
Survey of Companies Involved in Managing and Disposing of Construction and Demolition Waste

Final report prepared for the Yorkshire and Humber
Assembly/ Environment Agency

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OUR REFERENCE: 03105-FINAL



Executive summary

Survey summary details

A total of 14 face to face interviews were carried out with companies reprocessing construction and demolition waste in the Yorkshire and Humber area with an additional company completing the survey questionnaire electronically.

Some of the interviews covered more than one site operated by the same company which meant that the 15 completed questionnaires provided information relating to 23 permanently operating sites.

Types of waste reprocessing carried out

Over half of the sites crushing/ screening C&D waste also extracted wood from the waste and either chipped it themselves or sent it on elsewhere for chipping.

Some companies have already introduced or are moving to MRF like facilities for extracting materials like wood, glass, polythene, other plastics, paper, cardboard and metals from general C&D waste.

Other more specialist processes are also being developed for example, one company has introduced a plant conversion programme in which a proportion of used asphalt is used as feedstock in plants producing asphalt.

Trends in tonnages reprocessed and capacity issues

Half of the companies carrying out crushing /screening were operating at full capacity during 2003 with the other half running under capacity but all three plants carrying out C&D waste sorting processes were running at full capacity during 2003 which may indicate that this is a growth sector.

In recent years, a clear majority of companies in the survey had seen increases in the quantities of C&D waste which they reprocessed.

Of the companies interviewed, the majority were looking to increase their waste throughputs, often by adding more capacity.

Impacts of taxes, levies and standards

Most companies had seen benefits to their business from the introduction of the Landfill Tax (introduced in October 1996). For two of the companies interviewed it caused the setting up of reprocessing operations.

By contrast, only half the interviewees had seen an impact from the Aggregates Levy (introduced April 2002) and only one company had seen any impact yet of the new European standards for aggregates which came in during January 2004.

Planning permission issues

Several interviewees had complaints relating to planning permission. The time taken for it to be granted, and the stigmatisation of recycling as a waste use were both mentioned by more than one interviewee.

Segregated skips

The greater use of segregated skips at the point of waste generation was favoured by a majority of interviewees. A need was seen for education of site workers and/or site managers and contractors. Financial rewards and/or penalties were suggested by several interviewees as a way of increasing segregation on site. Difficulties in implementing segregated skips were mentioned as being due to lack of space on some sites and the cost of having more skips on site.

Listings of companies

Interviewees did not tend to have very strong feelings on whether there was a need for more listings of companies accepting C&D waste for reprocessing or supplying materials from reprocessed C&D waste.

Improving markets for materials from reprocessed C&D waste

Several interviewees saw a role for local authorities in issuing tenders specifying or accepting the use of recycled aggregates in the work they commission and in encouraging other contractors to use them. Closely related to this, a need for the education of surveyors/engineers who specify work was also mentioned by several interviewees.

Demolition project contracts

Opinion was divided on whether demolition project contracts should specify waste segregation and/ or recycling with those who were not in favour considering that demolition project contractors were already segregating waste as much as is possible.

Construction project contracts

Most interviewees were very much in favour of construction contracts specifying the use of recycled aggregates / other recycled materials. Several interviewees, unprompted, mentioned that they saw a role for local councils and government in accepting or specifying recycled aggregates and allowing others to do so.

Factors which hinder further progress and actions which could be taken

The main actions which could be taken/ issues to be resolved which were mentioned by more than one respondent in each case were

- The need for recycled materials to be specified in construction contracts
- An increase in the Landfill Tax and or the Aggregates Levy
- Education of site workers and /or site managers and/or contract specifiers
- Planning issues
- Dealing with unlicensed crushers
- Lower rates for waste uses on industrial land/ recycling
- Dealing with the confusion over the possible classification of recycled aggregates as waste

Introduction

The Yorkshire and Humber Assembly and the Environment Agency commissioned MEL Research to carry out face to face interviews with companies involved with reprocessing construction and demolition (C&D) waste in the Yorkshire and Humber region. The aim of the interviews was to find out about trends in C&D waste management in the region and also to investigate barriers to increasing waste reduction and reprocessing and identify actions which could be taken to increase the reprocessing and reduction of the C&D waste stream in the region.

Survey organisation and implementation

Face to face interviews were carried out with 14 companies in the Yorkshire and Humber region which reprocess construction and demolition waste. An additional survey questionnaire was completed electronically by a respondent who was not able to complete the questionnaire face to face and requested the questionnaire to complete in his own time. A range of sizes of companies were interviewed ranging from big national companies eg Tarmac, RMC, Viridor and Biffa to small local companies.

