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What is Waste?

Irish & European Perspectives on Waste Law

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**A Research dissertation submitted in partial fulfilment for the Degree
of Master of Science in Technology Management.**

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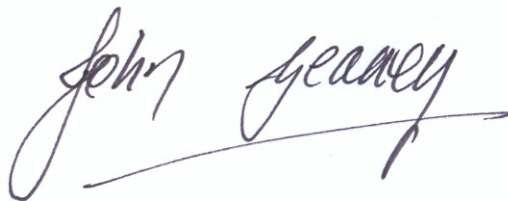
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Chapter 1: Abstract

Irish and European waste legislation has progressed through a myriad of legislative waste revisions over the last 35 years. The complex web of legislation includes;

- 1975- Council Directive on Waste (75/442/EEC)
- 1991- Council Directive on Waste (91/156/EEC)
- 1993- Establishment of Environmental Protection Agency (Ireland)
- 1994- European Waste Catalogue Published
- 1996- Waste Management Act (Ireland)
- 1998- 'Changing Our Ways' Irish Waste Policy
- 1999- Council Directive on Landfill (99/31/EC)
- 2001- Waste Management Amendment Act (Ireland)
- 2002- New European Waste Catalogue
- 2002- 'Preventing & Recycling Waste- Delivering Change – New Irish Waste Policy
- 2003- Council Directive on Acceptance of Waste at Landfills (2003/33/EC)
- 2004- National Waste Prevention Programme Launched (Ireland)
- 2003- Thematic Strategy on Prevention and Recycling of Waste
- 2006- Council Directive on Waste (2006/12/EC)
- 2006- National Strategy on Biodegradable Waste (Ireland)
- 2008- Council Directive on Waste (2008/98/EC)
- 2009- National Waste Prevention Program (2009-2012) Launched (Ireland)
- 2010- Deadline for entry of 2008/98/EC into force in all member states (12th Dec)

While the body of legislation is comprehensive, a major debate still reigns on one central issue; What is the legal definition of Waste?.

Throughout the history of the various Waste Directives, this issue has perplexed the courts in many of the member states and has consistently been referred to the European Court of Justice for interpretation and definition. Cichowski (1999) reported that national judges within the EU had asked the European Court of Justice (ECJ) for

interpretation of waste law more than any other subject from the beginnings of the waste directive in 1976 through to 1998.

This dissertation reviews the key literature and European Court of Justice (ECJ) case histories involving the definition of waste. It also reviews similar cases involving waste definition in the Irish courts and discusses the issues associated with the definition both at a National and a Community level. It also previews some future waste definition issues likely to require further determination in the future. As a result of this research, it is clear that confusion regarding the exact definition of waste and indeed holders of waste still exists at a legislative level. As case law has evolved, the European Court has substantially changed its definition of waste. Furthermore, it is also clear that through analysis of cases such as *Brady vs the EPA* and the *Commission vs Spain*, there are significant differences between the National Courts and the Community on this definition.

Finally it is also apparent that the development of 'End of Waste' criteria will further complicate an already confused picture at both a National and Community level.

Chapter 2: Introduction & Rationale for Investigation

According to Eurostat, Every year, some 2 billion tonnes of waste - including particularly hazardous waste - are produced in the Member States (Europa 2010). The amount of waste generated is related closely to economic growth and notwithstanding the recent economic turmoil, this figure shows an upward trend across Europe. The accession of the former Eastern Bloc countries into the European Community in 2004 has brought less developed waste infrastructure servicing the pool of produced waste. Article 5 of the Waste Framework Directive European policy requires that member states and the European community should be self sufficient in the disposal of waste, but central to the treatment and disposal of waste is the problem of definition. What is waste?

Cheyne and Purdue (Cheyne and Purdue 1995, p. 151) summarized the issue succinctly by finding;

'Pollution is always caused by waste, but waste does not always cause pollution'

They further deliberated on the challenge of waste definition by finding that;

The basic problem is that, the more the words are interpreted as requiring an intention to abandon or that substances or objects are excluded if they are still capable of being put to a use, the more processes and activities will be excluded even though they need to be controlled because of their potential risk of damage. This is why the task of defining 'waste' is a difficult task, philosophically, semantically and legally

(Cheyne and Purdue 1995, p. 152)

European Law has evolved to require member states to manage and control their waste processes. The main member obligations of the Waste Framework Directive (WFD) Council Directive (EC) are listed in Article 4 of the directive. This obliges member states to implement;

The necessary measures to ensure that waste is recovered or disposed of without endangering human health and without using processes or methods which could harm the environment and in particular:

- *without risk to water, air or soil or to plants or animals*
- *without causing a nuisance through noise or odour*
- *without adversely affecting the countryside or places of special interest*

Member States shall also take the necessary measures to prohibit the abandonment, dumping or uncontrolled disposal of waste

(Directive 2006/12/EC, p. L114/11)

The definition of waste is therefore central to any effort made by member states to control their waste processes. The conflict between overregulation and possibly restricting the recovery and/or reuse of material and under regulation which may lead to environmental risk or harm calls for a close examination of what constitutes waste.

Chapter 3: Research Questions

European Waste Law has undergone substantial revision over the last 20 years, including several changes to European Waste Directives, Landfill Directives and revisions to the European Waste Catalogue.

At a local level, Ireland has moved to reduce dependence on landfill and bring European Directives into effect through the Waste Management Act, National Strategy on Biodegradable Waste and Waste Prevention Programs.

This dissertation examines some of the divergences between the legislative movements at both National (Ireland) and European level. The central question regarding the definition of waste is examined in detail through the analysis of relevant case law. It is clear from this historical analysis of case law that the European Court of Justice has changed its perspective of waste definition as multiple cases have come before the Court.

In addition, the dissertation also examines Irish waste case law and examines the differences between the local Irish findings and those of the European Court of Justice (ECJ). In this case, the central question is whether there is a difference of interpretation between the local and European Courts in the definition of waste. Again, it is clear that the Irish Courts have interpreted waste differently and have in at least one case (*Brady v The Environmental Protection Agency (2007)*) taken a more conservative view of the definition of waste compared to their ECJ counterparts.

At a European level, there are legislative efforts to determine criteria for 'End of Waste' whereby a material is no longer deemed to be a waste and is therefore free of regulatory restrictions in terms of movement and trade. This dissertation examines the likely effect these criteria will have on waste definition and considers some of the issues which may arise given the criteria used in relevant case law as well as technological changes in terms of waste treatment and processing. It is clear that the

main criteria for determining 'End of Waste' may lead to further confusion and inhibit the development of alternative methods for recycling waste.

Chapter 4: Research Methodology

The subject matter behind this thesis is broadly legal in nature. The legal definition of waste both at European and Irish level continues to evolve and further cases are likely to come before the Courts in many of the jurisdictions across Europe.

The initial literature search consisted of reviewing articles and documents recommended by Owen McIntyre, Senior Lecturer in the Faculty of Law in UCC. Many of these papers provided the foundation for subsequent research using citations and bibliographic references to Irish and European laws and case law.

Case Law research was mainly carried out using three search engines;

- 1) European Court of Justice (ECJ) cases since 1997 are reported on the website of the ECJ (<http://curia.europa.eu/>).
- 2) ECJ Judgements prior to this 1997 are available on the eur-lex website (<http://eur-lex.europa.eu/>) which provides access to laws and case studies of the European Union. Both of these sites provided information on many of the case studies referenced as part of this project.
- 3) Irish Case Law is available on the British and Irish Legal Information Institute (BAILLI) website (<http://www.bailii.org/>) which provides access to case law across Europe with particular emphasis on Britain and Ireland.

The particular cases discussed in this paper, both at European and Irish level are noteworthy as they form recurring references for subsequent cases. The sequence of European cases reviewed form a chronological view of how the opinion of the ECJ has changed and matured over the last 35 years since the initial Waste Framework Directive was established. It is also apparent that the referenced European cases are repeatedly cross referenced in Irish case law.

As the subject matter is relevant to the authors work in the waste industry, other policy documents and legislative sources were also available and reviewed as part of the research methodology. In particular, matters such as End of Waste criteria, Irish legislative and regulatory differences in terms of Waste definition and producer responsibility are part of the continuing debate on waste definition at a national level.

Chapter 5: History of European Waste Legislation

Introduction

In order to understand the current debate on waste definition, it is necessary to understand the evolution of various waste directives since 1975. Since European law first moved to define the meaning of waste, there have been multiple changes and revisions to the definition. There is some evidence that the translation of terminology from one community language to another has added to the complexity of the definition.

Historical Analysis

Wilkinson summarized the history of the development of the legal concepts of waste law from the origins of European directive 75/442/EEC. In this original interpretation by the Commission, 'waste' was defined in a very general way in Article 1 of 75/442/EC as;

Any substance or object which the holder disposes of or is required to dispose of pursuant to the provision of national law in force

(Wilkinson 1999, p. 174)

In this initial form of the waste directive,

'Disposal' meant:

The collection, sorting, transport and treatment of waste and tipping above or under ground', the transformation operations necessary for its re-use, recovery or recycling.

(Wilkinson 1999, p. 174)

This directive also listed many items which were excluded from and not subject to this original Waste Directive. These included such items as Radioactive Waste, Mining

and Quarrying Waste, Animal Waste and Animal Carcasses and Decommissioned Explosives. (It was intended that these types of wastes would be covered under other directives)

During the 1980's international law on the transportation and movement of waste (Basel Convention) and European directives on Toxic and Dangerous Wastes (78/319/EC) as well as other international bodies (OECD C(88) 90) delivered other definitions of waste. For instance, the Basel Convention defined waste as;

Substances or objects which are disposed of or are intended to be disposed of or are required to be disposed of by the provisions of national law

(Basel Convention 1989, p. 6)

While the OECD definition introduced the concept of a tabular definition where waste was defined by reference to a number of tables.

These various differences in International definition gradually led to divergence of interpretation between EC, OECD and Basel definitions of waste. Directive 75/442/EC was subject to amendment during the late 1980's and these amendments led to Directive 91/156/EEC which was adopted in March 1991.

