EC WASTE LAW—A COMPLETE MESS?

Stephen Tromans*

1. Introduction

The problem of waste can be viewed in various ways. At one level, it simply constitutes a significant source of pollution. As Alexandre Kiss has put it:

> In the widest sense, a major proportion of pollution consists of introduction into the environment of substances of which one wishes to rid oneself.[1]

This represents the original justification for regulating waste disposal, and continues to constitute a compelling reason to do so. It is still largely the case that the rules of international law are, with a few exceptions, aimed at regulating the disposal of waste rather than addressing and preventing its generation.[2] However, regulating disposal can only go so far in 'limiting the avalanche of waste which is now threatening to engulf industrialised countries'.[3] Consequently, attention has shifted, at least at national and EC levels, towards policies and legislation designed to minimise the generation of waste, and to secure its beneficial reutilisation. Waste disposal, seen in this sense, can be viewed as the ultimate reintroduction or reintegration of substances which have originally been extracted from the environment back into the environment from whence they came.[4]

The European Community has for many years taken a broader view of waste policy than simply ensuring safe disposal. As Ludwig Kramer points out, the three principles of waste management (prevention of generating waste, recycling, and safe disposal of waste which cannot be recycled) were developed early on and have been regularly repeated since 1977.[5] These are ambitious goals, affecting as they do many different sectors of industry and the ultimate consumer. The management of waste has become a major business, both for the traditional waste disposal companies and for more sectoral interests such as metals recyclers and those who generate energy from

* Barrister, Chambers of Lionel Read QC, 1 Serjeants' Inn, Research Professor, Nottingham Law School.

[1] *La reparation des dommages catastrophiques*, p 301; cited in K. Kummer, *International Management of Hazardous Wastes* (Oxford, 1995) p 14.

[2] P. Sands, *Principles of International Environmental Law, Volume 1* (Manchester UP, 1995) p 517. OECD figures suggest that the 40% increase in member country GDP since 1980 has been accompanied by a 40% increase in municipal waste: 'the delinking of affluence from effluence remains elusive.'

[3] Ibid at 518.

[4] C. Campbell-Mohn, B. Breen and J.W. Futrell, *Sustainable Environmental Law* (Environmental Law Institute, St Paul, Minn, 1993) p 84.

[5] *Focus on European Environmental Law* (London, 1992) p 32.

waste.[6] Such enterprises need clear guidance on the requirements of Community waste law, not only in order to ensure they operate lawfully, but also in order to be able to plan the very significant investment within the long lead-times required to bring new waste management facilities into operation. It is therefore important to consider whether the relevant EC legislation is fit for its purpose.

Like Kramer, Duncan Laurence acknowledges that Community waste policy embraced from the outset the dual objectives of resource conservation and disposal policy.[7] In hindsight, he suggests, many of the original directives on waste management could be readily criticised for their vagueness.[8] Problems included the lack of clear definitions on key terms, and the imposition of wide and open-ended objectives which are likely to be subject to varied interpretation nationally. The trend has been towards Community initiatives that are drafted with greater precision, and which leave commensurately less discretion to member states. The products of this tendency include the Directives on incineration and on landfill, as well as on packaging waste. This tendency seems likely to continue, focusing on particular waste materials, such as end-of-life vehicles, used tyres, healthcare and electronic wastes—and reflecting perhaps the increasing complexities of regulation in this area.

2. Why So Complex?

At its root, waste policy should be simple. Waste should be minimised. Waste that cannot be avoided should be beneficially used, either by reuse, or by recycling, or by conversion into energy. Residues that cannot be treated in this way should be disposed of so as to create as little environmental harm as possible, applying the precautionary principle appropriately. However, these principles, which can be stated so simply, have given rise to a body of EC and national law that is notoriously difficult, even for specialist lawyers and which—even for such lawyers—makes little sense in terms of some of its points of detail.[9]

Why is this? It is possible to identify at least five reasons why the translation of waste policy into workable law has proved so difficult a task.

(1) Firstly, the regulation of waste can also involve the regulation of traded materials, changing hands for large sums of money on an international basis. There is accordingly a tension with principles favouring the free movement of goods.
(2) Secondly, waste is an emotive subject. The public perceives activities which involve the management of waste in a qualitatively different way to those involving other types of materials. To categorise a material as waste has consequences for the public acceptability of facilities handling that material.
(3) Thirdly, whereas it is relatively straightforward to keep a check on the production and transfer of goods, obtaining reliable statistics on how much waste

[6] Some 200 million tonnes of waste cross OECD borders annually, including waste used as raw materials to the value of some $20billionUS (OECD figures).
[7] *Waste Regulation Law* (London, 1999) p 5.
[8] Ibid at 7.
[9] The Commission Report of 1995 on waste, COM(95)522, 8.11.95 refers to the difficulty of the lack of common nomenclature, imprecise legal acts and ambiguous concepts.

arises, is recovered and is disposed of is difficult. The difficulty is compounded by inconsistent approaches to the categorisation and listing of types of waste.

(4) Fourthly, a number of member states have promoted strong—even aggressive—policies on recycling. Such policies have the potential to cause difficulties in terms of movement of goods or the markets for recycled or recyclable materials. To some extent therefore, the Community's hand has been forced in respect of the development of legislation, leading to difficult legislation born of political compromise.

(5) Finally, waste regulation is inevitably a wider subject than simply the European Community. EC law has sought to take account of and build on the decisions of the OECD on transboundary waste movements, and the Basel Convention and other conventions. The assimilation of these instruments as been a strongly complicating factor.

I propose to consider some of these complicating factors in a little more detail, then to discuss some examples of the difficulties which have arisen from them in the case law of the Community and of the UK. But first it is helpful to go back to basics as to why waste is regulated, and to what end.

3. Basics of Waste Regulation

As the legal framework becomes more complex, so there is an ever greater need to step back and to consider what are the fundamentals involved in regulating waste, as opposed to substances which may have equally harmful consequences in their use. For example, why should there be different rules for pesticide that is sprayed onto a field than for the same pesticide when disposed of as waste in a landfill site? Or why should different principles apply to the transport of chemical feedstock and the same chemical as waste, given that the consequences of either spilling into a roadside ditch may be equally serious?

The answer can be given at a number of levels. A waste may have equivalent hazardous properties to a raw material in terms of toxicity, flammability, and so on. But in the case of the raw material the economic incentive is to use it efficiently, and to treat it accordingly. The objective is to incorporate as much of it as possible into the product, not into the environment. Once the material becomes waste, however, the economic imperative is to dispose of it as cheaply as possible, and accordingly the risk of the hazardous properties causing harm is increased—particularly if the cheapest method involves its immediate reassimilation into the environment, rather than reuse or recovery. In other words, it is the economic context rather then the hazardous properties which gives rise to the unique risk attaching to waste in this comparison.

Comparing waste with a product raises similar issues. A product, for example a pesticide, may present risks in its use, and accordingly the conditions of its use must be controlled. However, it is possible to balance the risks of the intended use against the benefits under administrative procedures, and to form a decision as to whether the product should be used or not. With waste the disposal method will, in the absence of regulation, be driven largely by economic considerations. Whereas a product will have an intended use, there may be many options for managing waste, some

inherently more environmentally beneficial or less harmful than others. So again, the economic context is important.

However, there is yet another comparison to be drawn, between what might be termed 'virgin' feedstock or fuel and waste which is used as a feedstock or fuel. Obvious examples are waste solvent burnt as fuel, compared with oil or other non waste-derived fuels; or scrap metal used for smelting rather than the equivalent non waste material. The economic distinction cannot be so readily drawn in this case, since there is no commercial reason why the waste-derived material should be used less efficiently or in a less responsible manner than the virgin material. The reason for treating the materials differently in law, if any, would appear to relate either to differences in their hazardous properties, or in the processes to which they are subjected. It may be that the waste derived material is more hazardous because it is contaminated with other substances, or because its composition is less predictable. Or the processes required to use the waste-derived material may give rise to possible environmental harm, which would not be the case with the processes used to produce the virgin material.