Identifying sites

The main sources of information used for identifying sites in the Yorkshire and Humber region which reprocess construction and demolition waste were CIRIA's internet registry of recycling sites website and WRAP's Aggregain website. We also contacted and interviewed an additional company identified during the course of the survey by another of the companies interviewed. An additional site was identified from the Tarmac website. No further sites were identified from company websites or through email or telephone contact with the other following major construction companies; Balfour Beatty, Taylor Woodrow and Carillion. The BRE website of recycling sites also did not prove useful for identifying C&D reprocessing sites.

Contacting companies and arranging interviews

In order to obtain as many interviews as possible, we telephoned all 37 companies/ site addresses detailed in the interim report including all reserve sites to try to arrange interviews. As was stated above, in some cases more than one site in our lists was operated by one company and therefore covered by the same interview thus reducing the sample of available sites to interview.

Some site managers were relatively easy to contact, but for others, repeated telephone calls were made to speak to the site manager, and messages were also left to call us back where possible. If and when we got through to the site manager, we explained whom we were doing the survey for,

what it would cover, and what it would be used for. In cases where interviews did not prove possible, the main reasons were

- The person we needed to speak to was never available on the telephone despite repeated attempts to contact them, and did not return messages from us (about six cases).
- Companies not having time to see us or not wishing to take part in the work (about four cases).
- Company agreed to interview but cancelled at last minute (three incidences, one of which was rearranged successfully).
- Companies no longer reprocessed C&D waste or site no longer active (about three cases).
- Telephone number for the site was incorrect, and no correct telephone number could be identified through directory enquiries (one case)

In advance of visiting companies who had agreed to an interview, we sent out a letter (included in Appendix 1) which reminded the interviewee of the time and date of the interview and summarised what the survey was about.

Out of the 15 completed questionnaires, all except one related to a company which operated out of one or more permanent sites in the region. The one company interviewed which did not have a permanent site hired in crushing equipment when required.

Some companies which were interviewed had more than one site in the region, and provided us with information for all their sites in Yorkshire and Humberside during their interview with us. The 15 completed questionnaires therefore corresponded to 23 permanent sites at which reprocessing took place or was organised from. One company had four permanent sites in the region, another company, three permanent sites, and three other companies had two sites in the Yorkshire and Humber region. The remaining ten companies interviewed just had the one site in the region. The number of completed questionnaires thus fell short of the intended 25 but in covering 23 sites gave a large enough sample to obtain useful information on the construction and demolition waste reprocessing sector in the Yorkshire and Humber region.

Location of sites covered by interviews

Table 1 below shows the number of sites originally identified in each sub region and the number of sites originally selected for interview. The number of interviews carried out in each sub-region is also shown. The final column shows the numbers of sites in each sub region which were covered by an interview (either through a visit made to the actual site or through information provided through a visit provided to another site in the region operated by the same company).

Table 1. Sites in each sub region

Sub region	Total number of sites originally identified	Number of sites originally selected for interview	Number of interviews carried out	Number of sites covered by interviews
West Yorkshire	16	11	5	6
North Yorkshire	7	5	2	6
South Yorkshire	9	6	3	4
East Yorkshire/ Humber	5	4	5	7
TOTALS	37	26	15	23

Interviewers briefing and interviews carried out

Before the project interviewers telephoned companies to arrange visits, there was a briefing meeting. At this meeting, the MEL project manager, went through the survey questionnaire and also provided background information on taxes, aggregates grading and planning issues to the other project interviewers. The numbers of interviews subsequently carried out by each interviewer are shown in Table 2 below.

Table 2. Interviews carried out by each interviewer

Interviewer	Number of interviews
Chloe Nikitas	9 face to face interviews plus liaison with company about company completed questionnaire
Kylie Kavanagh	1
Barbara Leach (in place of Rachel Parker who was ill and unable to complete her interviews)	4
TOTAL	15 completed questionnaires (14 face to face interviews plus one completed by company)

Recording questionnaire responses

During the face to face interviews, the survey questionnaires were filled in by hand by the interviewers. These were then entered electronically after the interviews onto questionnaire Word proformas by the interviewer themselves. Some survey information was entered into Excel during the data analysis stage to enable compilation and comparison of the different responses.

Survey results

A copy of the questionnaire is attached in Appendix 2. The questionnaire is structured into the following five sections:

- Section A – Waste quantities and reprocessing methods
- Section B – Trends in tonnages processed and the impact of taxes, levies and standards
- Section C – Factors influencing levels of C&D waste reprocessing
- Section D – Factors hindering further progress
- Section E – Actions which could support further progress
- The interviewee was also asked at the end of the interview whether they had any other comments on what had been covered by the survey.

Waste quantities and reprocessing methods

The different C&D waste reprocessing activities carried out by the companies visited are shown in Table 3 below. The numbers of companies carrying out each type of activity are shown. Most companies carried out more than one type of waste processing activity.