In this amended Directive, the definition of waste was modified to become broadly similar to the earlier definitions of the OECD. Article 1 of this directive brought new and more comprehensive definitions;

Article 1

For the purposes of this Directive:

(a) 'waste' shall mean any substance or object in the categories set out in Annex I which the holder discards or intends or is required to discard.

The Commission, acting in accordance with the procedure laid down in Article 18, will draw up, not later than 1 April 1993, a list of wastes belonging to the categories listed in Annex I. This list will be periodically reviewed and, if necessary, revised by the same procedure;

- (b) 'producer' shall mean anyone whose activities produce waste ('original producer') and/or anyone who carries out pre-processing, mixing or other operations resulting in a change in the nature or composition of this waste;*
- (c) 'Holder' shall mean the producer of the waste or the natural or legal person who is in possession of it;*
- (d) 'Management' shall mean the collection, transport, recovery and disposal of waste, including the supervision of such operations and after-care of disposal sites;*
- (e) 'Disposal' shall mean any of the operations provided for in Annex II, A;*
- (f) 'Recovery' shall mean any of the operations provided for in Annex II, B;*
- (g) 'Collection' shall mean the gathering, sorting and/or mixing of waste for the purpose of transport.*

(Directive 91/156/EEC 1991, p. 1-2)

Annex 1 of Directive 91/156/EEC (reproduced below) contained a list of 16 categories of waste (Q1 – Q16).

ANNEX I
CATEGORIES OF WASTE

- Q1 Production or consumption residues not otherwise specified below
- Q2 Off-specification products
- Q3 Products whose date for appropriate use has expired
- Q4 Materials spilled, lost or having undergone other mishap, including any materials, equipment, etc., contaminated as a result of the mishap
- Q5 Materials contaminated or soiled as a result of planned actions (e.g. residues from cleaning operations, packing materials, containers, etc.)
- Q6 Unusable parts (e.g. reject batteries, exhausted catalysts, etc.)
- Q7 Substances which no longer perform satisfactorily (e.g. contaminated acids, contaminated solvents, exhausted tempering salts, etc.)
- Q8 Residues of industrial processes (e.g. slags, still bottoms, etc.)
- Q9 Residues from pollution abatement processes (e.g. scrubber sludges, baghouse dusts, spent filters, etc.)
- Q10 Machining/finishing residues (e.g. lathe turnings, mill scales, etc.)
- Q11 Residues from raw materials extraction and processing (e.g. mining residues, oil field slops, etc.)
- Q12 Adulterated materials (e.g. oils contaminated with PCBs, etc.)
- Q13 Any materials, substances or products the use of which has been banned by law
- Q14 Products for which the holder has no further use (e.g. agricultural, household, office, commercial and shop discards, etc.)
- Q15 Contaminated materials, substances or products resulting from remedial action with respect to land
- Q16 Any materials, substances or products which are not contained in the abovementioned categories.

(Council Directive 91/156/EEC, p. 6)

The list is notable for the following inclusions;

Q1 Production or consumption residues not otherwise specified below

Q16 Any materials, substances or products which are not contained in the above categories

(Council Directive 91/156/EEC, p. 6)

These two all encompassing categories permit all known materials to fall into the definition of waste. It could be argued that this level of all encompassing inclusion does not help to clearly discriminate between waste and non waste.

Annex IIA contained a list of ‘approved’ disposal operations such as they were identified by the commission at the time while Annex IIB listed those recovery operations approved by the commission. These lists were aligned to similar lists and annexes in OECD Table 1 (OECD Decision C(88)90) and the ‘D’ and ‘R’ Lists.

ANNEX II B
RECOVERY OPERATIONS

- R 1 Use principally as a fuel or other means to generate energy
- R 2 Solvent reclamation/regeneration
- R 3 Recycling/reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes)
- R 4 Recycling/reclamation of metals and metal compounds
- R 5 Recycling/reclamation of other inorganic materials
- R 6 Regeneration of acids or bases
- R 7 Recovery of components used for pollution abatement
- R 8 Recovery of components from catalysts
- R 9 Oil re-refining or other reuses of oil
- R 10 Land treatment resulting in benefit to agriculture or ecological improvement
- R 11 Use of wastes obtained from any of the operations numbered R 1 to R 10
- R 12 Exchange of wastes for submission to any of the operations numbered R 1 to R 11
- R 13 Storage of wastes pending any of the operations numbered R 1 to R 12 (excluding temporary storage, pending collection, on the site where it is produced)

(Council Directive 91/156/EEC, p. 7)

ANNEX II A
DISPOSAL OPERATIONS

- D 1 Deposit into or on to land (e.g. landfill, etc.)
- D 2 Land treatment (e.g. biodegradation of liquid or sludgy discards in soils, etc.)
- D 3 Deep injection (e.g. injection of pumpable discards into wells, salt domes or naturally occurring repositories, etc.)
- D 4 Surface impoundment (e.g. placement of liquid or sludgy discards into pits, ponds or lagoons, etc.)
- D 5 Specially engineered landfill (e.g. placement into lined discrete cells which are capped and isolated from one another and the environment, etc.)
- D 6 Release into a water body except seas/oceans
- D 7 Release into seas/oceans including sea - bed insertion
- D 8 Biological treatment not specified elsewhere in this Annex which results in final compounds or mixtures which are discarded by means of any of the operations numbered D 1 to D 7 and D 9 to D 12
- D 9 Physico-chemical treatment not specified elsewhere in this Annex which results in final compounds or mixtures which are discarded by means of any of the operations numbered D 1 to D 8 and D 10 to D 12 (e.g. evaporation, drying, calcination, etc.)
- D 10 Incineration on land
- D 11 Incineration at sea
- D 12 Permanent storage (e.g. emplacement of containers in a mine, etc.)
- D 13 Blending or mixing prior to submission to any of the operations numbered D 1 to D 12
- D 14 Repackaging prior to submission to any of the operations numbered D 1 to D 13
- D 15 Storage pending any of the operations numbered D 1 to D 14 (excluding temporary storage, pending collection, on the site where it is produced)

(Council Directive 91/156/EEC, p. 8)

This alignment between the various international definitions did create a new definition of waste in that the word ‘discard’ was now substituted for the word ‘dispose’ in the earlier definition. This change in wording was obvious only in the English text while other language texts in Dutch, French, Italian and Danish did not change the wording as the new Directive was transposed into law. (Wilkinson 1999). In terms of legal definition, it is felt that the term ‘discard’ is more encompassing in nature than the term ‘disposal’ This change in terminology was still the subject of much discussion subsequently. (Cheyne 1995)

Cheyne and Perdue (Cheyne and Perdue 1995), in considering the differences between the 1975 and the 1991 definitions of waste, pointed out that the 1991 definition of waste set out 'Disposal' operations and 'Recovery' operations within the new directive. They surmised that the standard definition of disposal could include such actions as sales, and commercial transfer of a property, while 'Discard' has a 'connotation of getting rid of something because it is useless or undesirable'. This suggests that the meaning of the term discard is 'narrower' and the object is subject to a deliberate or intentional act to get rid of.

Cheyne and Perdue further considered the activities listed in Annex I in detail (The discarding actions) and broke them into two main and broad groups. Group 1 could be considered to have no commercial value such as;

Q2 - 'Time expired products'

Q3 - 'Off specification products'

Q4 - 'Materials contaminated through mishap'

Q5 - 'Materials contaminated or soiled as a result of planned actions'

Q6 - 'Unusable Parts'

Q12- 'Adulterated Materials'

Q15- 'Contaminated Materials'

Q14- 'Materials or substances for which the holder has no further use'

(Cheyne and Purdue 1995, p. 156)

This group could be said to impose a cost on the producer to discard and thus fall into a 'classic' definition of waste.

Group 2 of Annex II include such categories as

Q10- 'Machining/mining residues'

Q11- 'Residues from raw material extraction and processing'

(Cheyne and Purdue 1995, p. 157)

These categories may include materials which have an intrinsic value and may therefore have a market value. It is therefore necessary to examine the 'role of the term 'discard'' (Cheyne and Purdue1995) in determining whether the object or material constitutes a waste. The holder in this case, may realize that the material has a value, but makes a decision to discard it in any case.

The meaning of the term 'discard' was therefore left open to some level of interpretation and this has led to ongoing need for court interpretation through case law. The potential for confusion is not helped by the listing of 'Recovery' operations in Annex II of the directive and the inclusion in this Annex of several operations which could be considered to be part of normal industrial processes. This includes,

R 2 – 'Solvent Reclamation/Regeneration'

R 9 – 'Oil re-refining or other uses of oil'

R10-'Land Treatment resulting in benefit to agriculture or ecological improvement

(Council Directive 91/156/EEC, p. 7)

These operations could be considered to be part of normal activities in any industrial activity and to consider them as being part of the treatment and recovery of waste could leave the processor or holder of the material liable to having to apply to the necessary regulatory bodies for the required approvals for the treatment and processing of waste. This would lead to costly and possibly unnecessary expense in terms of having to meet the requirements of a waste processor. This is obviously also impractical from the point of being able to reprocess materials which are ordinarily dealt with on a daily basis as part of the normal operations of the industrial process.

In addition, Cheyne and Purdue (Cheyne and Purdue 1995), also stated that one issue with prescriptive listings of disposal processes and recovery processes was that they required ‘frequent updating to take into account technological changes and to take into account any exploitation of loopholes in the descriptions’ (Cheyne and Purdue 1995, p. 149)

Continuing this debate, Fluck (Fluck 1994) defined discard as;

an action whose purpose is to desist from using a substance or object for its original purpose, to liberate it from that intended purpose, or to de-dedicate it, without immediately allocating it to a new intended purpose, certain recovery activities being necessary to make it fit once again for its former purpose (recovery), or the substance or object being definitively being withdrawn from any further use (disposal)

(Fluck 1994, p. 81)

This gives a different meaning again to the term discard. Fluck’s definition revolves around the use of the material or object for its original purpose. By accepting this definition, the term discard takes on a wider meaning in that subjecting the material or object to a recovery process suggests that the material or object should be considered to be a waste.