The presence of some additional 'environmental threat' attaching to waste derived materials is a theme which runs through both the UK and the EC case law and guidance, but which is not clearly articulated. Yet this cannot explain completely why waste should be the subject of special regulation, when there is no attempt to regulate all hazardous substances. There is, however, a broader justification for treating materials which have waste origins differently to other materials. This is simply to maintain the same level of control throughout the history of the material, and to ensure that its ultimate destination is known and accords with the relevant objectives of EC waste policy. The objective of minimisation means that it is undesirable that waste should arise in the first place, but where it does arise then it should be monitored so that it can be seen whether the targets on recycling and recovery set by EC law (and by national law in some cases) are being met. Another, perhaps more cynical, justification is that without such control it is all too easy for waste disposal to take place under the guise of recycling. These issues underlie the fundamental legal question of the definition of waste—one which has vexed national courts and the ECJ and which seems likely to continue to do so for the foreseeable future.

5. Waste and Trade

The formation of the original Community Strategy for Waste Management in 1989 came at a time when the focus within the Community was on the creation of the single internal market.[10] As Laurence points out, the original assumption was that the free trade principles of the single market would apply to waste, creating a 'Euro-waste free market'—a concept regarded by Laurence as being 'of highly dubious

[10] The detailed consideration of the relationship between environmental protection policies and free movement of goods is beyond the scope of this paper, but for detailed analysis see D. Geradin, *Trade and the Environment: A Comparative Study of EC and US Law* (Cambridge, 1997), and for a review of recent case law see N. Notaro, *The New Generation Case Law on Trade and the Environment* (2000) 25 EL Rev 467.

practical and political validity'.[11] The risk was that in a Community without internal frontiers 'the flow of waste towards lower-cost disposal plants may become a flood'.[12] Eventually, the practical realities prevailed, and the September 1989 Strategy[13] recognised in formulating the proximity principle that the need to protect the environment may involve restricting waste movements. This tension has continued to generate difficulties, in particular in relation to material for recovery, where the arguments for free movement are—as we shall see later—much stronger than for disposal, and where recovery activities have for long been an important part of the international economic system.[14]

6. Public Perception and Politics

It is a reality that waste carries with it a stigma, regardless of the hazards which it may actually present. People and businesses do not wish to have waste facilities near them if they can help it. This is no doubt due in part to the unpleasant effects on amenity which certain types of waste treatment and disposal can produce. It is also due in some measure to concern as to the possible health effects of exposure to emissions in whatever form from such facilities. But it is also undoubtedly due to the resentment deriving from being required to bear the consequences of the disposal of materials which others have previously benefited from, and now wish to be rid of. Two issues arise for comment here. One is the degree of risk which is tolerable, a matter unsatisfactorily addressed by EC legislation, and which has given rise to case law. The second is the potentially counter-productive consequences of categorising as waste a material which is subject to recovery operations.[15] In relation to this second issue, it has been suggested that there are two approaches.[16] The first, used in the US, is to make explicit exemptions from the definition of waste. The second approach is to define waste extensively, but to differentiate between recoverable materials in the stringency of regulation. The problem with the latter approach is one of public perception:[17]

Experience teaches that once a material is branded with the label 'waste', citizens mobilise to prevent its presence in their community. The public is rarely persuaded of nice distinctions between recyclable waste and conventional waste.

[11] Laurence, op cit, para 1.30.

[12] *Manual of Environmental Policy*, op cit, p 5.2–1.

[13] SEC(89)934.

[14] See for example the recitals to OECD Decision C(92)39 noting that '. . . recovery of valuable raw materials from wastes has been an integral part of the international economic system and that well established international markets exist for the collection and processing of such wastes'.

[15] This issue was raised by Minister Virginia Bottomley before the Commons Standing Committee on EC Documents in July 1989, when amendments to the Framework Directive were being considered. The Minister's complaint was first of an arbitrary list of reasons why materials become waste, and secondly that the lack of distinction between recyclable materials and waste might inhibit rather than stimulate recycling: see *Manual of Environmental Policy*, op cit at 5.3–4.

[16] See John Thomas Smith II, *The Challenges of Environmentally Sound and Efficient Regulation of Waste* [1993] JEL 91, 96.

[17] Ibid.

7. Statistics and Lists

Statistical information is seldom the most enthralling topic for lawyers, but as EC law moves towards the setting of targets for recovery, recycling and diversion from landfill, so reliable figures become ever more important. It has been said that:

> An essential prerequisite to any system which attempts to establish national waste recovery targets is a common statistical base which is readily comparable between countries.[18]

The European Waste Catalogue[19] represents an attempt to lay the basis for a system of Community-wide waste statistics and thereby improve the efficiency of waste management, but such a categorisation does not of itself guarantee consistency. This can only come about through the scrupulous application of an agreed methodology for collation and reporting.[20] To make a full and complete inventory of the contents of the Augean stables is not the same thing as cleaning them out, useful preparatory step though it may be. The Waste Catalogue does not itself have any definitive status in determining whether a material is waste; it simply seeks to classify it once the decision has been reached that it is waste.[21] Similarly, the later efforts at standardisation of statistical data can only provide a standard framework; they cannot ensure that it will be operated so as to deliver reliable data. Moreover, the more complex and comprehensive the framework, the more likely it is to run into objections that it presents a disproportionate burden.[22]

By contrast, attempts to produce lists of wastes ranked in terms of their hazardous or 'difficult' properties do have a definite legal status, in that such wastes are subject to specific rules or legal regimes. This is the area where the interrelationship between EC and other international measures is perhaps most marked: a necessary acknowledgement that modern waste movements are on a global rather than regional or continental scale. At EC level, the issues are the definition of hazardous wastes under Directive 91/689/EEC, and the categorisation of wastes for the purposes of the Transfrontier Shipment Regulation 259/93/EEC. In both cases the production of lists, and their application, have proved tortuous and complex processes.

In the case of the hazardous waste list under Directive 91/689/EEC, the difficulties encountered in arriving at the 236 entries in Decision 94/904/EEC have been summarised by the IEEP in its *Manual of Environmental Policy*.[23] These included the strong divergence of views between France and Germany who favoured a single list of wastes, and Britain and Italy who wanted a list of categories akin to those in Annex I of the Directive. In particular, there was dispute as to whether the proposed list complied with Article 1(4), which states that listed wastes must have one or more of the hazardous properties set out in Annex III. This led to the unsatisfactory compromise of the 'allowance' accorded to member states by the Preamble to Decision

[18] Laurence, op cit, para 1.30.

[19] Decision 94/3/EC OJ l5/15, 7.1.94. The Catalogue derives from the requirement of Article 1(a) of the Waste Framework Directive for a list of wastes belonging to the categories of Annex I to be drawn up by the Commission.

[20] See Council Regulation OJ C87/22, 29.3.99 on collation of statistics.

[21] See introductory note 3 to Decision 94/3/EC.

[22] This was one objection to the Joint Framework COM(99)31 for production and dissemination of statistical data on waste management.

[23] Op cit at 5.4–5.

94/404 whereby a waste included on the list may be considered as non-hazardous if it does not display any of the Annex III properties. Legal clarity was accordingly compromised by political differences.[24]

Further difficulties continue to arise in relation to the classification of wastes for the purpose of transfrontier shipment. The combination of different waste types, the distinction drawn between disposal and recovery, and different forms of movement into, out of and within the Community, result in a legislative scheme of fearsome complexity. The EC legislation here is driven by OECD schemes and by the Basel Convention, and as will be seen this has given rise to its own particular problems. Again the IEEP *Manual of Environmental Policy* charts the convoluted manoeuvrings in relation to the export of waste to non-OECD countries,[25] leading to Regulations 1420/99 and 1547/99: a process which took over four years and brought the European Parliament and Commission into direct conflict. The themes of effects on trade, international law, and the emotive nature of waste disposal again can be seen to underlie this area of policy.