Table 3. Waste handling activities carried out by companies

Waste handling activity	Numbers of companies carrying out activity
Crushing/ screening	13
Wood separation	8
Wood chipping	5
Cardboard extraction	3
Other materials extraction	1 site paper and glass extracted, 1 site plastic and glass soon to be extracted, 1 site diverts glass, paper, card loads to another company's site.
Cold mix production of tarmac like material	2
Other	1 company recycles asphalt to make new asphalt at 4 plants in region. There is also 1 plate glass reprocessor and 1 metal reprocessor.

The main type of reprocessing activity for C&D waste is crushing/ screening to produce aggregates and/ or soils that can be used in construction, landscaping etc. The companies interviewed for this survey reflected this with 13 out of the 15 carrying out crushing / screening.

Over half (eight companies) crushing/ screening C&D waste were also separating out wood from C&D waste with five companies chipping it themselves before sending it on for chipboard manufacture.

Scales of throughputs of companies in the survey

Out of the 13 companies crushing/ screening C&D waste, five had inputs of 100,000 T or over per year with the other eight companies having inputs of under 100,000 tonnes per year. 100,000 tonnes per year corresponds to 100 HGV loads per week (for HGVs taking 20 T loads over a 50 week working year) The company in the survey which crushed most waste was Tarmac which had an output tonnage of 600,000 T of Type 1 aggregates in total over the company's two sites in the region. This corresponds to 600 HGV loads per week. (Tarmac was not able to provide us with an input tonnage.) The lowest annual input tonnage out of all the companies crushing/ screening C&D waste was 8,500T which corresponds to 9 HGV loads per week.

The quantities of wood extracted from C&D waste ranged from 250 T to 10,000 T per year. This wood was usually used for chipping, though one company composted some wood waste.

The one company which provided an annual tonnage for cardboard separated out for recycling segregated out 250 tonnes.

As regards the more specialist C&D waste reprocessing activities, the company recycling used asphalt processed 23,000 T of recycled asphalt in three out of its four plants in the region in 2003, and the company reprocessing metals from demolition reprocessed 1,000 T. The company recycling plate glass recycled a low tonnage of C&D waste glass.

Processing methods running at full capacity and under capacity

As regards **crushing/ screening of C&D waste**, half of the respondents (6) said that their process was running at full capacity during 2003, and half (6 again) said that their process was running under capacity during 2003.

Wood chipping was running at full capacity only at a minority of companies with two operating at full capacity, and four under capacity during 2003.

C&D waste sorting processes were running at full capacity at all three sites carrying out this activity during 2003.

Cold mix surfacing material production was not running at full capacity at either of the two companies which carried this out.

The company **recycling used asphalt** into new asphalt had all of its plants in the region running at full capacity during 2003 with respect to the input proportions of recycled asphalt. The company **reprocessing metal** from demolition also ran at full capacity.

Plans to increase the capacity of sites

Out of the companies which answered questions on whether they had plans to increase their C&D waste throughputs, nine were at least looking to do so and only two were definitely not going to do so.

Trends in tonnages processed and the impact of taxes, levies and standards

Trends in tonnages reprocessed

Most companies interviewed in the survey have been increasing the quantities of C&D waste that they reprocessed in recent years. Over the last 10 years, or the period that the company had been reprocessing C&D waste if that was less than 10 years,

- Eight companies said that the quantities that they reprocessed had gone up
- Two companies said that the quantities reprocessed had stayed the same
- Three companies said that the quantities had gone down

The majority of companies had not had any difficulties in getting enough waste to reprocess over the last three year period (seven companies). Five companies had had difficulties getting enough waste. Two of these companies mentioned local competition from other reprocessors as being a factor in this.

Impacts of taxes, levies and standards

The **Landfill Tax** has had a significant effect with eight companies saying that the Landfill Tax has had an effect on their business and only one said that it had not. The other companies were not reprocessing C&C waste in 1996 when the Landfill Tax was introduced. Comments made by interviewees on the impact of the Landfill Tax are listed below.

We landfilled less inert materials and went to more trouble to separate out inert and active wastes. this had become more cost effective. There was a massive impact on the way that buildings are demolished with techniques which lead to greater separation of materials used once more.

The Landfill Tax was the impetus for starting the modifications to the asphalt plant to take recycled asphalt. Asphalt waste is taxed at the higher rate and due to this, we started the modifications programme.

The Landfill Tax was the driver for the setting up of our recycling operations. We knew that we would have to pay a lot in Landfill Tax to dispose of waste produced by our Highways work and so have effectively used the money that has been saved in disposal costs to pay for the recycling facilities.

It helped increase tonnages. It is not going up fast enough.

[The Landfill Tax did] not initially [have an impact] but it does now. Customers are starting to look seriously at the costs of waste.

The higher it gets, the more custom we get.

The Landfill Tax made people segregate more and consider recycling.

It sharpened customers' minds on what they were doing and people started separating waste more.