Choongh and Grekos (Choongh and Grekos 1990) summarized the situation at the time by stating that ‘the definition required two tests to be met before something can be characterized’ (Choongh and Grekos 1990, p. 3), that is, the substance or object in question must fall within the categories set out in Annex I and be a substance or object which the holder discards, intends to discard or is required to discard. On this basis, the initial part of the test will always be satisfied because anything and everything falls within Annex I due to the general all encompassing categories in that Annex. Accordingly, in any given case, whether or not something is waste will always depend what is meant by the word ‘discard’.

The interpretation of the terms disposal and discard in the context of the EU definition of waste has therefore resulted in a large body of case history, some of which will be discussed later in this dissertation.

Directive 2006/12/EC replaced the previous directives 75/44/EC and 91/156/EEC and this directive itself has been further refined in Directive 2008/98/EC. This new version of the Waste Framework Directive further developed the concept of a hierarchy of waste processing and treatment, introduced the obligation on member states to initiate waste prevention programs as well as setting recycling and recovery targets for member states. As stated in the introduction, this directive must be implemented in law in all member states by 12 Dec 2010.

Further evidence of the type and level of debate on this subject can be found in the 'Communication from the Commission to the Council and the European Parliament on the Interpretive Communication on Waste and by-products' (Commission of the European Communities 2007). In this communication, the commission acknowledged that 'a number of issues have arisen in relation to the interpretation of this (waste) definition'. (Commission of the European Communities 2007, p1)

The communication essentially attempted to explain the definition of waste and the difference between waste and by-products (non waste) in a production process. It referenced the fact that;

....production processes are often complex and can generate several different materials with different economic values, environmental impacts and waste/non waste statuses' and that 'rapid changes in technology, both in production processes and the waste treatments available' gave rise to a continuously evolving situation.

(Commission of the European Communities 2007, p. 3)

While restating that the European Court of Justice (ECJ) has taken a broad perspective on the definition of waste, the word ‘discard’ is a central feature of the communication. In essence, when a material is discarded, it should be considered as a waste. In testing for the presence of a by product (as opposed to a waste), the communication restated the 4 part test found in *Palin Granit* (*Palin Granit 2002*), that is;

- *Further use is a certainty, not merely a possibility*
- *No further processing should be required prior to re use*
- *A continuous product process must be evident*
- *The use must be lawful – If this is not the case, then without doubt, the material is a waste*

(Commission of the European Communities 2007, p. 4)

While all of the above are well referenced against the various case studies available from the ECJ, the overriding concern regarding the potential for environmental damage must also be considered even though a use for the material can be found. When faced with the potential for environmental damage, ‘this may affect the boundaries of the waste/non waste decision in situations where a comparison is possible and relevant’ (*Commission of the European Communities 2007, p. 9*)

Conclusion

Notwithstanding the large body of legislation and associated case law, it is clear that the words 'dispose' and 'discard' are central to any discussion on waste definition. The merit of all encompassing lists such as those found in Waste Directives could be debated in terms of being over protective or counterproductive. The European Courts have shown some consistency in terms of examining the intention of the holder of the waste and whether a burden is evident when attempting to discard the material.

Chapter 6: Waste & By Products – Salient Differences

Introduction

In any production processes, there can be a variety of intended products, by products and residues. Modern production processes have evolved to maximize the yield of the desired products, but also to find new uses for by products and residues. In any debate on waste definition, there must be a clear differentiation between intended products, by products and residues. If the holder of a residue seeks to ‘discard’ this material, it could be argued that they are possession of a waste and must be subject to waste restriction and regulation. Conversely, the holder may elect to consider the residual material to be a by product and seek a different method of disposal. This could have the effect of avoiding the necessary regulation and restrictions on holding or moving waste.

Literature Review

In his paper on the definition of ‘By Product’, Giampietro (Giampietro 2006) sought to clarify the subtle differences between Wastes and By-Products. Giampietro assessed recent ECJ judgments and found a number of key differentiators. In determining the difference, Giampietro looked at the following scenarios;

- If there is an in intent to limit the quantity of material as part of a process, it may be inferred that the material would be a waste which would be discarded.
- If, after production of the primary product, there is an intention to market or exploit the value of the remaining material on economical and advantageous terms, without any further processing, then the material may be viewed as a by product and not a waste.
- If there is a (Palin Granit, 2002) ;

Degree of likelihood that that substance will be reused, without any further processing prior to its reuse. If, in addition to the mere possibility of reusing the substance, there is also a financial advantage to the holder in so doing, the likelihood of reuse is high. In such circumstances, the substance in question must no longer be regarded as a burden which its holder seeks to 'discard', but as a genuine product

(Palin Granit 2002,p. 37)

- If the material is voluntarily produced and 'it is the result of technical choice' (Saetti & Frediani 2004, p. 45) then it should be considered as a by-product
- If, after production of the primary product, the use of the remaining material is certain and the material is wanted.

This extends to the choice of technology where by making a certain choice of equipment and machinery, the producer expects and anticipates the production of certain secondary products.

- The fact that the by product is subjected to one of the operations detailed in Annex II (Standard waste treatment methods), does not of itself mean that the material is a waste or residue to begin with. It is acknowledged that even raw materials are subject to processes akin to 'Recovery Operations' (Arco Chemie 2000, p. 50).
- Even if the use of the material leads to the material disappearing, it should not necessarily be considered as a waste as again, even a raw material can be consumed in a process.
- Similarly, the fact that the material poses a risk to the environment cannot be used as a test for it to be considered as a waste as even raw materials pose a risk to the environment and must be treated with care.
- Even if the holder mistakenly considers the material to be a waste, it may be considered as a by-product if by his, (The holders), actions, he reuses the material in its 'Original state' without discarding it, then it should be considered as a by-product. (Giampietro 2006, p. 2)

- If the material is transported or conveyed to another user to satisfy their needs, it may still be considered as a by-product. This is a somewhat different interpretation in Saetti & Frediani (Saetti & Frediani 2004) to that expressed in Palin Granit (Palin Granit 2002) where the material should be used directly in the production process from which it originated and therefore in the production plant of the originator.

Conclusion

All of the above points to an interpretation of the intention of the producer of a production residue as to the use of that residue or by-product. The material cannot be considered as a waste if there is a deliberate intention to produce the material and the producer acknowledges that that the production of the material is a consequence of the production process. The similarity between recovery operations (as detailed in the waste directives) and many production processes can lead to significant difficulties in determining the presence of a waste.

Chapter 7: EU Case History on Waste Definition

Introduction

In any attempt to examine the European Court definition on waste, it is necessary to examine many of the cases on which the Court has made a determination in this regard. The following 11 cases are regularly cited in literature as examples of how the Court has determined the legal definition of waste at a particular time. It is important that these cases are seen in a broadly chronological order to show that that perspective of the Court has changed over the last 35 years.

It can also be argued that the rulings of the Court have not necessarily become more consistent in determining the boundaries of waste legislation. This will be clear with the analysis of individual cases

Case 1: Zanetti (1990)

The meaning of the word disposal was central to the case of Zanetti (Zanetti, 1990). In this case, the court was asked to adjudicate on the concept of waste where two Italian nationals had appealed an Italian court prosecution regarding the transport of waste without prior authorization. The material in this case was a form of used hydrochloric acid (HCL) and it was being transported to a facility for recovery and transformation into a different chemical. This case is cited as an example whereby material can still be deemed to be waste despite the fact that it may have an economic value. This is an important determinant in the argument as to the presence of waste. While the material was, without doubt, hazardous, it was not likely to be abandoned or discarded.

Limiting the definition of waste to those items which have no economic value would defeat the purpose of the Waste Framework Directive, ie, to control both recovery and disposal operations and ensure that both the environment and public health are protected. A resultant side effect of such a limitation might also lead to situations where some nominal payment is made in order to avoid or frustrate regulation.

In this judgment summary (Zanetti, 1990), the court found;

The concept of waste, within the meaning of Article 1 of Directive 75/442/EEC and Article 1 of Directive 78/319/EEC (regarding toxic and dangerous waste), is not to be understood as excluding substances and objects which are capable of economic re-utilization. The concept does not presume that the holder disposing of a substance or object intends to exclude all economic re-utilization of the substance or object by others.

(Zanetti 1990, p. 3)

In this case, the material was found to be a waste by the ECJ and while this judgment preceded the subsequent revision of Directive 75/442/EEC, This was subsequent confirmed as a valid judgment after the implementation of the necessary amendments which led to directive 91/156/EEC.

Case 2: Euro Tombesi (1997)

In the 1990's another case concerning the discharge of marble rubble by an Italian Company, Euro Tombesi (Tombesi 1997), the European Court of Justice (ECJ) further held that while materials may have an economic value, may be traded and subject to commercial transaction, they may still be deemed to be wastes and subject to the same restrictions as materials which are clearly waste materials. In this case, the ECJ found;

The concept 'waste' in Article 1 of Council Directive 75/442/EEC of 15 July 1975 on waste, as amended by Council Directive 91/156/EEC of 18 March 1991, referred to in Article 1(3) of Council Directive 91/689/EEC of 12 December 1991 on hazardous waste and Article 2(a) of Council Directive Regulation (EEC) No. 259/93 of 1 February 1993 on the supervision and control of shipments of waste within, into and out of the European Community, is not to be understood as excluding substances and objects which are capable of economic reutilization, even if the materials in question may be the subject of a transaction or quoted on public or private commercial lists. In particular, a deactivation process intended merely to render waste harmless, landfill tipping in hollows or embankments and waste incineration constitute disposal or recovery operations falling within the scope of the above mentioned Community rules. The fact that a substance is classified as a reusable residue without its characteristics or purpose being defined does not remove it from the scope of the Community rules on waste

(Tombesi 1997, 61(1))

Importantly noting the potential for confusion, the judgment stated;

There is an element of circularity: whether there is 'recovery' depends on whether there is 'waste', which depends on whether there is 'recovery'

(Tombesi 1997, p 55)

This theme of circularity was also picked up by Cheyne and Purdue (Cheyne and Purdue 1995) in examining the 1975 definition of waste,

the 1975 definition, having defined waste by way of disposal, then defined the term disposal itself as 'the collection, sorting, transport and treatment of waste as well as the storage or tipping above or underground, together with the transformation operations necessary for its reuse, recovery or recycling'. In this definition, the 'definition of disposal is circular as it itself employs the term 'waste'

(Cheyne and Purdue 1995, p 154)

The Tombesi case itself appeared to limit the definition of waste to those operations stated in Annexes IIA or IIB in the Waste Framework Directive. This became known as the 'Tombesi bypass'. The difficulties posed by such a limitation are obvious in terms of controlling and managing waste. It was clear that further clarification would be necessary to avoid situations where these exact operations were deliberately avoided, renamed or redefined so as to avoid the legal obligations and regulations associated with waste management.