8. National Legislative Drivers

Many examples could be given of domestic legislation which has provided the framework or impetus for EC waste measures. Rightly or wrongly, in 1975 Environment Minister Denis Howell was able to tell the House of Commons Scrutiny Committee that the original waste framework directive 75/442/EEC had been based on the waste provisions of the Control of Pollution Act 1974.[26] The Priority Waste Streams Programme commenced in 1990 was to some extent inspired by the Dutch experience in seeking consensus between industry, consumer interests and government.

However, there are also examples where national measures have required urgent action on the part of the Community to avoid negative consequences. The Packaging Waste Directive is an obvious example. The House of Lords Select Committee on the European Communities in considering the issue had no doubt about the need for quick action to avoid the proliferation of national measures, which were already in place in Germany and France, and which were already creating market distortions:[27]

> The situation in the Community with regard to packaging and packaging waste is unstable. Markets are distorted. Political interests, stirred by environmental concerns, are aroused. Calls for action abound. But public understanding of the scientific basis for action is rudimentary; and in many member states the infrastructures for implementing solutions are underdeveloped.

The point is that such conditions, whilst they provide a strong impetus for Community legislative action, are not necessarily conducive to the most reflective and effective outcomes. The risk however is that in a number of areas, for some years to come,

[24] Another consequence of the difficulties in agreeing the list was that the original Directive 78/319/EEC on toxic and dangerous waste had to be treated as still in force, then retrospectively resurrected, even though it had been repealed by Directive 91/689/EEC: see Directive 94/31/EEC.

[25] Op cit at 5.5–11 and 12.

[26] IEEP, *Manual of Environmental Policy*, p 5.3–4.

[27] Session 1992–93, 26th Report, HL Paper 118, *Packaging and Packaging Waste*, para 6.

Community waste law will still be running to catch up with the more advanced measures of some member states.[28]

9. The International Dimension

Waste is one area where a full understanding of EC law is difficult without an appreciation of the relevant wider international context. This is most obviously so in relation to transfrontier movement,[29] but wider influences can also be seen on issues such as the definition of waste. In particular, the influence of the work of the OECD and of its Waste Management Policy Group[30] is marked. It was OECD Recommendation C(76)155(Final) which formulated the waste hierarchy of reduction, recovery and disposal before the OECD's focus of attention shifted to transfrontier movement in the 1980s. Of particular relevance here are the OECD Council Decision on Transfrontier Movements of Hazardous Wastes C(88)90(Final), and the Decision Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations C(92)39/Final. Decision C(92)39 formulated the Green, Amber and Red Lists of wastes which were adopted by the EC for the purposes of transfrontier movements, while Decision C(88)90 provided the International Waste Classification System (IWIC), containing the 'Q', 'D' and 'R' lists of reasons why materials are intended for disposal, disposal and recovery operations, an approach followed by the revised Waste Framework Directive. The OECD's work in progress on transboundary waste traffic also provided the basis for the drafters of the Basel Convention.[31]

The high level of similarity in the parallel approaches of the EC and OECD is explicable by the close involvement of the EC Commission and EC member states in the OECD's work.[32] Like the EC system, the OECD approach distinguishes between disposal and recovery activities, and the OECD approach can be seen to have influenced the EC law in this area. The symbiosis between the OECD, EC and Basel systems can be seen to have been mutually influential, and the relevant interrelationships will no doubt continue to influence future developments. The difficulty can come where elements of one regime are incorporated into another without adequate consideration of the knock-on effects.

10. Defining Waste

As is well known, the original Framework Directive 75/442/EEC defined waste at Article 1(a) simply as any substance or article which the holder disposes of, or is

[28] Examples include the recently adopted directive on end of life vehicles and the proposed directive on waste electrical and electronic equipment

[29] See Kummer, op cit, Chapter 4. Kummer points out in particular that the EC system is considerably more sophisticated and complex than the Basel Convention, largely because of its distinction between recovery and recycling: see pp 136–7 and 154–5. For a cogent critique of the Basel system, and its possible failure to come to terms adequately with the nature of the materials it seeks to regulate, see A. Kellow, *International Toxic Risk Management* (Cambridge, 1999) chapter 5.

[30] Now renamed the Working Group on Waste Management Policy.

[31] See Kummer, op cit at 160.

[32] Ibid at 163.

required to dispose of pursuant to the provisions of national law.[33] It was clear from the definition of 'disposal' at Article 1(b) that this covered not only the normal disposal activities of collection, transport, treatment and tipping but also recovery related 'transformation operations' necessary for reuse, recovery or recycling. The amendments made by Directive 91/156/EEC acknowledged in the recitals that a common terminology and clearer definition was needed to improve the efficiency of waste management in the Community. The test is now any substance or object in the categories set out in Annex I to the Directive[34] which the holder discards or intends to discard or is required to discard.

The term 'discard' is therefore of central importance, as indeed is the case under US law, where the term has given rise to protracted debate and litigation.[35] In terms of the EC definition, a key problem has been the equivocal nature of the relationship between the meaning of 'discard' and the descriptions of the various types of 'disposal' and 'recovery' operations set out in Annexes IIA and IIB of the Directive.[36] Another issue is the lack of any clear common meaning as between the different language versions of the term 'discard',[37] and the extent to which the term is to be given an extended meaning, going beyond the concept of getting rid of unwanted materials, to cover the situation where materials are sold or otherwise transferred for beneficial reuse. One approach to this question has been that of Dr Jurgen Fluck, who suggests that 'discard' should be defined not just as 'getting rid of' something, but as relating to a decision to change the purpose of a substance or object, or to release it from its original purpose without immediately reallocating it to any new purpose, or rededicating it to recovery or disposal.[38]

These questions have been the subject of consideration by the ECJ in *Euro Tombesi and Others*[39] and *Inter-Environment Wallonie v Regione Wallone*,[40] and by the High Court in *Mayer Parry Recycling v Environment Agency*.[41] Part of the difficulty in making sense of the ECJ cases lies in the fact that the detailed analysis to be found in the opinions of the Advocate General is not replicated in the reasoning of the European Court.

[33] This original definition appears to have provided the model for the definition at Article 2.1 of the 1989 Basel Convention on the control of transboundary movements of hazardous waste and their disposal: 'substances or articles which are disposed of or are intended to be disposed of or are required to be disposed of by the provisions of national law'.

[34] The Annex contains descriptive categories Q1–Q15, plus a catch-all category Q16 of 'any materials, substances or products which are not contained in the above categories'. This is one example of the curious drafting which perhaps gives EC waste law a bad name. Another notorious example is the exclusion at Article 2 of 'waste waters with the exception of waste in liquid form': at one level a fairly obvious attempt to delineate the boundary between regulation of waste and discharges to the aquatic environment, but with numerous difficulties of interpretation and practical implementation stemming from lack of clarity in the EC drafting. See Laurence, op cit, paras 2.62–2.72.

[35] The Resource Conservation and Recovery Act 1976 (RCRA) refers to 'discarded material': see John Thomas Smith II, *The Challenges of Environmentally Sound and Efficient Regulation of Waste* [1993] JEL 91, 93–4.

[36] I. Cheyne and M. Purdue, *Fitting Definition to Purpose: the Search for a Satisfactory Definition of Waste* [1995] JEL 149, 153–4.

[37] On these difficulties, see Laurence, op cit, paras 2.100–2.102; see also Laurence, 'Swallows and Fishes: The Definition of Waste in the Waste Management Act 1996', 7 *Irish Planning and Environmental Law Journal* 2 at 43.

[38] *The Term Waste in EU Law* [1994] European Environmental Law Review 79, 81; cited by Cheyne and Purdue, supra, p 155.

[39] [1997] ECR I-3561; [1998] JEL 116.

[40] [1997] ECR I-7411.

[41] [1999] Env LR 489. See also, most recently, *Castle Cement v Environment Agency* (22 March 2001, Stanley Burnton J).