The picture as regards the **Aggregates Levy** was less clear cut. Six companies said that the Levy had had no effect on them, with the same number saying it had effected them, but in three of these six cases saying that the effect had either been very little or only temporary. Comments on the Levy included the following.

This has given us an advantage in selling our products. We obtained a large contract just after the introduction of the Aggregates Levy which we attribute to the Levy.

It has made no difference, but it may do if it goes up. It will make people think like the Landfill Tax did.

It had no effect. Can't see it having much effect in the future either. Local influences are much more important. For example, new pylons have just been erected and there is a lot of free stone around at the moment.

No effect, but it might if it goes up in the future.

Initial increase in demand, but then demand returned to its pre Aggregates Levy levels.

Very slight effect. There are many stone quarries in the [Sheffield] area and prices for primary aggregates are comparable with recycled aggregates.

More cost effective and therefore easier to sell recycled aggregates.

Only one company said that the new **European standards** for aggregates were having an effect on them with 11 companies saying that the standards were having no effect so far.

Factors influencing levels of C&D waste reprocessing

Planning permission

The interviewees working for larger companies were not able to respond to our questions on the effects of planning permission because such issues were dealt with by specialist departments in their head offices.

Three interviewees complained about the time it takes for planning permission to be granted. One of these suggested fast tracking of projects.

Worthwhile projects should be fast tracked. Planners should work alongside companies. It took eight months to get planning permission for the C&D waste sorting facility that we are currently constructing. This slowed progress with the plant and mean that the plant is not available for April and May this year which are months when input tonnages are high. (Halifax, West Yorkshire.)

One interviewee thought that regional decision making would improve consistency.

C&D reprocessing doesn't have the environmental impacts of quarrying and the planning process should recognise this. County level decision-making is good as it makes it more consistent. Regional level would be even better. (Company has three sites in North Yorkshire.)

Two interviewees mentioned that recycling was stigmatised by being a waste land use.

Application for a recycling site seen as a waste use which stigmatises it. (Company has three sites in North Yorkshire.)

We have struggled to get permissions for waste treatment centres. All waste facilities are stigmatised. (Company has two sites in North Yorkshire.)

One interviewee complained of the increasing burden of work involved with planning permission applications.

The applicant is expected to do more and more work, some of which is superfluous. Planning permission is difficult for small companies. (East Yorkshire.)

One local council came in for praise!

East Riding Council has been very co-operative. They have been good and far-sighted.

Segregated skips

The majority of interviewees considered that the greater use of segregated skips would lead to more materials for reprocessing (ten considered that this was the case and three considered that it would not). This reflected a majority view that it was best to segregate at source rather than later, though a minority of interviewees favoured separating later. One respondent gave an equivocal response. Reasons given for respondents thinking that segregation on site was not a good idea were the higher chance of contamination and the difficulty of getting the skips used correctly. Other companies relied on sorting mixed waste and preferred to take this approach.

Interviewees were also asked what factors they thought hindered the greater use of segregated skips are listed below together with the number of interviewees who mentioned each factor.

- lack of space on site (5 interviewees)
- lack of education of site workers and or site managers (5 interviewees)
- cost (4 interviewees)
- culture (2 interviewees)
- more skips tied up (2 interviewees)
- requirement for monitoring skip use on site (2 interviewees)
- time pressure (1 interviewee)

Some comments made by interviewees about the use of segregated skips are listed below.

The secret of recycling is that waste needs to be segregated at source.

[The greater use of segregated skips] would lead to cheaper waste disposal and better value. Contamination needs to be cleaned up at source.

Lack of education of site staff [hinders the use of segregated skips]. The brickie will get paid whether or not he puts waste in the right skip.

We have tried this [segregated skips] but there is ignorance and lack of concern from the people on site. For the builders a skip is a skip. We have also tried financial rewards by making the separated skips cheaper (eg £140 and £70). This has not worked and there is always an argument about it.

It is difficult to get people to use segregated skips effectively. It is difficult to check whether skips contain properly segregated waste as you cant' see what is at the bottom of the skip.

Segregated skips tie up more skips as different ones are required for different materials. Also the transportation and hire charges are greater again due to the greater number of skips required.

The vast majority of material collected in skips is normally segregated at a waste transfer station and materials that is suitable for recycling goes on to be reprocessed anyway. In fact, I feel that segregated skips would lead to a decrease in the quality of recycled waste due to the higher chance of contamination.

[The use of segregated skips] is expensive due to the need for fencing off of the area, someone to supervise the correct materials going into the correct skips and rental on more containers.

One interviewee suggested the following approach to segregation

Treat it in the same way as health and safety of sub-contractors is treated – must be taken seriously.

Nine interviewees thought that **sub-contractors** were a barrier to waste segregation on site, with only two interviewees disagreeing that that was the case.