Case 3: Arco Chemie (2000)

In the Arco Chemie case, (Arco Chemie 2000) a Dutch company applied to export 15000 Tonnes of production byproduct for use in a cement kiln as a fuel to a destination in Belgium. The byproduct material was a hydrocarbon type fuel of between 25 and 28 MJ/Kg and while not specifically mentioned in Annex I of the Waste Framework Directive, it was captured under the all encompassing Q16, which refers to ‘any materials, substances or products which are not covered by another category’

In this case, the substance was in fact undergoing one of the ‘recovery’ operations detailed in Annex IIB. However, in this case, the ECJ found that it may not be inferred that just because a substance undergoes an operation as detailed in Annex IIB;

That that substance has been discarded so as to enable it to be regarded as waste for the purposes of that directive.

(Arco Chemie 2000, p. 2)

This effectively overturned the ‘Tombesi Bypass’ of the earlier Tombesi case where the ECJ had found that the actions of Annex IIa or Annex IIB (disposal or recovery operations) could determine if the material is waste. In the Arco Chemie case, the Court elaborated;

The fact that a substance used as fuel is the residue of the manufacturing process of another substance, that no use for that substance other than disposal can be envisaged, that the composition of the substance is not suitable for the use made of it or that special environmental precautions must be taken when it is used may be regarded as evidence that the holder has discarded that substance or intends or is required to discard it within the meaning of Article 1(a) of Directive 75/442 on waste, as amended by Directive 91/156. However, whether it is in fact waste within the meaning of the directive must be determined in the light of all the

circumstances, regard being had to the aim of the directive and the need to ensure that its effectiveness is not undermined.

(Arco Chemie 2000, p. 4)

Note the use of the term ‘residue’ in the final judgment. There is an important distinction between a product ‘residue’, which may not be seen to be a desired part of a production process and a ‘by product’ of a production process where a ‘by product’ may be a desired outcome of such a process.

In examining this distinction between By-Product and Residue, Scotford (Scotford 2007) determined that,

A residue of one stage of a production cycle may be the raw material for a subsequent stage, with or without undergoing treatment to prepare it for use at that later stage.

(Scotford 2007, p. 11)

Scotford pointed out the similarities between some of the processes that by products undergo and the regulated recovery processes which would determine the same material to be a waste.

In the Arco Chemie case, the Court stated that the definition of waste should not be interpreted ‘restrictively’.

The fact that that use as fuel is a common method of recovering waste and the fact that that substance is commonly regarded as waste may be taken as evidence that the holder has discarded that substance or intends or is required to discard it within the meaning of Article 1(a) of Directive 75/442, as amended by Directive 91/156. However, whether it is in fact waste within the meaning of the directive must be determined in the light of all the circumstances, regard being had to the aim of the directive and the need to ensure that its effectiveness is not undermined.

(Arco Chemie 2000, p. 73)

In this case, it was the opinion of the Court that just because the residues were subject to a disposal or recovery operation as listed I Annexes IIA or IIB, this should not lead to the conclusion that the materials were waste. It was obvious that such operations were routinely carried out on materials which were clearly not waste. Rather, it was the opinion of the ECJ that whether the material is waste or not must be determined by reference to all the circumstances pertaining while ensuring the effectiveness of the waste directive, (in terms of pollution control and waste prevention) is not undermined. It is noteworthy that the court specifically stated that it did not regard the fact that a material may pose an environmental risk as sufficient to classify it as a waste.

The environmental impact of the processing of that substance has no effect on its classification as waste. An ordinary fuel may be burnt without regard to environmental standards without thereby becoming waste, whereas substances which are discarded may be recovered as fuel in an environmentally responsible manner and without substantial treatment yet still be classified as waste'

(Arco Chemie 2000, p. 66)

Allied to this, the concept of the material being 'completely' recovered and yet still being deemed as waste was considered at length. The Court stated;

In that regard, it should first be noted that even where waste has undergone a complete recovery operation which has the consequence that the substance in question has acquired the same properties and characteristics as a raw material, that substance may none the less be regarded as waste if, in accordance with the definition in Article 1(a) of the directive, its holder discards it or intends or is required to discard it.

The fact that the substance is the result of a complete recovery operation for the purposes of Annex IIB to the directive is only one of the factors to be taken into consideration for the purpose of determining whether the substance constitutes waste and does not as such permit a definitive conclusion to be drawn in that regard.

If a complete recovery operation does not necessarily deprive an object of its classification as waste, that applies a fortiori to an operation during which the objects concerned are merely sorted or pre-treated, such as when waste in the form of wood impregnated with toxic substances is transformed into chips or those chips are reduced to wood powder, and which, since it does not purge the wood of the toxic substances which impregnate it, does not have the effect of transforming those objects into a product analogous to a raw material, with the same characteristics as that raw material and capable of being used in the same conditions of environmental protection.

(Arco Chemie 2000, p. 94-96)

This point would prove relevant in a later case (Mayer Parry 2003) where metal which was collected, sorted, cleaned, cut, shredded and checked was still considered waste despite the fact that after processing it attained a value and was not liable to be discarded. The concept of ‘complete recovery’ needed some further definition beyond the level of having ‘value added’ or being less likely to be discarded.

Case 4: Palin Granit (2002)

In the Palin Granit case, (Palin Granit 2002) a Finnish company engaged in the quarrying of stone considered that the leftover stone was capable of being used as infill and gravel without any further treatment. At times, the market for this type of material was poor and this led to stockpiling of the material. The court was asked to consider whether this leftover stone, while awaiting a final use, constituted waste. The court found that in this type of case,

The use of the material must be a certainty, not just a possibility

The material must not require further processing prior to reuse

The use of such materials must be part of a continuing process of production.

The court further held that all 3 of the above criteria must be fulfilled independently. It would not suffice that they were or are partially met. Of course, the use that the material is finally put to, must in itself, be lawful. This case also allowed the court to draw a distinction between a 'by product' of a process, which can and will be reused, and a 'production residue' which may not find a new use. In the Palin Granit case, the court found that the left over stone should be classified as a waste as its use as an embankment or infill material was only incidental to the business of the company. The Court found that;

The leftover stone is only a secondary product and the undertaking seeks to limit the quantity produced. According to its ordinary meaning, waste is what falls away when one processes a material or an object and is not the end-product which the manufacturing process directly seeks to produce.

(Palin Granit 2002, p 32)

Paragraph 23 reiterated that while protecting the environment, the definition of waste can be interpreted widely as per the earlier case of Arco Chemie (Arco Chemie 2000);

The term 'discard' must be interpreted in light of the aim of Directive 75/442 which, according to its third recital, is the protection of human health and the environment against harmful effects caused by the collection, transport, treatment, storage and tipping of waste, and Article 174(2) EC, which provides that Community policy on the environment is to aim at a high level of protection and is to be based, in particular, on the precautionary principle and the principle that preventive action should be taken. It follows that the concept of waste cannot be interpreted restrictively (see Joined Cases C-418/97 and C-419/97 ARCO Chemie Nederland and Others [2000] ECR I-4475, paragraphs 36 to 40).

(Arco Chemie 2000, p. 23)

In the Palin Granit case however, the court judgment summary;

The holder of leftover stone resulting from stone quarrying which is stored for an indefinite length of time to await possible use discards or intends to discard that leftover stone, which is accordingly to be classified as waste within the meaning of Council Directive 75/442/EEC of 15 July 1975 on waste.

The place of storage of leftover stone, its composition and the fact, even if proven, that the stone does not pose any real risk to human health or the environment are not relevant criteria for determining whether the stone is to be regarded as waste.

(Palin Granit 2002, p. 1-2)

The second paragraph above is of some relevance in that it can be considered that the place of storage may not be subject to the normal site permitting and licensing restrictions. The holder of the material may not realize that they are holding a waste or engaged in a waste activity, yet the material they are handling, transporting and storing may be legally classified as a waste.

This case, together with Arco Chemie (Arco Chemie 2000), permitted some renewed insight into how the ECJ defined waste. They are however, somewhat contradictory in that the Arco Chemie case expressly did not rate environmental risk as a reason to determine the material to be waste. The Palin Granit case directly infers that the presence of leftover rock on the site for extended periods of time did indeed pose an environmental risk and this became a reason to determine the presence of waste. Scotford (Scotford 2007) referred to this decision as ‘constructive’ discarding and pointed out the contradiction between the two decisions.

In the Palin Granit judgment, the court stated;

the only foreseeable reuses of leftover stone in its existing state, for example in embankment work or in the construction of harbours and breakwaters, necessitate, in most cases, potentially long-term storage operations which constitute a burden to the holder and are also potentially the cause of precisely the environmental pollution which Directive 75/442 seeks to reduce. The reuse is therefore not certain and is only foreseeable in the longer term, with the result that the leftover stone can only be regarded as extraction residue which its holder ‘intends or is required to discard’ within the meaning of Directive 75/442, and thus falls within the scope of head Q 11 of Annex I to that directive.