This can be seen in the *Tombesi* case, where at issue was an Italian law which sought to provide a simplified regime for 'residues' which were capable of reuse, and to exclude entirely from waste control materials quoted with specific commodity characteristics in exchanges or official lists. The Danish government, by contrast, argued that all residues were waste unless arising as the intended outcome of a production process. Advocate General Jacobs, steering between these extremes, sought to link the term 'discard' to the act of consignment to a recovery operation, and in deciding what was a recovery operation, to 'work by example' from the listed operations in Annex IIB and analogous operations.[42] This approach, the so-called 'Tombesi by-pass',[43] gets around the need to consider in detail when waste is discarded, but really only shifts the problem to what is meant by 'recovery'.[44] Part of the difficulty is that a test based on the material being subjected to treatment is elusive. A number of the forms of recovery listed in Annex IIB do not necessarily involve any treatment before use,[45] and it would be paradoxical if old tyres burnt without treatment were not waste, whereas wood which had been ground up before use as fuel was waste.[46] Moreover, it is clear from the heading to Annex IIB that it is not intended to list recovery operations exhaustively: it is merely an illustrative list based on existing experience.

By contrast with the detailed reasoning of the Advocate General, the ECJ simply held, on the basis of settled case law—which had not, it said, been affected by the 1991 rewrite of the Directive—that the system of supervision and control was intended to cover all objects and substances discarded by their owners, even if they have a commercial value and are collected on a commercial basis for recycling, reclamation or reuse.

In the *Wallone* case, the issue was whether a substance or article is excluded from the definition of waste because it directly or indirectly forms an integral part of an industrial process. Again, Advocate General Jacobs stressed the broad nature of 'discard' as used in the Directive. For the purpose of distinguishing between waste recovery and the processing of non-waste materials, the Advocate General suggested it is relevant to consider 'whether a substance is destined to be put directly to continued use in its existing form'. In many cases some type of treatment will be required, so the answer to this question will be negative: the material will not be put directly to use in its existing form. But in any event, the Advocate General placed a gloss on that question in the case of 'residues, by-products, secondary raw materials or other materials resulting from industrial processes', namely that the condition of continued use in existing form would be met ' . . . where the material, or the process to which it is destined to be put, meets normal health and environmental requirements applicable to non-waste products or processes'.[47]

It is not immediately obvious where this test derives from. It can, however, be seen to be very similar to the approach adopted by the OECD Waste Management Policy

[42] Paras 50–6. It should also be noted that the Advocate General saw the appropriate division of responsibility as being for member states to develop detailed criteria, and for member state courts to apply the Directive to the large numbers of borderline cases that could arise in practice.

[43] G. Van Calster, 'The EC Definition of Waste: The Euro Tombesi Bypass and the Basel Relief Routes' [1997] *European Business Law Review* 137.

[44] As indeed the Advocate General acknowledged: see para 55 of the Opinion.

[45] For example, R9 (use principally as a fuel) and R10 (spreading on land).

[46] A. van Rossem [1998] JEL 116 at 143.

[47] Para 79.

Group in its Final Guidance Document for Distinguishing Waste from Non-Waste ENV/EPOC/WMP(98)1/REV1, which suggests that a waste ceases to be a waste when a recovery or other comparable process 'eliminates or sufficiently diminishes the threat posed to the environment by the original material (waste) and yields a material of sufficient beneficial use'.[48] In general, it goes on to suggest, this will have taken place when the material requires no further recovery, and can and will be used in the same way as a material which has not been defined as waste, and meets all relevant health and environmental requirements.[49] The OECD Guidance presents some 17 criteria, grouped into (1) general criteria, (2) characteristics of the material, (3) environmental impact, and (4) use and destination.[50] These criteria were referred to by the Advocate General, in support of the proposition that it was important to focus on the recovery process, and that matters such as standards and specifications were relevant.

This gloss put forward by the Advocate General in itself lacks clarity. The sense behind it appears to be that the 'residue' must meet normal health and environmental requirements for a non-waste product, or that the process in which it is used should meet such requirements for a non-waste process. But how is this to be judged in practice? It is not clear what are the 'requirements' to which the Advocate General refers. Compliance with a contractual specification (for example, draining a car battery) would not necessarily mean that it ceases to be waste. In any event the ECJ did not expressly endorse this aspect of the Opinion. It did however accept the suggestion that 'discard' covers both disposal and recovery, and that the descriptions of disposal and recovery operations under Annexes IIA and IIB demonstrate that the concept of waste does not as a matter of principle exclude any type of residue.[51] In particular, they demonstrate that the definition does not in principle exclude substances forming part of industrial processes. But the Court emphasised that a legitimate distinction still fell to be drawn between waste recovery and 'the normal industrial treatment of products which are not waste'.[52]

In *Mayer Parry* Carnwath J was able to derive from these cases the principle that the term 'discard' encompasses not only the disposal of waste but also its consignment to a recovery operation. The issue was then how this test applied to Mayer Parry's operations in reclaiming metals, in the light of the inclusion in Annex IIB of the category 'recycling/reclamation of metals and metal compounds'. It was agreed by the Agency that where scrap metal could simply be used in a furnace without further processing it would not be waste. It was also agreed that processing material for economic reasons, such as grading it, would not make it waste. The dispute lay in the fact that Mayer Parry contended that the scrap metal had not been discarded, when seen in the context of the commercial recycling industry of which it was the stock in trade. This conclusion could not however stand with the decisions of the European Court referred to above. The materials in question had been discarded, or

[48] Para 43.

[49] The Advocate General's Opinion was delivered on 24 April 1997, preceding the issue of the OECD Guidance on 2 July 1998. However, the Guidance in an earlier draft form (a 1996 Discussion Document) was before the Advocate General, having been annexed to the German government's written observations, and was referred to in the Opinion (paras 66 and 71).

[50] Para 22(a)–(q).

[51] Judgment, paras 27–8.

[52] Paras 26–33.

'got rid of' by their original users, as not wanted or needed for their original purpose. In so far as they required recovery operations before reuse, they would remain waste until those operations were complete.[53]

The difficulty acknowledged by Carnwath J lies in drawing a clear line between what are recovery operations and what are industrial operations using raw material. In the UK, Circular 11/94 attempted to draw that distinction by the concepts of 'specialised recovery operations' and 'the normal commercial cycle', on which basis Mayer Parry's operations would clearly be regarded as specialised recovery. The Circular goes on, in terms to some extent echoed by the approach of the Advocate General in *Wallone*, to suggest that a material ceases to be waste:[54]

> . . . when its processing produces a material of sufficient beneficial use to eliminate or diminish sufficiently the threat posed by the original production of waste. This will generally take place when the recovered raw material can be used as raw material in the same way as raw materials of non-waste origin by a person other than a specialised recovery establishment or undertaking.

Carnwath J saw this approach as being in line with that of the European Court, but preferred to concentrate on the question of whether the material was being subjected to a recovery operation within the category of metal recycling and recovery. It was not relevant to that question to consider whether the operations did not in themselves have adverse environmental consequences, following the judgment in *Wallone*.[55]

The sequel to *Mayer Parry* in England and Wales has been the production of a guidance note by the Environment Agency and the industry bodies, the British Metals Federation and the British Secondary Metals Association.[56] This attempts to answer practical questions, such as whether metal cuttings that are covered with a light film of oil are to be regarded as waste. As such, it represents a healthy application of the principle put forward in the ECJ cases that borderline cases should be left for member states to work out in practice.