One comment reflecting the majority view was:

The use of sub contractors is the main barrier to waste segregation.

Interviewees are also asked about what would **help increase segregation on sites**. The main ideas put forward are listed below together with the numbers of interviewees who mentioned them.

- financial rewards and/or penalties (4)
- education / contractor awareness (4)
- build requirement to segregate into contracts/ make it mandatory (3)
- guaranteed prices for segregated materials (1)
- visits to sites and site managers (1)

Listings of sites reprocessing C&D waste or selling on products made from recycled C&D waste

Only three interviewees had found it beneficial to their business to be listed on the CIRIA and/ or Aggregain websites. Several of the respondents were not aware that their companies were listed on these websites.

Opinion was divided on whether there was a need for more listings for companies accepting C&D waste for reprocessing or for companies selling on products made from C&D waste

As regards lists of **companies accepting C&D waste for reprocessing**, one interviewee suggested that

listings of companies accepting C&D waste for reprocessing be linked to the ReMaDe initiative

Another company view was

listings could be useful for companies relocating or new to the area eg Asda built a new store locally recently and brought in materials from the North East rather than using local sources

With respect to listings of **companies selling on products made from C&D products**, the only suggestion made to how this might be implemented was to put it in a *widely read contractors' publication equivalent to MRW*.

Another interviewee voiced the alternative viewpoint held by several interviewees that there was no need for either type of listing.

C&D waste disposal is always a localised market so hauliers and other interested parties are normally aware of all the local disposal/ recycling points.

How markets for materials reprocessed from C&D wastes could be improved

The ideas that interviewees put forward for improving the markets for materials reprocessed from C&D waste are listed below with the number of people mentioning each idea in brackets afterwards.

- action from local authorities with tenders specifying the use of recycled products/ accepting the use of recycled products/ letting other contractors use recycled aggregates in cases where the council has a say (4)
- Education of surveyors/ engineers specifying the materials used in construction (3)
- encourage the use of secondary materials through specifications (2)
- specifications/ grades standards for recycled aggregates/ recycled materials (2 interviewees)
- put Aggregates Levy up (2)
- make in necessary for reprocessed material to be used in a set proportion of new-build (1)
- Deal with the problem that recycled aggregates are classified as waste (1)
- Relax specifications (1)
- More reprocessing firms eg for wood (1)

Demolition project contracts specifying waste segregation and/ or recycling targets

A slight majority of respondents (eight) thought that it would be a good idea for demolition contracts to specify waste segregation and/ or recycling. Six of the respondents thought that there was no need for demolition project contracts to specify waste segregation since demolition contractors were already segregating waste as far as is possible. Three of the respondents carried out demolition contract work (included in the above figures) and two out of three of these thought that waste segregation was already sufficient with the third considering there was room for improvement through waste segregation targets.

One company mentioned the problem of illegal burning of demolition sites which takes revenue from bona fide companies.

Construction project contracts specifying the use of recycled aggregates/ other recycled material

There was a lot of support for the idea of construction contracts specifying the use of recycled aggregates/ other recycled material with 13 of the interviewees considering this to be a good idea, with only one respondent thinking it was not a good idea. The company that was not in agreement stated that this was due to the quality of “cheap and nasty recycled aggregates”. This company also quarried primary aggregates, and so may have been bearing this in mind. Some comments on this issue are listed below.

Clients should be more flexible about what's acceptable. They are still working in the past - they are stuck with the belief that recycling means inferior.

An engineer who specifies recycled aggregates needs to be knowledgeable. Engineers should look at the case studies on the WRAP website to see examples of the use of recycled aggregates.

Interviewees were not prompted for views on a role for local authorities and government, but five of them mentioned specifically the role of local authorities in accepting and/ or specifying recycled aggregates. Three of these five interviewees also wanted to see similar actions by Government. Comments indicating a role for local authorities and also government are listed below.

Government and local authorities tenders should specify the use of recycled products.

Government and councils need to accept the use of secondary aggregates in work that they commission.

There is variation between local authorities on their commissioning practices (with respect to whether they specify/ accept recycled aggregates).

Councils commissioning their own jobs will buy recycled aggregates, but a big housebuilding company surveyor will not due to having been told by the council not to use recycled aggregates.

This should be integral to the planning process. the planners should ask applicants to justify why they aren't using recycled materials.

Factors hindering further progress and actions which could be taken

Separate questions were asked on the questionnaire covering

- a) what factors hinder further progress in increasing the reprocessing of C&D waste, and
- b) what actions could be taken to increase the quantities of C&D waste reprocessed

Since many interviewees wanted to raise the same issues for each of these questions, the responses given to the two questions were grouped together for analysis. The issues brought up by interviewees are listed below with the number of interviewees mentioning each one in brackets.