(Palin Granit 2002, p. 38)

In the first subparagraph of Article 1(a) of Directive 75/442 waste is defined as ‘any substance or object in the categories set out in Annex I which the holder discards or intends or is required to discard’. Annex I and the EWC clarify and illustrate that definition, by providing lists of substances and objects which may be classified as waste. However, those lists are only intended as guidance and the classification of a substance or object as waste is, as the Commission rightly submits, primarily to be inferred from the holder’s actions, which depend on whether or not he intends to discard the substances in question. Therefore, the scope of the term ‘waste’ turns on the meaning of the term ‘discard’

(Palin Granit 2002, p. 22)

Case 5: AvestaPolarit Chrome OY (2003)

In a similar, but distinct matter from Palin Granit, (AvestaPolarit 2003) this case concerned the use of left over rock remaining as a result of mining operations in Finland and considered if these materials should be considered waste. The company concerned was intending to use this some of this 'surplus' rock to fill in underground caverns, other rock materials would be used as aggregate materials and yet more 'surplus' may be used in the construction of breakwaters and embankments. The ECJ drew on the earlier Palin Granit case in the thought process for Avesta Polarit. In this case, the court also looked at the word 'residue' and considered if residues are always waste. The Court held that in a number of particular situations, the residual materials should not be considered waste provided;

In this respect, a distinction must be drawn between residues which are used without first being processed in the production process for the necessary filling in of the underground galleries, on the one hand, and other residues, on the other.

The former are being used in that case as a material in the industrial mining process proper and cannot be regarded as substances which the holder discards or intends to discard, since, on the contrary, he needs them for his principal activity. Only if such use of those residues were prohibited, in particular for reasons of safety or protection of the environment, and the galleries had to be sealed and supported by some other process, would it have to be considered that the holder is obliged to discard those residues and that they constitute waste.

Outside such a case, if a mining operator can identify physically the residues which will actually be used in the galleries and provides the competent authority with sufficient guarantees of that use, those residues may not be regarded as waste. In this respect, it is for the competent authority to assess whether the period during which the residues will be stored before being returned to the mine is so long that those guarantees cannot in fact be provided.

(AvestaPolarit 2003, p. 36-39)

In short, if the material is to be used as a necessary part of the back filling of the mine (as in this instance) or as an integral part of the process (in a more general instance), then the material should not be classified or considered to be a waste.

In summary, the court found that;

The answer to the national court's first question must therefore be that, in a situation such as that at issue in the main proceedings, the holder of leftover rock and residual sand from ore-dressing operations from the operation of a mine discards or intends to discard those substances, which must consequently be classified as waste within the meaning of Directive 75/442, unless he uses them lawfully for the necessary filling in of the galleries of that mine and provides sufficient guarantees as to the identification and actual use of the substances to be used for that purpose.

(AvestaPolarit 2003, p .43)

In the final summary of the judgment, the Court ruled

The holder of leftover rock and residual sand from ore-dressing operations from the operation of a mine discards or intends to discard those substances, which must consequently be classified as waste within the meaning of Council Directive 75/442/EEC of 15 July 1975 on waste, as amended by Council Directive 91/156/EEC of 18 March 1991, unless he uses them lawfully for the necessary filling in of the galleries of that mine and provides sufficient guarantees as to the identification and actual use of the substances to be used for that purpose.'

(AvestaPolarit 2003, p. 1)

The Court went further in this judgment and became more specific about what should be considered as 'The Process'. If the stone is used as a landscaping

material, then it should be considered that this is not part of the production process. It may be an ‘environmentally-friendly’ way of dealing with the material, but it should not be considered part of ‘The Process ‘.

That is also true for the leftover rock accumulated in the form of stacks which will remain on the site indefinitely, and for the ore-dressing sand which will remain in the old settling ponds. Those residues will not be used for the production process, and cannot be used or marketed in any other way without prior processing. They are therefore waste which the holder discards. If they are landscaped, that constitutes merely an environment-friendly manner of dealing with them, not a stage in the production process.

(AvestaPolarit 2003, p. 42)

Case 6: Saetti & Fediani (2004)

This case concerned the use of Petroleum Coke ('Pet Coke') in a combined heat and power station situated in a refinery. The refinery was engaged in the refining of crude oil and the 'Pet Coke' as a by product of this process. The refinery was using this 'Pet Coke' in its own site and surplus electricity was being sold to users outside the site. In this case, the court held that the production of 'Pet Coke' was as a result of a technical choice by the refinery operators. The Court (Saetti & Fediani 2004) ruled that;

Petroleum coke cannot be classified as a production residue within the meaning of paragraph 34 of this order as the production of coke is the result of a technical choice (since petroleum coke is not necessarily produced during refinery operations), specifically intended for use as fuel, whose production costs are probably lower than the cost of other fuels which could be used to generate the steam and electricity which meet the needs of the refinery. Even if, as maintained by an adverse party in the main proceedings against Mr Saetti and Mr Fediani, the petroleum coke at issue automatically results from a technique which at the same time generates other petroleum substances which are the main results sought by the refinery's management, it is clear that, if it is certain that the coke production in its entirety will be used, mainly for the same purposes as the other substances, that petroleum coke is also a petroleum product, manufactured as such, and not a production residue. The file in the main proceedings sent to the Court appears to indicate that it is common ground that the petroleum coke is certain to be fully used as fuel in the production process and that all the resulting surplus electricity is sold.

(Saetti & Fediani 2004, p. 45)

The Court therefore ruled that;

The answer to the first question must therefore be that petroleum coke which is

produced intentionally or in the course of producing other petroleum fuels in an oil refinery and is certain to be used as fuel to meet the energy needs of the refinery and those of other industries does not constitute waste within the meaning of Directive 75/442.'

(Saetti & Fediani 2004, p. 47)

According to Waite (Waite 2006), this was a case of

Showing that even the existence of several of the waste 'indicators', does not necessarily lead to the conclusion that material is waste if it is genuinely wanted by its holder

(Waite 2006, p. 7)

In this case, the fact that the 'Pet Coke' was manufactured as a result of a technical choice was a key differentiator in the decision on whether to classify the material as a waste.

Case 7: Niselli (2004)

This case involved an Italian metals trader (Antonio Niselli). He was found to be collecting and transporting waste ferrous metals without the necessary licenses and permits. In this case, the court was asked to consider (Niselli 2004);

whether production or consumption residues can be excluded from the meaning of 'waste' in the first subparagraph of Article 1(a) of Directive 75/442 where they can be or are reused in the same or a similar or different production or consumption cycle, without undergoing any prior treatment and without causing harm to the environment, or after undergoing prior treatment without, however, requiring any of the recovery operations listed in Annex C to Decree-Law No 22/97, which transposes Annex II B to Directive 75/442 into Italian law word for word.

(Niselli 2004, p. 41)

An important distinction was drawn in this case between by-products, which can and will be reused and production residues and indeed second hand goods (such as scrap metals in this case), whose use or re use is more uncertain. In the case of Niselli, the final outcome of the sorting of scrap metals, did not, in the opinion of the Court, lead to the material not being considered to be a waste. However, once again, the Court appears to have contradicted itself by noting that the risk of harm to the environment was rated as one reason why a material should be considered to be a waste. This opinion is at variance with the earlier decision of Arco Chemie (Arco Chemie 2000).

The following quotations from the Niselli judgment summarize the Courts position on these materials.

It is clear from the foregoing that, in the light of the objectives of Directive 75/442, it is acceptable to classify goods, materials or raw materials, resulting from a process of manufacture or extraction the primary purpose of which is not their

production, not as 'waste', but as by-products whose holder does not wish to 'discard' them within the meaning of the first subparagraph of Article 1(a) of that directive, provided that their reuse is a certainty, without any prior processing, and an integral part of the production process (see Case C-114/01 AvestaPolarit Chrome [2003] ECR I-8725).

However, the latter analysis is not valid as regards consumption residues which cannot be regarded as 'by-products' of a manufacturing or extraction process which are capable of being reused as an integral part of the production process.

Nor can a similar analysis be accepted with regard to such residues, which cannot be classified as second-hand goods reused definitely and in a comparable manner, without prior processing. '

(Niselli 2004, p. 47-49)

In this case, the court found that the materials concerned in this case were not 'to be reused definitely and without prior processing' and in this case, the materials were in fact deemed to be waste. For the Court, the main finding was that;

The contentious materials were then sorted, and sometimes treated, and they constitute a secondary raw material to be used in steelmaking. In such a context, they must however continue to be classified as 'waste' until they have actually been recycled into steel products, that is to say, until the constitution of the finished products derived from the reprocessing for which they are intended.

(Niselli 2004, p. 52)

In summary, the ECJ ruled that;

The definition of 'waste' in the first subparagraph of Article 1(a) of Council Directive 75/442/EEC of 15 July 1975 on waste, as amended by Council Directive 91/156/EEC

of 18 March 1991 and by Commission Decision 96/350/EC of 24 May 1996, cannot be construed as covering exclusively substances or objects intended for, or subjected to, the disposal or recovery operations mentioned in Annexes II A and II B to that directive or in the equivalent lists, or to which their holder intends or is required to subject them.

The meaning of 'waste' for the purposes of the first subparagraph of Article 1(a) of Directive 75/442, as amended by Directive 91/156 and by Decision 96/350, is not to be interpreted as excluding all production or consumption residues which can be or are reused in a cycle of production or consumption, either without prior treatment and without harm to the environment, or after undergoing prior treatment without, however, requiring a recovery operation within the meaning of Annex II B to that directive

(Niselli 2004, p. 1-2)

This finding is similar to that determined in Mayer Parry (below), which was also concerned with the determination of the status of scrap metal which had undergone some level of processing. In the Mayer Parry case however, the Court appeared to give some direction as to when a material would cease to be a waste. This distinction is discussed later in this dissertation.

Case 8: Van de Walle (2004)

The Van de Walle case involved a leakage of fuel oil from a Texaco petrol station in Brussels. This led to soil contamination in the grounds beneath the station as well as adjoining property. While the Belgian authorities failed in their prosecution of the station manager (Mr. Van de Walle) and Texaco executives, the ECJ was asked to consider 2 questions, namely;

whether hydrocarbons which are spilled unintentionally and cause soil and groundwater contamination may be considered to be waste within the meaning of Article 1(a) of Directive 75/442 and whether the soil thus contaminated may also be classified as waste within the meaning of that provision even when it has not been excavated, and secondly whether, in circumstances such as those in the main action, the petroleum undertaking which supplies the service station may be considered to be the producer or holder of such waste within the meaning of Article 1(b) and (c) of the Directive.