However, the cases referred to above always seemed unlikely to be the last word on the issue, and indeed the ECJ returned to the matter in Cases C-418/97 and C-419/97, *ARCO Chemie Nederland, and EPON*,[57] where judgment was given on 15 June 2000. The cases concerned the by-products of a manufacturing process carried out by ARCO, known as 'LUWA bottoms', which was used as fuel in cement kilns, and woods chips from the construction and demolition sector, which were powdered and used by Epon as fuel to generate electricity. The Opinion of Advocate General Alber, delivered in 1999, had suggested that the EC waste definition is too imprecise to establish a global concept of general application. The question, as posed by the Advocate General, was whether the substance or material still presented potential risks typical of waste, or whether it had lost its character as waste by presenting no greater risks than comparable primary material. This brought the issue back to what in fact

[53] Paras 47–8.
[54] Annex 2, para 2.47.
[55] *Mayer Parry*, para 51; *Wallone*, para 30.
[56] *Guidance on Distinguishing Waste Scrap Metal from Raw Material* (March 2000).
[57] Full title *ARCO Chemie Nederland Ltd and Minister van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer (C-418/97); Vereniging Dorpsbelang Hees and Directeur van de dienst Milieu en Water van de provincie Gelderland, joined partyElektriciteitsproductiemaatschappij Oost- en Noord- Nederland NV (Epon) (C-419/97)*: see also the comments of A. van Rossem [1998] JEL 116, 144.

are the risks which are 'typical' of waste, which as indicated above, relate not only to the nature of the material but also to the commercial and economic context in which it exists.

The ECJ made three general points: (1) the scope of the term waste in EC law turns on the meaning of the term 'discard'; (2) given the objectives of waste law of protecting human health and the environment and that EC law aims at a high level of protection applying the principles of precaution and preventive action, the concept of waste cannot be interpreted restrictively; and (3) the effectiveness of the Treaty and the Directives would be undermined if national legislation were to use modes of proof or statutory presumptions which had the effect of restricting the scope of the Directive more narrowly than its definition of waste requires. It was not to be inferred simply from the fact that material was subject to an Annex IIB recovery operation that the material was waste—Article IIB accordingly offers no short cut to national regulators faced with these decisions. The heart of the matter was therefore whether use of the LUWA bottoms and woodchips as a fuel constituted discarding them. Both companies argued essentially that the environmentally responsible use of such substitute fuels did not amount to discarding them as waste. The Court did not agree, holding that the fact that substances may be used as a fuel in an environmentally responsible manner, causing no greater damage—or even less damage—than 'normal' fuels, did not exclude them from the definition of waste. Such matters, according to the Court, went rather to the issue of whether such use should be encouraged and authorised, and the degree of control to which it should be subjected. The fact that such materials are commonly regarded as waste and that use as a fuel is a common method of recovering waste were evidentially relevant, but ultimately whether they were waste was held to be a matter for determination in the light of all the circumstances, regard being had to the aim of the directive and the need to ensure its effectiveness is not undermined. Much the same answer was given to a separate question as to the relevance of the status of the material as a by-product of a production process: the circumstances of its production might have evidential value (for example its composition, its possible uses, and whether special protection measures would be needed in its use), but ultimately the issue depends on all the circumstances and the aim of the Directive. The final issue considered by the Court related to whether the woodchips had ceased to be waste by having been subjected to a recovery operation of having been reduced to chips. Again the Court rejected such a suggestion, holding that even where a substance had been subject to a complete recovery operation, this did not necessarily mean it had ceased to be waste. This was even more the case where, as here, the wood had been subject simply to sorting or pre-treatment which did not 'purge the wood of the toxic substances which impregnate it'.

So despite the cases, difficulties remain. These stem in part from differing national approaches in borderline cases, and the extent to which latitude should be accorded to take differing approaches. The problem is that divergent rules can result in divergent standards and possible barriers to trade. The ECJ has resolutely refrained from accepting any single clear test for distinguishing between waste and raw materials or non-waste fuels. In particular, the ECJ has not equated the meaning of discard with the meaning of disposal and recovery by way of the 'Tombesi bypass'. In *Mayer Parry*, the most that could be said was that the ECJ approach in *Wallone* 'moves much closer'

to the Advocate General's approach in *Tombesi*, with its 'apparent approval' of the passage in the Opinion in *Wallone*, which in turn 'appears to imply approval' of the earlier approach.[58] However, in *ARCO and Epon*, the Court has expressly declined to endorse any such test, effectively leaving matters to the national authorities on the facts of each case, but on the principle of effectiveness, with an strong inclination towards a highly inclusive definition. One aspect of any test along the *Tombesi* lines which requires (but has not as yet received) exploration relates to the possible practical difficulties of enforcing a system where the status of a material is dependent on its destination.[59]

11. Packaging Recovery

As indicated above, waste regulation is not simply concerned with preventing environmental pollution; increasingly it is also concerned with resource conservation. In that respect, it is interesting to compare with the Waste Framework Directive the terms of Directive 94/62/EC on Packaging and Packaging Waste.[60] As mentioned above, the Directive is perhaps the best example of a measure driven by legislative developments in member states, specifically Denmark and Germany. It also illustrates how waste policy has been a political hot potato, with a history of pragmatism and compromise in setting the relevant targets, involving at one point some 300 amendments from the European Parliament's Committee on Environment, Public Health and Consumer Protection.[61]

Article 6 of this Directive requires member states to attain percentage targets for the recovery and for the recycling of packaging waste. Article 7 requires the necessary measures to be taken to provide for the collection of packaging waste, and for the reuse, recovery and recycling of such waste when collected. Definitions of these terms are provided in Article 3. 'Recovery' means any of the 'applicable' operations provided for in Annex IIB of the Waste Framework Directive (Article 3(6)). 'Reuse' receives a specific definition which involves the packaging being refilled or used for the same purpose for which it was conceived, where it was designed to 'accomplish within its life cycle a minimum numbers of trips or rotations' (Article 3(5)). The term 'recycling' is defined at Article 3(7) to mean the reprocessing of the waste materials in a production process for the original purpose or for other purposes (which include 'organic recycling' but exclude 'energy recovery'). Recycling is not a defined term in the Waste Framework Directive, but does feature, linked with reclamation, in a number of the categories of recovery operations at Annex IIB (R2–R4).

The issue therefore arises of how the two EC measures mesh. It needs to be borne in mind that recovery and recycling are distinct targets, recycling being a more specific target falling within the general recovery target.[62] The question is at what point

[58] See para 40 of *Mayer Parry*, and compare the analysis in Laurence, op cit, para 2.141.

[59] Laurence, op cit, para 2.152, suggesting this may be a 'very shaky foundation' for control over possibly illegal waste movements.

[60] OJ L365, 31.12.94.

[61] IEEP, *Manual of Environmental Policy*, op cit at 5.8–5. See also the discussion at ENDS Report 204 (January 1992) p 34.

[62] Thus Article 6.1(a) sets a target within five years of between 50 and 65% recovery, and Article 6.1(b) within that general target sets a target of between 25 and 45% for recycling.

in the process a member state can properly claim that packaging waste has been recovered or recycled so as to count towards the target. In the case of countries such as the UK which have instituted systems which offer significant financial opportunities to reprocessors of packaging waste, this issue may have important implications for commercial interests.[63] For example, the Department of Environment *User's Guide* to the producer responsibility system[64] seeks to interpret the term recycling in relation to various types of material (metal, glass, plastic and paper) to identify who exactly in the chain is the reprocessor and as such entitled to issue packaging recovery notes.

As we have seen from the consideration of the definition of waste in the Waste Framework Directive, the use of waste-derived materials in reprocessing or industrial operations can constitute waste recovery, and as such will be subject to the regulatory requirements of the Directive. However, there will come a point where those operations are completed so that the material is capable of use in the same way as a material of non-waste origin, at which point it ceases to be waste. The question is whether that is also the point at which it can be said to be recovered or recycled for the purposes of the Packaging Waste Directive. In so far as 'recovery' is concerned, there is an express link with 'applicable' operations in Annex IIB. The word 'applicable' seems to imply that only some of those operations will be applicable to packaging waste: for example category R8 (oil re-refining or reuse) has no obvious application to packaging waste. But also there are operations listed in Annex IIB which could apply to packaging waste, but which fall short of recovery: for example categories R12 and R13, involving the exchange of wastes or the storage of wastes for submission to recovery operations. Quite clearly, it is not the intention of the Packaging Waste Directive that member states should be able to meet its targets for recovery simply by setting up and monitoring schemes for the storage or exchange of wastes. This is implicitly recognised in the heading of Annex IIB, 'Operations which may lead to recovery'.