- The single factor mentioned by the most respondents was the need for recycled materials to be specified in construction contracts (7 interviewees)
- Seven interviewees also wanted an increase in either Landfill Tax (5 interviewees) or the Aggregates Levy (6 interviewees) or both
- Seven interviewees also mentioned that education of either or a combination of site managers/ workers on site/ specifiers was needed. (4 - specifiers, 2 - workers on site, 1 - site managers)
- Lower rates for waste uses on industrial land/ recycling (2)
- Planning issues (3)
- Unlicensed crushers (3)
- Problem that recycled aggregates are classified as waste which means large costs due to requirement for waste licences (2)
- Cheapness of primary aggregates (1)
- Colour of secondary aggregates which tend to be darker than primary (1)
- Tax rebates for using recycled materials in construction (1)
- Lack of availability of wood shredders to hire rather than buy (1)
- The construction industry needs to talk to big builders, there is a lack of communication (1)
- Develop aggregates technology - cuboid rather than flakey aggregates function better (1)
- Need blue chip aggregates suppliers to give the production and use of secondary aggregates credibility (1)
- Lack of funding for companies separating out C&D waste and for companies reprocessing separated out C&D waste (1)
- Lack of support from and ignorance of councils (1)
- Getting councils and others to accept recycled aggregates (1)
- Education of children/ culture (2)
- Change from throwaway to reuse (1)

Views on the Environment Agency

Several interviewees had comments on their experiences of being regulated by the Environment Agency.

The Environment Agency has the greatest influence. It needs to be an educational force for the construction industry. The company is regulated by three different EA offices and complains about inconsistencies. Inspectors seem to be quite junior and there is a high turnover so the personal touch is lost. They limit what you can do and work by the book regardless of common sense. A modification to the licence of one site was submitted three years ago and the EA hasn't had a chance to determine it yet due to staff leaving and not leaving notes about previous discussions. They also have a landfill site that can't be used because now PPC has started there is disagreement about the proposed liner that prior to PPC was perfectly adequate. (North Yorkshire).

The Environment Agency can't support new activities and just says no to them if they don't like them. They are very procedural and technical. (East Yorkshire)

The Environment Agency should be given more power to target unscrupulous operators to make it a level playing field.

The Environment Agency has not got a clue. The definition of waste will be a problem. This has not been clarified.

The company wants to landscape one of its sites using recycled soil but it having problems with the EA due to waste definition issues.

These last two comments refer to the current issue of waste definition mentioned by several interviewees. This issue is due to uncertainty about whether recycled aggregates and soils must be classified as waste up until when they are used under EU waste definitions and UK and EU case law. Classification as waste brings with it requirements for waste management licences, waste transfer notes and considerable financial charges. Classification as waste would be a driver against the use of recycled aggregates and recycled soils. WRAP and others have been involved via a spin off from the WRAP Working Group on Aggregates trying to get this issue resolved. Lawyers from the Environment Agency and DEFRA have been involved. Progress has recently been made.

WRAP, in consultation with the EA, Highway Products Association and the Quarry Products Association has recently produced a "Quality Protocol for the Production of Aggregates from Inert Waste". This document identifies the point at which inert waste used to produce aggregates ceases to be a waste and becomes a product. Basically, we have been informed by John Barritt, WRAP's Technical Advisor that what they have worked out is that if the producer says that the material (aggregates or soil) is recovered, the Environment Agency can then say that this has been done satisfactorily and it ceases to be waste. It was reported at the WRAP Aggregates Forum in

May 2004 that the protocol will be placed on the WRAP website sometime during June with a printed version available by the end of June. This new system should hopefully be in place soon thus solving this problem.

Crushers operating under 28 day rule

Several of the respondents mentioned that they were competing for waste with exempt sites and/or with illegal operators or companies operating crushers under the 28 day rule (for which period, crushers can be operated on a site without requiring planning permission). A couple of companies mentioned that some of their competitors did not enforce health and safety requirements sufficiently to save money. Other companies mentioned that some competitors were generally unscrupulous, for example with regard to permitted levels of contaminants in products.

One interviewee commented that -

Some competitors may not comply with product standards (eg asphalt in 6F5 aggregates) and also may not follow Health and Safety rules.

Exempt sites

We discussed this issue of exempt sites with John Barritt of WRAP. He informed us that there will soon be new regulations out for exemptions to Waste Management Licensing which fall under Paragraphs 9 and 19. These are the exemption paragraphs dealing with the unlicensed handling and disposal of C&D waste. There will be tighter control, fees, and yearly registration for companies operating under the exemptions. There will also be a 21 day period that companies will have to wait before starting waste depositing activities under the exemptions. When these changes come in, it will be interesting to see the results on the quantities of C&D waste available for reprocessing.