(Van de Walle 2004, p. 23)

The defendants in this case argued that they had no ‘intention’ of discarding the fuel products which were delivered to the station and that they did not operate a business which could be considered to be producing waste. In the words of the judgment;

Mr Van de Walle and Others argue that Texaco delivered petroleum products which were sound at the time they were sold to the service station, an operation which cannot be regarded as the production of waste or as indicative of an intention to get rid of waste.

Mr Van de Walle and Others take the view that the Community legislature defined waste as any substance which the holder ‘discards or intends or is required to discard’ in order to include a subjective element beyond the objective element (registration of a waste in a catalogue on the basis of its characteristics or its degree of toxicity), confining the scope to situations where there is action, intention or obligation on the part of the holder to discard waste, by either disposal or recovery. This interpretation of the verb sought to limit its meaning where there is a deliberate

action of discarding the waste. In this case, the spillage was accidental or perhaps negligent, but there was no intention on the part of the defendants to discard any fuel.

(Van de Walle 2004, p. 30-31)

Furthermore, Texaco argued that they themselves were not the holder of the waste product. They argued that they delivered 'sound' material to the station and that the independent operator of the station was the legitimate holder of any waste products.

Obviously, the importance of any determination as to whether soil, previously uncontaminated with leaked fuel, becomes a waste after the fuel was leaked had significant implications for the cost of any remediation.

In this important case, the court found that the spilled fuel cannot be separated from the contaminated soil;

It is clear that accidentally spilled hydrocarbons which cause soil and groundwater contamination are not a product which can be re-used without processing. Their marketing is very uncertain and, even if it were possible, implies preliminary operations would be uneconomical for their holder. Those hydrocarbons are therefore substances which the holder did not intend to produce and which he 'discards', albeit involuntarily, at the time of the production or distribution operations which relate to them.

(Van de Walle 2004, p. 47)

Moreover, the Court also found that;

If hydrocarbons which cause contamination are not considered to be waste on the ground that they were spilled by accident, their holder would be excluded from the obligations which Directive 75/442 requires Member States to impose on him, in contradiction to the prohibition on the abandonment, dumping or uncontrolled disposal of waste. '

(Van de Walle 2004, p. 49)

The Court ruled that the soil was indeed was on the basis that;

The same classification as 'waste' within the meaning of Directive 75/442 applies to soil contaminated as the result of an accidental spill of hydrocarbons. In that case, the hydrocarbons cannot be separated from the land which they have contaminated and cannot be recovered or disposed of unless that land is also subject to the necessary decontamination. That is the only interpretation which ensures compliance with the aims of protecting the natural environment and prohibiting the abandonment of waste pursued by the Directive. It is fully in accord with the aim of the Directive and heading Q4 of Annex I thereto, which, as pointed out, mentions 'any materials, equipment, etc., contaminated as a result of [materials spilled, lost or having undergone other mishap]' among the substances or objects which may be regarded as waste. The classification as waste in the case of land contaminated by hydrocarbons does indeed therefore depend on the obligation on the person who causes the accidental spill of those substances to discard them. It cannot result from the implementation of national laws governing the conditions of use, protection or decontamination of the land where the spill occurred.

Since contaminated soil is considered to be waste by the mere fact of its accidental contamination by hydrocarbons, its classification as waste is not dependent on other operations being carried out which are the responsibility of its owner or which the latter decides to undertake. The fact that soil is not excavated therefore has no bearing on its classification as waste.

(Van de Walle 2004, p. 52-53)

The final ruling of the ECJ found that;

Hydrocarbons which are unintentionally spilled and cause soil and groundwater contamination are waste within the meaning of Article 1(a) of Council Directive 75/442/EEC of 15 July 1975 on waste, as amended by Council Directive 91/156/EEC of 18 March 1991. The same is true for soil contaminated by hydrocarbons, even if it has not been excavated. In circumstances such as those in the main proceedings, the petroleum undertaking which supplied the service station can be considered to be the holder of that waste within the meaning of Article 1(c) of Directive 75/442

only if the leak from the service station's storage facilities which gave rise to the waste can be attributed to the conduct of that undertaking.

(Van de Walle 2004, p. 61)

McIntyre (McIntyre 2009) in reviewing the Van de Walle case, found that this judgement would have ‘a profound impact on the application of rules imposing liability for the remediation of contaminated sites’ (McIntyre 2009, p. 1). This judgement concluded that contaminated solids fell within the meaning of Categories of Waste Q4 Annex I waste material; ie.

Q4 Materials spilled, lost or having undergone other mishap, including any materials, equipment, etc., contaminated as a result of the mishap

(Council Directive 91/156/EEC, Annex I)

And also Q15 of Annex I;

Q15 Contaminated materials, substances or products resulting from remedial action with respect to land

(Council Directive 91/156/EEC, Annex I)

One important point taken from the judgment is that the accidentally spilled hydrocarbons could be considered as a ‘Production Residue’ and that the distributor did not intend to produce as part of the manufacturing or distribution process. The importance of this judgement is the fact that the ECJ considered the soil to be waste according to a broad interpretation of the waste directive.

Case 9: Abfall (2002)

This case involved the proposal by Abfall Service AG to ship 7000 Tonnes of Hazardous Waste from Austria to Germany in 1998. The waste was to be deposited in a former salt mine as part of a mine sealing process. While the German authorities appeared to have no difficulty with the shipment of the waste into their country, the Austrian Authorities objected to the shipment on the basis that the shipment would lead to the 'disposal' of the waste and not a 'recovery' operation. The case was heard in the ECJ and the essential question to be answered was whether the shipment of the waste could be classified as either a disposal or recovery operation. In addition, the refusal of the Austrian authorities to authorise the shipment gave rise to questions to what should happen when there is a difference of opinion between States of shipment, transit states and receiving states as to the status of a waste shipment. The control of waste movement across borders through the process of 'Transfrontier Shipment' is an important control mechanism for each member state to ensure that waste is disposed, recovered or recycled correctly and consistently across the EU.

In this case, the Court found that all parties involved in the transfrontier shipment of waste have the right and indeed the duty to object to the shipment if they feel that the shipment has been wrongly classified;

...that the competent authority of dispatch, within the meaning of Article 2(c) thereof, is competent to verify whether a proposed shipment classified in the notification as a 'shipment of waste for recovery' does in fact correspond to that classification, and

- *that, if that classification is incorrect, the authority must oppose the shipment by raising an objection founded on that misclassification within the period prescribed by Article 7(2) of the Regulation.*

(Abfall 2002, p. 50)

It must therefore be concluded that the intention of Annexes II A and II B to the Directive is to list the most common disposal and recovery operations and not precisely and exhaustively to specify all the disposal and recovery operations covered by the Directive.

(Abfall 2002, p. 60)

In effect, the Court felt that each case must be examined on its own merits and the Court gave some indication for future findings by stating;

Consequently, where, having regard solely to the wording of the operations in question, a waste treatment operation cannot be brought within one of the operations or categories of operations referred to in Annex II A or II B to the Directive, it must be classified on a case-by-case basis in the light of the objectives of the Directive.

(Abfall 2002, p. 64)

In this particular case, the court found that the deposit of the waste in a disused mine constituted a recovery operation on the basis that the deposition served to replace other materials which would be been used for the same purpose. In the words of the court;

The deposit of waste in a disused mine does not necessarily constitute a disposal operation for the purposes of D 12 of Annex II A to the Directive.

The deposit must be assessed on a case-by-case basis to determine whether the operation is a disposal or a recovery operation within the meaning of that Directive.

Such a deposit constitutes a recovery if its principal objective is that the waste serve a useful purpose in replacing other materials which would have had to be used for that purpose.

(Abfall 2002, p. 71)

In this case therefore, the final ruling of the Court was that;

- that the competent authority of dispatch, within the meaning of Article 2(c) thereof, is competent to verify whether a proposed shipment classified in the notification as a 'shipment of waste for recovery' does in fact correspond to that classification, and

- that, if that classification is incorrect, the authority must oppose the shipment by raising an objection founded on that misclassification within the period prescribed by Article 7(2) of the Regulation.

The deposit of waste in a disused mine does not necessarily constitute a disposal operation for the purposes of D 12 of Annex II A to Council Directive 75/442/EEC of 15 July 1975 on waste, as amended by Council Directive 91/156/EEC of 18 March 1991 and Commission Decision 96/350/EC of 24 May 1996.

The deposit must be assessed on a case-by-case basis to determine whether the operation is a disposal or a recovery operation within the meaning of that Directive.

Such a deposit constitutes a recovery if its principal objective is that the waste serve a useful purpose in replacing other materials which would have had to be used for that purpose.

(Abfall 2002, p. 1-2)

Case 10: Commission Vs Spain (2005)

This case, which was very similar in appearance to an Irish case (Brady-v-Environmental Protection Agency 2007), helped to resolve the lack of clarity regarding agricultural waste and in particular the issue of faecal matter arising as a result of farming activity. The intent of the various waste directives was to include 'wastes from agricultural primary production'. This term was included in the European Waste Catalogue (EWC) which was defined on 20 December 1993.

This particular case concerned the effluent from some 200 pig farms in the Catalonian region of Spain. In 2000, it was noted that significant pollution from these pig farms had leaked into the groundwater and aquifer system of the Girona region of Catalonia. This pollution was primarily as a result of both animal faeces as well as animal carcasses. As a result of the inaction of the Spanish authorities, the European Commission brought the Spanish Government to the European Court.