Similarly, the term 'recycling' as used in the Packaging Waste Directive receives a specific definition that is narrower than its natural meaning, namely 'the reprocessing in a production process of the waste materials for the original purpose or for other purposes'. But this definition is itself loaded with ambiguity. The use of the word 'reprocessing' implies that the materials have been processed before, but not necessarily (it would seem) that the previous processing must have been of the same nature as the reprocessing. If it does have to be processing of the same nature then the definition would be narrowed significantly. The reprocessing must be 'in a production process', though not necessarily (again it would seem) the same production process. Does this mean a final production process that results in another bottle, aluminium can or cardboard container; or one that results in a different product, such as sheet metal; or does it also include a production process the product of which is a feedstock, for example, glass cullet, crushed and baled scrap metal, or de-inked paper? The production process may be for the original purpose of the waste materials, or 'for other purposes'. This implies some degree of flexibility, but how far back along the chain of recovery does it allow the concept to extend?

[63] See the Producer Responsibility (Packaging Waste) Regulations 1997 No 648.
[64] 1997, p 62.

In seeking to answer these questions, it may be helpful to stand back and consider the ultimate goal of the Directive. Is it simply to avoid the ultimate disposal of packaging waste by encouraging recycling, or is it also resource conservation? If the latter, then the Directive is not only concerned to ensure that something which can be termed a 'recovery operation' is carried out, it is also concerned to see that the packaging waste ultimately becomes a usable product. The recitals to the Directive embrace both objectives, referring not only to the 'reduction of the final disposal of such waste' but also stating that ' . . . recycling should be regarded as an important part of recovery with a particular view to reducing the consumption of energy and primary raw materials and the final disposal of waste'.

That being the case, there seems no reason why a material which has been subject to recovery for the purposes of the Waste Framework Directive (and hence ceased to be waste) may still not be regarded as having been recovered or recycled for the purpose of the Packaging Waste Directive's targets. Until such time as the material is converted into a product it may be said that the objectives of the Directive as to recycling have not been fully met. The issue is the point at which it can be said to have been converted into a product. The EC cases considered above have stressed the significance of the material becoming capable of use in the same way as a raw material of non-waste origin in terms of whether or not it should be treated as waste for the purpose of ongoing control. But the question for the Packaging Waste Directive is to identify a point at which material can be said to have been recovered or recycled for the purpose of counting towards national targets. In this context it is important (a) to avoid double-counting, and (b) to ensure some degree of consistency between the approaches of member states in terms of recyclable material which is imported or exported so as to avoid double-counting at Community level or unfairness between member states. The importance of harmonisation of databases in order to allow member states and the Commission to monitor implementation of the Directive's objectives is stressed by Article 12. However, much of the information referred to in Decision 97/138/EC[65] establishing a format for database systems is to be provided on a voluntary basis: Table 2 of the Decision demonstrates the compromises involved in referring to the data to be provided and its accuracy being in line with 'availability and costs involved' and being adaptable to member states' situations.

But to be fair to the EC, the Directive's implementation in the UK demonstrates how Member States can take an already difficult measure and make it more difficult for themselves. The commercially-based system adopted in the UK has been described as:[66]

> . . . an extraordinarily complex mixture of legislation, official guidance, and market forces through which businesses which make or use packaging—and those who recover it—must pick their course.

The potential difficulties of the UK implementing legislation and the EC law which it implements are well shown in *R v The Environment Agency ex parte Mayer Parry Recycling*.[67] Mayer Parry, in a sequel to the earlier litigation over the definition of waste, argued that the Agency were wrong to regard the producers of ingots, sheets or coils

[65] OJ L52/22 22.2.97.
[66] ENDS Report 277 (February 1998) p 17.
[67] 8 September 2000, Collins J.

from steel recovered by Mayer Parry as being the reprocessor entitled to issue packaging recovery notes (PRNs), rather than Mayer Parry. The Environment Agency submitted that the earlier approach of Carnwath J in *Mayer Parry I* was wrong and misunderstood the Directives in the light of *ARCO and Epon*. For the Government, it was contended that *Mayer Parry I* was correctly decided, but that (as tentatively suggested above) the approach of the Packaging Waste Directive may be different to that of the Waste Framework Directive in that regard. Collins J regarded it as 'a most unfortunate state of affairs' that the Government and the Agency should be taking such different lines. No doubt partly for that reason, and the economic importance of the issue of who is entitled to issue PRNs, Collins J referred the matter to the European Court. It remains to be seen how the ECJ will deal with the issue of the relationship between the two Directives.

12. Transfrontier Shipment: Categorisation Problems

The close relationship between the EC and OECD waste classification systems for waste transhipment purposes has already been noted. The more unsatisfactory features of that relationship came to the fore in *R v Environment Agency ex parte Dockgrange Ltd and Mayer Parry Ltd*.[68] The case concerned the import of waste comprising such items as cars, fridges, cookers and other 'white goods' for fragmentisation and related processes in the UK. All the components individually fell within the Green List of Regulation 259/93/EEC, yet the Environment Agency chose to regard the waste as falling within the Red List, on the basis of Article 10 of the Regulation, dealing with unassigned wastes, and on the basis of the precautionary principle. The original rationale of the OECD Green List was an examination of the physical/chemical properties of the waste, hazardous criteria and required management regimes.[69] Green List wastes were perceived as not presenting hazards; Amber List wastes were those considered to present a lower degree of risk than Red List, or to be subject to a greater level of experience in management. Carnwath J found neither basis put forward by the Agency to be compelling. Nothing in Article 10 suggested that a mixture was *per se* to be regarded as a different form of waste.[70] The case illustrates the difficulties of synthesising the EC and OECD systems. The EC 'Correspondents meetings' which operated as an Advisory Group under Article 37(2) revealed the disarray between member states as to the appropriate treatment of such wastes, and by Article 42(3) were powerless to act to amend the relevant EC lists without changes by the OECD.[71] Moreover, the Regulation had adopted the OECD lists, but without appreciating the important difference that the OECD regime made no provision for unassigned wastes. As Carnwath J put it:[72]

[68] [1998] JEL 146.
[69] See the 1995 OECD Guidance Manual OECD/GD(95)26.
[70] Ibid at 152.
[71] Mayer Parry had applied to the OECD to have its specific waste mixture listed as Green or Amber, but no final decision on the matter was expected for some two years: see S. Tromans [1998] JEL 146, 157.
[72] Ibid at 153.

The Regulation does not satisfactorily address the problem of mixed wastes. This is probably because of the adoption of the OECD lists, which were designed for a regime which did not have the catch all provision for unassigned wastes.

(The OECD system operates on the basis that waste which does not appear on any List is regulated, pending assignment to a List, by national legislation; accordingly it is open to any country to regard it as hazardous and to treat it as Red List.[73] This is obviously a different approach to the automatic equation with Red List requirements under Article 10.) Article 10 itself did not prohibit the mixing of wastes, and accordingly in the absence of a specific listing for a mixture there was nothing, in Carnwath J's view, to require a mixture to be treated, *per se*, as a different form of waste. The pragmatic approach taken was to read Article 10 together with the information requirements under Article 11 as to the provision of information on the composition of the shipment. Thus a mixed consignment would be acceptable only if that requirement could be complied with: for Green List wastes there could be a reasonable degree of flexibility in this respect.[74]

What the case illustrates is the high degree of complexity of the EC system, and how easy it can be to arrive at absurd results under that system—in this case the result of putting a mixture of harmless wastes into the Red List, whereas some of the more harmful components removed from them earlier (for example the 'fluff' light fraction from metal shredding) would fall into the Amber List.