Implications of the survey

Role for local councils

The most commonly mentioned action which could be taken to increase the reprocessing of C&D waste was the specifying of recycled materials in construction contracts. Many respondents saw a role for local councils in taking a lead with this both in the work that they commission and in projects where they have a say. The attitude to recycled aggregates in construction work, according to interviewees varied vastly from council to council. John Barritt of WRAP, whom we consulted with while preparing this report informed us that this is an issue that WRAP is aware of and was looking to tackle.

There were also some criticisms of planning departments within councils in particular the time taken to grant planning permission which, for at least one respondent resulted in delays to constructing recycling facilities.

An example of how councils themselves can successfully reprocess C&D waste themselves was provided by Barnsley MBC. Barnsley MBC Engineering Services DLO has put into place crushing and screening operations for dealing with waste produced by the council's own highways work. This was done in 1994 due to the imminent introduction of the Landfill Tax. All the waste construction materials from Barnsley's highways work, some from a neighbouring council's highways work and some of the waste from the Barnsley Council's building work together with a quantity of roadworks waste from utilities companies is crushed and screened at the Smithies Lane Depot site. About 30,000 T of C&D waste was input to the crushing/ screening process during 2003. Barnsley MBC Engineering Services DLO is currently negotiating with other council departments to see whether they can take and process inert wastes produced by these other departments.

Role for the Yorkshire and Humber Assembly

The Yorkshire and Humber Assembly has a role as an influencer both on national government and on the local councils in its area.

With respect to national government, the Assembly can

- argue for construction schemes implemented by government to specify the use of recycled aggregates
- provide feedback from this survey for the beneficial effect on C&D reprocessing seen as a result of the Landfill Tax

The main ways in which the Assembly can influence local authorities are to:

- encourage local authorities to specify the use of recycled aggregates in their own contracts
- encourage local authorities to push for the use of recycled aggregates in work carried out by others but where the local authority has a say
- encourage local authorities to assist those applying for planning permission for facilities recycling C&D waste and to grant these facilities, where they are appropriate as quickly as is possible
- encourage more local councils to consider whether they could emulate the C&D waste reprocessing successfully implemented by Barnsley MBC Engineering Services DLO

Role for the Environment Agency

The issue of waste definition under EU law under which it has up until now been unclear whether or not secondary aggregates and soils are classified as waste up until the point when they are put to beneficial use appears to now be resolved. As was stated earlier in the report, the EA has been one of the parties involved in producing the “Quality Protocol for the Production of Aggregates from Inert Waste” which will soon be printed. Under this protocol, the EA will, now be able to designate secondary aggregates and soils as no longer waste at the point at which they are produced thus solving this problem.

Several interviewees voiced complaints about the Environment Agency being inconsistent between offices, and being procedural, working by the book and not being supportive of waste recycling activities. There may be a role for an education programme to deal with these issues.

Other actions which have been identified

Several respondents considered that education of those in the C&D industry including site workers as well as site manager and contract specifiers was needed. Communication between those in the construction industry was also highlighted as needing improvement.

There was also considerable support for either the Landfill Tax or the Aggregates Levy to be increased to boost recycling.

Appendix 1

Dear

Survey of companies reprocessing or recycling waste from construction and demolition activities in the Yorkshire and Humber region

Thank you for agreeing to meet with me at [time] on [date].

My company, MEL Research, is visiting companies involved in the reprocessing or recycling of waste from construction and demolition activities as part of a project on behalf of the Yorkshire and Humber Assembly and the Environment Agency.

The Assembly and the Environment Agency would like to see increases in the quantities of such waste that are reprocessed. They are therefore seeking the views of companies involved in recycling or reprocessing construction and demolition waste on what the obstacles are to increasing throughputs and what can be done to help. The results from the study will be used to assist with policy development regionally.

If you wish to contact the Yorkshire and Humber Assembly, Sian Ferguson (Tel 01924 331555) is the project officer.

I look forward to meeting with you and hearing your views.

Yours sincerely,

[Interviewer]
M.E.L Research
Tel 0121 604 4664
Email c.nikitas@m-e-l.co.uk

Appendix 2

Survey of companies reprocessing C&D waste in the Yorkshire and Humber region

Interviewer..... Time and date of interview.....

Name of company.....

SECTION A - Waste quantities and reprocessing methods

Background to waste handling activities of company

<p>Q1. How do you reprocess C&D waste?</p>	<p>1</p> <p>2</p> <p>3</p> <p>4</p>
<p><u>Reprocessing method 1</u></p> <p>Q2-1. What tonnage of waste was input to this method during 2003?</p> <p>Q3-1. What were the output materials? Ask for the tonnage of each output material and what happened to each output material. Query if the input and total output tonnages are not the same.</p> <p>Q4-1. Was this processing method running at full capacity during 2003?</p> <p>If NO,</p> <p>Q5-1a. What is the full capacity?</p> <p>Q5-1b. Why was it not running at full capacity during 2003?</p>	

Reprocessing method 2

Q2-2. What tonnage of waste was input to this method during 2003?

