domestic householders. Reducing waste could also have a significant impact on the local economy, not only in terms of reducing business costs, but also with the W.D.A. precept, currently this is in the order of £6m per annum and approximates to £60 per tonne of waste collected. Even the most optimistic values of recycled materials rarely exceed an average of £30 per tonne.
- 5.4 The Council make a charge for and markets the service of collecting business waste and shows in its budget books that this is a profit making venture. Increased marketing and throughput for this service can result in economies of scale and reductions in energy consumption for the good of the environment as well as increasing the service's commercial viability. Consideration should be given to ploughing back some of the surplus to waste minimisation strategies and providing subsidised recycling for local businesses. Currently, it would appear that Council policy on recycling is flawed by concentrating virtually exclusively on domestic waste.
- 5.5 The Council itself, produces a very large volume of waste from its grounds maintenance operations, highways function and the running of markets. In general, virtually all this waste has the potential to be recycled or composted, whilst currently virtually none is. The Panel would like to ask the Council to put its own house in order and become a model in terms of recycling its own waste.
- 5.6 In reviewing the work of other boroughs, they appear to have generated considerably

more initiatives with local companies for recycling specific materials. Examples were engine oil,, books, various fabrics and clothing, furniture, white goods, wood etc. Early indications show that there could be, and in all likelihood are businesses in Tameside which, if approached would participate in some form of partnership in refurbishing or reusing these products. The Panel consider some form of mailing or proposal sent with the business rate demands might act as a catalyst. When asked for a list of local businesses in the recycling field, it did not appear that the Council maintained such a record or promoted it.

- 5.7 Finally, the Panel asked if officers within the recycling team, would review the figures given in various business plans, national statistics and regional statistics to ensure that a number of clerical errors were rectified and in any examples where figures varied, that the correct figures were established and published so that the Council records with regard to recycling could be properly charted and their successes measured accurately.

## 6. Recommendations

- 6.1 A definitive monitoring programme should be established for the Council's Ash Road Site, to ascertain whether or not this site produces any methanes or leachates from the waste.
- 6.2 The concept of a nappy laundering and recycling system proposed by a Co-operative, and supported by the Economic Development Unit, be encouraged by the Panel.
- 6.3 The Council's initiatives relating to the recycling of plastics be reassessed, due to their continued increase.
- 6.4 That Council Policy should actively support recycling in financial terms, and be allocated a specific budget at a level based on population and weight of material collected.
- 6.5 That due to the distances travelled to transport and consequently landfill the waste, the Manchester area should investigate the viability of establishing a large incinerating plant.
- 6.6 The Environmental Health Division should inform householders and local businesses of waste minimisation strategies.
- 6.7 Consideration should be given to ploughing back some of the surplus to waste minimisation strategies and providing subsidised recycling for local businesses.
- 6.8 The Council should act as a role model by taking steps to recycle more waste arising from its own business operations.
- 6.9 The Council should consider distributing information, which could be sent with business rate demands, on the consequences of not recycling, which might act as a catalyst.
- 6.10 The Recycling Division should review the figures detailed in their various business plans, national statistics and regional statistics to ensure that a number of clerical

errors are rectified, in order that the Council's records with regard to recycling can be properly charted and their successes measured accurately.

- 6.11 The Council should ensure that "Thank You" signs are located at recycling sites for patrons.