The problem of categorisation also arose in Case C-192/96 *Beside BV and Besselsen v Minister van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer*.[75] This case involved waste imported from Germany to The Netherlands. It was claimed that the waste comprised plastic mixed with other materials, but in fact the plastic content varied between 90 and 50%, the other materials including paper, cardboard, wood, metal, glass, and in one case six rounds of live ammunition. Whereas the importer claimed that all the materials involved were on the Green List, the Dutch authorities took the view that the waste was really household or municipal waste, and as such was on the Amber List.

The issue for Advocate General Jacobs was under what circumstances waste of household/municipal origin could fall out of that category. Conflicting submissions on the issue were received from the Commission, the Danish, Dutch and Finnish governments. The Advocate General noted that 'municipal waste' was a diverse category, which under the European Waste Catalogue included organic kitchen wastes, clothes, acids, batteries and aerosols. Unsorted municipal waste would not, in the Advocate General's view, fall into the Green List simply because by chance none of its components were within the Amber or Red Lists; by reference to OECD Decision C(92)39, footnote 19, the key requirement was that the waste had been properly sorted into categories. Again, the judgment of the Court was less full than the Opinion, but essentially the Court held that the origin of the waste was not decisive and that classification could be based on composition: so for example, waste of municipal origin which comprised small plastic items could fall into the Green List.[76] However,

[73] OECD Guidance Manual OECD/GD(95)26, para 5.1.

[74] In this case the information could be given to an accuracy of around 95%, which Carnwath J regarded as acceptable.

[75] [1999] Env LR 328.

[76] Heading 'GH Solid plastic wastes'; subheading '20 01 03 small plastics'.

this would require municipal or household waste to be collected separately or properly sorted.[77] If not sorted, the waste would be within category AD 160 ('municipal/household waste') and accordingly on the Amber List.

The case aroused strongly divergent views over this question, and illustrates some of the ambiguities inherent in the EC system. As both the Advocate General and the Court noted, the introductory paragraph to the Annex II Green List provides that regardless of whether wastes are on the Green List, they cannot be moved as such if they are contaminated by 'other materials' to an extent which either (a) increases the risks associated with the waste sufficiently to render it appropriate for inclusion in the Amber or Red Lists; or (b) 'prevents the recovery of the waste in an environmentally sound manner'.[78] It was not clear however, to what extent that provision allowed some degree of mixture, or what was meant by 'other wastes'.[79] The Commission, Danish and Dutch governments took a strict line, that mixed batches of different types of Green List wastes were unacceptable. Essentially their arguments came down to the environmental problems that could arise from the shipment of mixed batches. Specifically, it would be easier to camouflage the presence of Amber or Red List items; if the waste were incinerated there might be items of low calorific value that would result in disposal rather than energy recovery; and the multiplicity of diverse materials such as plastics could render it technically or economically unfeasible to carry out recovery.

Whilst accepting that sorting or separate collection was necessary, the Advocate General observed that if it was intended, as argued for by the Commission and some member states, that Green waste falling within one general category or even subcategory should never be mixed with waste from another category or subcategory, then it would be desirable in the interests of legal certainty, for the legislation to make that clear.

13. Recovery and Proximity

As noted earlier, the proximity principle originated as a response to the threat that in a market without frontiers, waste would be drawn inexorably to the cheapest point of disposal within the Community.[80] Such a principle has potentially more serious implications where the waste in question is a recoverable, tradable commodity. Also, to restrict the movement of such waste might have the effect of discouraging desirable recovery. Accordingly, this is an area where there is a potentially heady mix of conflicting principles. The difficulty can be seen, for example, in how the movement of material destined for incineration with energy recovery should be treated. The material is a substitute for fuel, and energy recovery is to be encouraged; yet the tendency could be for the material to find its way to the cheapest facility, with the lowest environmental standards, making it more difficult to invest in high performance plant. Basically there would appear to be three main policy options to meet this difficulty: (1) to equate such recovery with disposal in terms of control, (2) to develop

[77] Paras 29–32.
[78] The wording was inserted into Annex II by Commission Decision 94/721/EC.
[79] See Advocate General's Opinion, para 22.
[80] This is of course subject to the cost of transporting waste to more distant disposal points.

criteria narrowing down what can constitute recovery (for example, calorific value), or (3) to harmonise standards.[81] The third alternative may not be achievable except in the long term.

The clash of principles involved was considered in Case C-203/96 *Chemische Afvalstoffen Dusseldorp BV v Minister van Volkshuisvesting Ruimtelijke Ordening en Milieubeheee*,[82] again involving a detailed Opinion by Advocate General Jacobs. This case concerned the policy of prohibiting the export of waste from The Netherlands unless the treatment was more efficient than was available in The Netherlands. The waste in question was oil-contaminated materials such as filters, cloths and gloves, which were to be sent for processing in Germany. The Advocate General's Opinion contains a very full analysis of the relevant principles and their history. From this analysis, no endorsement could be found of the blanket application of self-sufficiency or proximity as grounds for justifying measures contrary to Articles 30 and 34 of the Treaty; each measure was to be judged individually on this test. Nor could any support for the Dutch policy be found in the *Walloon* case,[83] which had been concerned with disposal, not recovery. The Advocate General referred to the adverse effects that the application of those principles could have on recycling and on the cross border movements necessary to achieve economic viability and new technologies. The arguments for cross border trade were stronger for recovery, in that the activity provided substitute raw materials, with corresponding single market benefits. The Advocate General did however acknowledge the possibility of exceptions, for example where very hazardous waste was being transported unnecessarily far.

The Court reached the same conclusion—disposal and recovery had different roles and it was proper to treat them differently. It was appropriate to encourage recovery and elicit the best techniques by facilitating free movement, provided that the transport itself was not a threat to the environment.[84] The case has been hailed as a 'major new milestone' in the decisions on the relationship between waste and the free movement of goods: whilst concerned with recovery, the implication is that even for disposal, self sufficiency and proximity do not give licence to member states to pursue whatever policies they choose.[85] In this respect it is important to remember that in the *Walloon* case, self sufficiency and proximity were not the main bases for the decision in support of the import ban. The Court was well aware of the real environmental problems stemming from an 'abnormal large scale inflow of waste' into Wallonia, having regard to the limited disposal capacity available there.[86]

14. Waste Disposal and Risk

Article 4 of the Waste Framework Directive requires that member states shall take the necessary measures to ensure that waste is disposed of without endangering

[81] See the discussion at ENDS Report 289 (February 1999) p 48.
[82] [1999] JEL 121; [1999] Env LR 360.
[83] Case C-2/90 *Commission v Belgium* [1992] ECR I-4431.
[84] Para 33.
[85] See J.H. Jans [1999] JEL 121 at 153. The application of the principles is only acceptable within the limits of Articles 30–6, a conclusion not affected by Article 130t.
[86] Paras 30–2 of judgment; see also the Advocate General's Opinion in *Chemische*, para 46.

human health and without using methods that could harm the environment, and in particular:

— without risk to water, air, soil and plants and animals,
— without causing a nuisance through noise or odours,
— without adversely affecting the countryside or places of special interest.

The status of this provision has been considered in a number of cases. In Case C-236/92 *Comitato di Coordinamento per la Difesa Della Cava v Regione Lombardia*[87] the question for the ECJ was whether Article 4 granted to individuals 'subjective rights' ('diritti soggettivi') which the national court was required to protect. The context in that case was an argument against the establishment of tips for waste disposal, that the Italian government had not done enough to ensure recycling.

Advocate General Darmon could find no mandate in Article 4 for member states being required to dispose of waste by recycling it. However, more importantly perhaps, he also acknowledged the practical impossibility of literal compliance with Article 4, since ' . . . any measure for the disposal of waste is inherently liable to produce pollution, whatever the method adopted'.[88] Article 4 was seen as defining objectives for the more specific functions of planning, authorisation, inspection and supervision contained in the Articles 5–11. This was also the approach taken by the Court: it was held that Article 4 ' . . . must be regarded as defining the framework for the action to be taken by the member states regarding the treatment of waste and not as requiring, in itself, the adoption of specific measures or a particular method of waste disposal'.[89] This may be the only practical interpretation. As was pointed out in relation to the UK at the time the amending Directive was adopted:[90]

> It is beyond dispute that there are many waste disposal sites in Britain which do not meet the basic requirement of operating without causing a nuisance or harming the environment.