Q3-2. What were the output materials? Ask for the tonnage of each output material and what happened to each output material. Query if the input and total output tonnages are not the same.

Q4-2. Was this processing method running at full capacity during 2003?

If NO,

Q5-2a. What is the full capacity?

Q5-2b. Why was it not running at full capacity during 2003?

Reprocessing method 3

Q2-3. What tonnage of waste was input to this method during 2003?

Q3-3. What were the output materials? Ask for the tonnage of each output material and what happened to each output material. Query if the input and total output tonnages are not the same.

Q4-3. Was this processing method running at full capacity during 2003?

If NO,

Q5-3a. What is the full capacity?

Q5-3b. Why was it not running at full capacity during 2003?

<p><u>Reprocessing method 4</u></p> <p>Q2-4. What tonnage of waste was input to this method during 2003?</p> <p>Q3-4. What were the output materials? Ask for the tonnage of each output material and what happened to each output material. Query if the input and total output tonnages are not the same.</p> <p>Q4-4. Was this processing method running at full capacity during 2003?</p> <p>If NO,</p> <p>Q5-4a. What is the full capacity?</p> <p>Q5-4b. Why was it not running at full capacity during 2003?</p>	
<p>Have you got any definite plans to increase the capacity of your site(s) over the next three years or so? If yes, probe for scale of increase and what they plan to do.</p>	

Section B - Trends in tonnages processed and the impact of taxes, levies and standards

<p>Q6. How long has your company been reprocessing waste from C&D activities?</p>	
<p>Q7. What changes have there been in the tonnages you reprocess over the last 10 years/ time you have been operating ?</p>	

<p>If the tonnage has gone up or down –</p> <p>Q8. Why do you consider that the tonnage reprocessed has increased/ decreased?</p>	
<p>If the site was operating in 1996</p> <p>Q9. Did the introduction of the Landfill Tax in 1996 have any effect on your business and the tonnages you reprocess?</p>	
<p>If the site was operating in 2002</p> <p>Q10. Did the introduction of the Aggregates Levy in 2002 have any effect on your business and the tonnages you reprocess?</p>	
<p>Q11. What impacts are the new European standards for aggregates having on your business?</p> <p>Q12. Would you like to see any changes to the standards for recycled aggregates? If YES What changes?</p>	

Section C – Factors influencing levels of C&D waste reprocessing

<p>Q13. In your view, are there any aspects of the planning permission process which hinder C&D waste reprocessing?</p>	
<p>Q14. In your view, are there any changes that could be made to the planning permission process to boost C&D waste reprocessing?</p>	
<p>Q15. What are your experiences of the planning permission process for C&D waste reprocessing facilities?</p>	
<p>Q16. Over the last three years have you had any difficulties in obtaining enough C&D waste to reprocess? (Explore answers given)</p>	<p>YES/NO</p>
<p>Q17. Would the greater use of segregated skips where wastes are collected lead to more C&D waste materials for reprocessing? If YES,</p>	<p>YES/ NO</p>

<p>Why?</p> <p>Q18. In your view, what factors hinder the greater use of segregated skips on C&D sites?</p> <p>Q19. In your view, what could be done to increase the use of segregated skips?</p> <p>Q20. Is the use of sub-contractors a barrier to waste segregation on C&D sites?</p> <p>If YES</p> <p>Q21. Have you any views on how this could this be overcome?</p>	<p>YES/NO</p>
<p>Q22. You are listed on the CIRIA/ Aggregain website as a reprocessor/ recycler, seller of aggregates. Is this beneficial to your business? If YES – How?</p> <p>Q23. Are you aware of the CIRIA/ Aggregain (the one they are not listed on) website?</p> <p>Q24. Do you use any other listings to help obtain business? If YES, Which ones?</p>	<p>CIRIA website/ Aggregain website</p> <p>Beneficial/ Not beneficial</p> <p>YES/NO</p> <p>YES/ NO</p>

<p>Q29. What are your views on demolition project contracts specifying waste segregation and/or recycling targets?</p>	
<p>Q30. What are your views on clients procuring construction projects specifying the use of recycled aggregates/ other reprocessed materials?</p>	
<p>Q31. Are there any technological barriers to the reprocessing of C&D waste or the use of the products produced? If YES What are these?</p>	

Section D - Factors hindering further progress

<p>Q32. In your opinion, and considering your own business, what are the five main factors hindering increased reprocessing of C&D waste?</p> <p>Ask the respondent to rank the factors.</p>	
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Section E - Actions which could support further progress

<p>Q33. In your opinion, and considering your own business, what are the five main changes that could be made which would help increase the reprocessing of C&D waste?</p> <p>Ask the respondent to rank the factors.</p>	
<p>Q34. Do you have any other comments on what we have spoken about?</p>	