In their defense, the Spanish authorities argued against;

The classification of the pig slurry as waste within the meaning of Directive 75/442. The slurry is used as mineral organic soil fertiliser and is therefore not waste but a raw material

(Case C121/03 2005, p. 45)

In addition, they stated that;

The Catalan authorities have implemented training for farmers with a view to appropriate waste management of livestock effluent and that they encourage the setting up of composting works for the treatment of surplus excreta

(Case C121/03 2005, p. 55)

In its judgment, the ECJ agreed that the slurry and excrement, while used as a fertiliser, should not be regarded as a waste, stating;

It is clear from the contents of the case-file that the slurry is used as an agricultural fertiliser in the context of rules for spreading in accordance with good agricultural practice laid down by the Autonomous Community of Catalonia. The persons running those farms are not therefore seeking to discard it, with the result that the slurry is not 'waste' within the meaning of Directive 75/442

(Case C121/03 2005, p. 65)

This judgment is at complete variance with the Irish case of Brady-v-Environmental Protection Agency (see Irish Cases, Chapter 9) and shows clearly the contradiction between the European Court on one hand and the National Courts on the other. This contradiction is centered around the definition itself and how it should be interpreted on a case by case basis.

Case 11: Mayer Parry Recycling (2003)

This final ECJ case (Mayer Parry 2003) brought a level of definition to the concepts of both waste and recycling. Mayer Parry Recycling Ltd was a UK company involved in the treatment of scrap metal so as to make it suitable for further processing into 'Grade 3b' type material. This material is subsequently sold as a feedstock to steelmakers for further processing into ingots, sheets and coils of steel.

Mayer Parry Recycling Ltd argued that their process, which consisted predominantly of collection of scrap, inspections, sorting, cleaning, cutting, separating and shredding of the material prior to selling on to steelmakers, was a form of recycling and thus the material treated should no longer be regarded as waste. This would have had significant benefits for the company as it would lift restrictions on transport, international shipments, insurances, permits required etc.

The material under consideration in the case could also be classified as packaging waste. Under Directive 94/62/EC on packaging and packaging waste, member states are obliged to achieve set targets in the recovery and recycling of packaging waste. If Mayer Parry were successful in being deemed to have recycled the material they collected, they could also benefit significantly in being appointed as an accredited reprocessor of packaging waste and be able to trade associated Packaging Recovery Notes (PRNs). This would have brought significant financial benefits to the company.

The company has previously failed in this argument to convince the UK authorities of the merits of their argument. Subsequently the case came to the European Court of Justice for decision.

In its judgment, the Court found against Mayer Parry in their argument that they were recycling the waste in their care. The Court found;

.....the production of Grade 3B material does not constitute reprocessing of metal packaging waste with the objective of returning that material to its original state, namely steel, and of reusing it in accordance with its original purpose, namely the manufacture of metal packaging, or for other purposes. In other words, the metal packaging waste reprocessed by Mayer Parry does not undergo reprocessing in a

production process conferring on the Grade 3B material characteristics comparable to those of the material of which the metal packaging was composed.

Grade 3B material is a mixture which, apart from ferrous elements, contains impurities (ranging from 3% to 7% according to the various parties), such as paint and oil, non-metallic materials and undesirable chemical elements, which remain to be removed when the material is used to produce steel. Grade 3B material cannot therefore be used directly for the manufacture of new metal packaging.

It follows that Grade 3B material such as that produced by Mayer Parry cannot be regarded as recycled packaging waste.

(Mayer Parry 2003, p. 83-85)

But instead, the Court found that the Mayer Parry material only ceased to be a waste when it was subsequently processed (by a steel company such as Corus UK) into rolls or ingots or coils of steel. This material could subsequently be processed into original packaging material or indeed, other types of steel products. The Court found that the end use of these coils, ingots and rolls was not relevant, but the fact that they shared the ‘comparable characteristics’ of the original packaging material was relevant.

It accordingly remains to consider whether the use of Grade 3B material in the production of ingots, sheets or coils of steel, in circumstances such as those of the main proceedings, may be regarded as a packaging-waste recycling operation.

That is in fact the case, since the production process in question results in the manufacture of new products, namely ingots, sheets or coils of steel, which possess characteristics comparable to those of the material of which the metal packaging waste incorporated in the Grade 3B material was initially composed and which may be used for a purpose identical to the original purpose of the material from which that waste was derived, namely the metal packaging, or for other purposes.

It follows from all the foregoing considerations that the answer to the second question must be that ‘recycling’ within the meaning of Article 3(7) of Directive 94/62 is to be interpreted as not including the reprocessing of metal packaging waste when it is transformed into a secondary raw material such as Grade 3B

material, but as covering the reprocessing of such waste when it is used to produce ingots, sheets or coils of steel.

(Mayer Parry 2003, p. 86-88)

This finding is broadly in accordance with the similar finding in the case of Arco-Chemie (Arco Chemie 2000). It should be remembered that in that case, the court found that;

A substance ceases to be waste only when it has undergone a complete recovery operation within the meaning of Annex IIB to the directive, that is to say when it can be processed in the same way as a raw material.

(Arco Chemie 2000, p. 93)

Although in this case, unlike the Arco Chemie situation, there was no intention on the part of the holder to discard the material, as it had an inherent value, this does not preclude the material having the status of waste in a legal sense.

Chapter 8: Irish Waste Legislation

Introduction

The Waste Management Act 1996 gave effect to the Council directives 75/439/EEC, 75/442/EEC and 91/156/EEC as well as other directives including those concerning waste water treatment, packaging waste, hazardous waste. This 1996 act covered both hazardous and non hazardous waste

1996 Waste Management Act (Ireland) Vs European Directives

The definition of waste in the 1996 act listed the 16 categories of waste mentioned in the earlier European Directives. In addition, the act also included all materials listed in the European Waste Catalogue (EWC) as waste. The 1996 act expressly states that waste;

means any substance or object belonging to a category of waste specified in the First Schedule or for the time being included in the European Waste Catalogue which the holder discards or intends or is required to discard, and anything which is discarded or otherwise dealt with as if it were waste shall be presumed to be waste until the contrary is proved

(Waste Management Act 1996, Section 4(1)(a))

While Annex 1 of the Directive is broadly the same as the 1996 Waste Management Act, the Irish definition therefore goes further than that in the directives (Scannell 2009) by

Expressly providing that anything discarded or otherwise dealt with as a waste has to be presumed to be a waste unless the contrary is proved'

(Waste Management Act 1996, Section 4(1)(a))

This important, stand alone requirement is not mirrored in the European directive and puts the onus on the holder of the waste to prove otherwise should the regulatory authorities take a view that the material is a waste. This is likely to be tested in the courts given the restricted nature of the Waste Management Act as currently drafted. The author is aware of a number of potential cases where opinion could be challenged, one example includes;

- Could a processor of surplus and 'waste' paper argue that his plant should not be subject to a waste management regime if it could be proven that the paper is actually being traded?

While waste paper is mentioned in the European Waste catalogue, this material may not be subject to the act of being discarded and may instead be sold off if for instance the paper is surplus to requirements on a newspaper production line, it may consist of offcut materials, be a reel which is too small to process etc. It could therefore be argued that this material is a residue and ultimately the question must be asked, does the holder of the waste take a view that the material is a waste?

There is also a possible issue with the interpretation of the word 'Holder'. Laurence (Laurence 2000) makes the point that in the directive on waste, the holder of the waste is defined in Article 3(6) of the Directive as meaning

The waste producer or the natural or legal person who is in possession of the waste

(Directive 2008/98/EC, Article 3(6))

The waste producer is defined in two different ways as being either as above or;

Anyone whose activities produce waste and/or anyone who actively carries out preprocessing, mixing or other operations resulting in a change in the nature or composition of this waste

(Directive 2008/98/EC, Article 3(5))

Whereas the 1996 Waste Management Act has a differing definition. In this case, the holder is defined in Section 5 of the act as ‘

The owner, person in charge or any other person having, for the time being, possession or control, of the waste

(Waste Management Act 1996, Section 5)

This could be interpreted more restrictively in the Irish context as meaning the last person or body to have possession of the waste. This almost gives some level of responsibility to a holder to recognise the nature of the waste and have some level of consciousness that the material is indeed a waste. It is further difficult to understand the meaning or significance of the term ‘for the time being’ in an Irish Waste context.

This matter is further confounded by the Waste management act definition of waste as being waste ‘until the contrary is proved’. (Waste Management Act 1996, Section 5). This again puts a heightened responsibility on the holder of the waste to recognise the significance of what they have in the possession and treat it as being subject to waste regulations.

A more lenient view could be taken in the Directives definition that the person who has possession of the waste can determine whether the material is waste or not. It could appear that given a choice, the possessor of the waste may take a view that the material is not waste and can avoid the controls and permits associated with waste handling and transport. Such a view could be taken by, for instance, a Materials Transfer Station Operator, or somebody who undertakes some level of processing or treatment on the waste and could perhaps argue that the material has changed its composition and should no longer be regarded as waste. They may, for instance, argue that they no longer wish to discard the material or that they have made such a deliberate decision to produce the material and therefore, the material should no longer be regarded as waste.

Laurence (Laurence 2000) makes the point that the Waste Management Act does not in any way refer to the producer of the waste.

The Third Schedule of the 1996 act also defines a list of Waste Disposal Activities which, while not identical to the European Directive of the time do include many of those activities listed in the European Directive.

In summary, the 1996 Waste Management Act does have significant differences when compared to the related European Directives. The role of 'Waste Holder' could be interpreted entirely differently in an Irish Context. The time based language including such terms as 'for the time being' is also likely to be the subject of discussions before the Irish Courts given the nuances of language involved in cases such as O'Regan vs Cork (2005) where the inclusion of the present tense in the act was the subject of a challenge. (See below)

Waste Directives and Transposition into Irish law

Ireland's ability to transpose European Directives such as 75/442/EEC and 91/156/EEC into law and then to enforce such law has been the subject of much critical coverage. These cases include, but are not limited to;

C-316/06 - Urban Waste Water Treatment under directive 80/778/EEC.

C-215/06 - Assessment on the Environment under directive 85/337/EEC.

C-183/05 - Conservation of Natural Habitats under directive 92/43/EEC.