What is true of Britain is undoubtedly also true of the rest of Europe.

The question then arises as to precisely what status these objectives do have. The issue was considered recently by Richards J in *R v Leicestershire County Council ex parte Blackfordby and Boothorpe Action Group Ltd*.[91] The case involved a challenge by local residents to grant of planning permission for a scheme of mineral extraction and the deposit of 3.9 million tonnes of putrescible waste on a site near their homes. It was accepted by the residents that the objectives were not absolute requirements which had to be achieved in every case. But on the other hand, it was claimed they were more than just normal 'material considerations' to be taken in to account. It was submitted that Article 4 (and the domestic regulations giving effect to it) required the authority to avoid or minimise any risk to human health or the environment, or to do all that was practicable to achieve those objectives.

The argument was rejected by Richards J, both on authority and on principle, the authorities being the *Lombardia* case and the Court of Appeal decision in *R v Bolton*

[87] [1994] Env LR 281.
[88] Ibid, para 37.
[89] Ibid, para 14. See also Cases 372 to 374/85 *Ministere Public v Traen* [1987] ECR 2141.
[90] ENDS Report 201 (October 1991) p 28.
[91] 15 March 2000.

Metropolitan Council ex parte Kirkman.[92] On principle, the requirements were objectives, that is ends at which to aim. Provided the authority understood this status, and took the requirements into account as such, its decision could not be criticised. To give the objectives any greater status would be to give them an '. . . indeterminate status, lying in unsatisfactory middle ground between that which must be taken into account in the decision-making process and that which must be achieved by the decision'. Thus the requirements of Article 4 become simply objectives to be taken into account along with other, possibly countervailing, objectives.

14. Landfill and Fine Detail

One possible response to the problem of waste moving to the lowest-cost and less satisfactory facilities is the harmonisation of standards. This approach, in anticipation of a European waste market without frontiers, was what prompted early drafts of the Landfill Directive in the late 1980s and early 1990s.[93] Homogeneous waste acceptance criteria and operational standards were seen as vital to the goal of preventing waste moving to cheap and poorly operated landfills. The prescriptive approach this entailed did not appeal to the UK waste industry or government. By 1993 the UK was questioning whether there should be a landfill directive, on subsidiarity grounds:

> Individual states should be free to make decisions on how to dispose of their own wastes in their own country.[94]

Such arguments did not prevail, and the UK changed its stance accordingly.[95] But by any standards the ensuing Directive in the Landfill of Waste[96] is a highly complex instrument, which will present major challenges in implementation throughout the EU. Part of the challenge lies in the fact that it goes well beyond the establishment of technical standards, referred to at recital 11, but is also concerned to minimise landfill and encourage prevention, recycling and recovery.[97] The Directive has more than its fair share of definitional obscurities, perhaps most notably in respect of 'municipal waste' (defined by Article 2(b) as 'waste from households, as well as other waste which, because of its nature or composition, is similar to waste from households') and 'liquid waste' (defined at Article 2(q) as 'any waste in liquid form including waste waters but excluding sludge').

One of the acid tests of this ideologically-driven Directive may turn out to be how rigorously it is applied to small municipal landfill sites in rural areas. In 1996, MEPs

[92] [1998] JPL 787.
[93] ENDS Report 183 (April 1990) p 31.
[94] Environment Minister Tim Yeo, cited at ENDS Report 224 (August 1993) p 35. To some extent, this may be seen as cultural issue between member states which rely on detailed EC requirements in the absence of their own technical standards, and states such as the UK which have a tradition of producing their own detailed domestic criteria: see for example Waste Management Paper 26F, dealing in detail with co-disposal.
[95] In 1993, the UK government had produced a document setting out the case for co-disposal, *UK Landfill Practice: Co-disposal: Using Nature's Techniques to Treat Difficult Wastes* (DoE, 1993): see also St. Tromans and R. Turrall-Clarke, *Contaminated Land* (London, 1994) p 236.
[96] 99/31/EC OJ L182 17.7.99.
[97] The House of Commons Environment Committee, in its Report on the draft Directive, noted 'seeping through the text' an apparent antipathy towards landfill: Session 1990–91, 7th Report, HC 236, para 40. See also R.G.P. Hawkins [1992] JEL 307.

were enraged by the proposal to exempt smaller landfills in rural areas with a population less than 35 inhabitants per square kilometre: an exemption proposed by Portugal and Eire, which would have resulted in some 50% of the land area of the Community falling outside the Directive.[98] As it is, the Directive provides a partial derogation[99] by Article 3(4) for landfill sites for non-hazardous or inert waste serving small islands or 'isolated settlements' as defined by Article 2(r). It remains to be seen how member states relying on that derogation will ensure that the relevant landfill sites, given their necessarily isolated nature, do not receive hazardous or non-inert wastes. This brings us to the final point, that of effective implementation.

15. Effective Implementation?

The Annual Survey of the Implementation and Enforcement of Community Environmental Law published in 1999, for the years 1996–97,[100] indicates that most of the problems with the Waste Framework Directive involve its application. This is presented as being at the root of the large (though reducing) number of complaints primarily concerned with the dumping of waste, ' . . . proliferation of uncontrolled dumps, controversial siting of planned controlled tips, mismanagement of lawful tips, water pollution caused by directly discharged waste'.[101] This is seen as bound up with the inadequacies of waste management planning throughout the Community: the Commission decided in October 1997 to take infringement proceedings against all member states except Austria in this respect. The practical robustness of EC waste law and its adequate and even handed enforcement will be put to the test within the enlarged European Union of the next decade.

16. EC Waste Law: An Overall Assessment

EC waste law has come a very long way since the 1989 Waste Strategy, when the concern was of unrestricted and environmentally unsound waste movements within Europe and beyond. It has successfully introduced the proximity principle. It has introduced—though not yet successfully implemented—a range of harmonising measures for waste facilities. It has set ambitious targets for recycling and recovery, and has laid the foundations for systems of waste classification and reliable statistics. Yet it has not stemmed the growth of waste generation. Is the system in fact a complete mess?

It is a sophisticated and infuriatingly complex system, at least partially for the reasons explained in this paper, not all of which are to be laid at the door of the EC institutions. It is a system that can certainly lead to dangers of obfuscation, national inconsistency and a lack of ability to see wood for trees. It is in some respects a naïve system as to the practical realities of implementing its objectives, standards and

[98] See ENDS Report 256 (May 1996) pp 38–9.
[99] All be it an important one, covering matters such as financial security, gas and water pollution control and some waste acceptance requirements.
[100] SEC 1999/592, adopted 27 April 1999.
[101] Ibid at 58.

requirements. A robust and coherent definition of waste remains elusive, as does the relationship in many respects between waste regulation and free movement of goods. On the other hand, it is possible for lawyers to get too hung up on the more legalistic elements, such as the definition of waste. Given the immense variety of movements of materials, by-products and residues within Europe and globally, it is probably impossible to arrive at a general definition that will give certainty in all circumstances. It is also fair to say that in comparative terms, EC waste regulation (like the Basle and OECD systems) is in its early stages, and that some of the difficulties experienced reflect this, and will not figure so prominently in the long term. Equally, there is no doubt that EC waste law has in many countries raised standards and resulted in potentially harmful activities being better regulated and controlled. If EC waste law can deliver these results, then its messiness in certain areas and absurdities in others may be excusable. But as the law becomes more ambitious and more complex, so it will face a harder task to deliver its objectives. Perhaps the true verdict should therefore rest at the end of the current decade, not with the lawyers who interpret and quibble over the drafting, but with all citizens as to whether their environment has been protected and improved by this remarkable body of legislation.