The Commission found it necessary to take proceedings against Ireland in case C-494/01 (Commission of the European Communities Vs Ireland 2005) after 12 complaints were received by the commission relating to 18 waste disposal activities in Ireland between 1997 and 2000. (Particular concern regarding transposition of article 12 of the waste directive, ie; Permitting of waste facilities). In his opinion, Advocate General Geelhoed found that in the case of Ireland;

....The infringements of these core provisions of the waste directive are of such a scale, duration and seriousness that they may be qualified as general and structural.

(Commission of the European Communities Vs Ireland 2005, p.119)

In other words, Ireland has allowed a situation to develop in terms of waste management that;

Can only be redressed by a revision of the general policy and administrative practice of the Member State in respect of the subject governed by the Community measure involved

(Commission of the European Communities Vs Ireland 2005, p.47)

In addition, AG Geelhoed found that;

The failure to comply with Articles 4, 5, 9 and 10, which constitute the core of the waste directive, has been persistent, widespread and serious so that there are sufficient grounds for establishing that Ireland has infringed the waste directive in a general and structural manner.

(Commission of the European Communities Vs Ireland 2005, p.123)

In his summary, AG Geelhoed found that;

.....by failing throughout its territory for a protracted period of time firstly to establish an adequate and fully operational licensing framework for the disposal and recovery of waste, secondly to ensure that holders of waste have it handled by a public or private waste collector, by an undertaking authorised to carry out waste disposal or recovery operations or that they recover or dispose of it themselves , thirdly to prevent the abandonment, dumping and uncontrolled disposal of waste, thereby endangering human health and causing environmental harm, and fourthly by failing to establish an adequate network of disposal installations Ireland has infringed its obligations under Articles 4, 5, 8, 9 and 10 of Council Directive 75/442/EEC on waste.

(Commission of the European Communities Vs Ireland 2005, p.126)

It is therefore widely acknowledged that Ireland has been delinquent in bringing its waste legislation into line with European requirements. This has been the subject of much critical press coverage which continues to this day. A lax attitude to waste legislation continues to exist despite the criticisms levelled from the ECJ.

Exceptions to the 1996 Waste Management Act

There are a number of exceptions to the 1996 Waste Management Act. In particular, Section 3 of the 1996 Act which states that the Act does not apply to;

(a) an emission into the atmosphere, other than an emission from a facility for the holding, recovery or disposal of waste

(Waste Management Act 1996, Section 3(a))

This has implications for waste management companies to ensure that odours and other emissions from their premises do not cause pollution to the area. This also allows the EPA to prosecute and control activities of waste management companies.

(b) sewage and sewage effluent (other than sludge from a facility for the treatment of sewage)

(Waste Management Act 1996, Section 3(b))

(This is covered in separate legislation Local Government (Water Pollution Act, 1977))

(c) the treatment of effluent or the discharge thereof to waters, other than the treatment of effluent at, or its discharge from, a facility for the holding, recovery or disposal of waste;

(d) the dumping of waste at sea

(Waste Management Act 1996, Section 3(c)(d))

These activities are covered by the Dumping at Sea Act 1996

(e) a radioactive substance within the meaning of the Radiological Protection Act, 1991 (including a radioactive waste product).

(Waste Management Act 1996, Section 3(e))

In addition, Section 51 of Waste Management Act 1996 states that a waste licence is NOT required for the ‘recovery of faecal matter of animal or poultry origin in the form of manure or slurry’

Laurence (Laurence 2000) also notes that Article 2(1) of the Waste Framework Directive excludes;

- (a) gaseous effluents emitted into the atmosphere;*
- (b) radioactive waste;*
- (c) waste resulting from prospecting, extraction, treatment and storage of mineral resources and the working of quarries;*
- (d) animal carcasses and the following agricultural waste: faecal matter and other natural, non-dangerous substances used in farming;*
- (e) waste waters, with the exception of waste in liquid form;*
- (f) decommissioned explosives.*

(Directive 2008/98/EC, Article 2(1))

Laurence points out that the exclusion for mining and quarrying is not transposed into Irish Law. This could be interpreted as meaning that mining and quarrying activities are indeed subject to the Waste Management Act.

Chapter 9: Waste Definition in Irish Law- Case Studies

The powers of the 1996 Waste Management Act are wide ranging and particularly Section 57 where;

.....on application by any person to the High Court, that court is satisfied that waste is being held, recovered or disposed of in a manner that causes or is likely to cause environmental pollution, or s. 34 or s. 39(1) to be contravened, it may by order:-

(a) require the person holding recovering or disposing of such waste to carry out specified measures to prevent or limit or prevent a recurrence of such pollution or contravention within a specified period;

(b) require the person holding, recovering or disposing of such waste to do, refrain from or cease doing any specified act, or to refrain or cease making any specified omission,

(c) make such other provision, including provision in relation to the payment of costs, including costs incurred by the agency in relation to the carrying out of relevant inspection or surveys and the taking of relevant samples and the analysis of the results of such activities, that the court considers appropriate.

(Waste Management Act 1996, Section 57)

Irish Case law contains a number of examples where the definition of waste was under dispute. Among these, the most notable example is the case of;

Case 1: Brady v The Environmental Protection Agency (2007)

In this case, Donal Brady was the owner of an intensive pig farm in Edgeworthstown, Co. Longford. The farm contained approximately 10,000 pigs and obviously, the disposal of the resultant 30,000 M3 of effluent each year was a major cause of concern for the Environmental Protection Agency (EPA). The EPA is the statutory agency set up under the 1992 Environmental Protection Agency Act which specific responsibility for (amongst other activities);

1. The licensing, regulation and control of activities for the purposes of environmental protection
2. The monitoring of the quality of the environment, including the establishment and maintenance of data bases of information related to the environment and making arrangements for the dissemination of such information and for public access thereto
3. The provision of support and advisory services for the purposes of environmental protection to local authorities and other public authorities in relation to the performance of any function of those authorities and ;
4. The promotion and co-ordination of environmental research, the provision of assistance and advice in relation to such research and the carrying out, causing to be carried out, or arranging for, such research

In this case, Brady had agreed with neighbouring farms to allow the local farmers to use the pig slurry as a fertiliser on their lands. He received a licence in March 1998 from the EPA which required him to monitor and control the use of pig slurry on these neighbouring farms. In appealing the licence to the Irish High Court, one of his arguments was that the pig slurry should be deemed to be a form of organic fertiliser and not, in fact, waste. In his judgement, Mr Justice Charlton quoted widely from European cases such as these referenced earlier.

In his final summary, Justice Charleton found that the slurry was indeed waste and stated;

I would conclude that it is impossible to hold that the pig slurry being produced by the applicant in industrial quantities is not waste within the meaning of Article 1 of Council Directive 75/442/EEC as amended by Council Directive 91/156/EEC. I rule that the sale or gift to other farmers of this material constitutes the disposal of waste within the meaning of s. 3 of the Environmental Protection Agency Act, 1992 as amended and that it is an emission. The applicant thus requires a licence from the respondent.

I would hold that the conditions attached to the licence of the applicant are necessary for the statutory purpose for which the respondent was set up and that they are both within the powers of the respondent and reasonably related to the activity licensed. In fairness to the argument presented on behalf of the applicant, I would find it impossible to give a different meaning to waste than that defined herein on the basis of the relevant Directives by the European Court. This product, pig slurry, could only be not classified as waste, were it to be:-

- 1. A non dangerous substance that is used in farming (I would hold that it is in fact dangerous to the environment and to human health);*
- 2. That special environmental precautions do not need to be taken when it is used (I would hold that special environmental precautions are essential if it is properly to be discarded);*
- 3. That it is certain to be used correctly as an organic fertilizer as opposed to becoming a pollutant (I would hold that the certainty of its use in this respect is far from established and is, indeed, uncertain);*

and

- 4. That the material is spread in accordance with good agricultural practice pursuant to regulations laid down by a competent authority (I would hold that the respondent is the competent authority and that the regulation of this activity is essential).*

(Brady v The Environmental Protection Agency 2007, p. 44-45)

The important differences between this case and the aforementioned Commission Vs Spain (Commission Vs Spain) merit examination. In the Spanish case, the court was satisfied that Pig Slurry was excluded from the definition of waste. However, in the Irish context, Justice Charleton held that;

- 1) The fact that special precautions have to be taken when pig slurry is used as a fertiliser. This should mean that the substance requires to be discarded
- 2) The reuse was not certain or lawful
- 3) That regulations (for good agricultural practice) are required for it to be reused

This case is therefore an excellent example of the divergence of opinion between the ECJ and the National Courts.

Case 2: O'Regan Vs Cork (2005)

In the case of Louis O'Regan Vs Cork (2005), the definition of waste in an Irish context also arose. In this case, the respondent (O'Regan), had pleaded guilty to dumping of waste on an unauthorised landfill at a site in Weir Island, Carrigtoohill, Co. Cork. In his defence, the respondent had initially argued that the materials concerned were not actually waste and that the material deposited at Weir Island did not constitute waste on the basis that any waste material which had removed from any of the material deposited on the site. The respondent had subsequently changed his plea to one of guilty and accepted that the materials dumped at the site at Weir Island did actually constitute waste.

In his judgment, Mr Justice Clarke relied on four tests to prove the presence of waste on the site at Weir Island;

- 1) Section 5 of the Waste Management Act 1996 and the relevant European Waste Catalogue.
- 2) Section 57 of the Waste Management Act 1996 which requires that 'waste is being recovered or disposed of'. Justice Clarke found this to be the case.
- 3) Section 4 of the Waste Management Act 1996 and the related third schedule, which included the act of 'deposition in or under land (including landfill)'
- 4) The risk of environmental pollution exists. Justice Clarke expanded on the meaning of 'Risk'. He found that it was not necessary for damage to the environment to actually occur, only that an expert witness can convince a Court that a meaningful risk does exist. Quoting from a similar case of Wicklow County Council vs Fenton, where Justice O'Sullivan found that;

one of the witnesses for the applicant expostulated during the trial that it was surely not necessary to wait for actual harm to be caused before the applicant could make its case. Indeed it is not. Environmental pollution is caused if a risk is created to waters, the atmosphere, land, soil, plants or animals

(Wicklow County Council vs Fenton 2002, p. 7)

In this case, Justice Clarke found that;

There is, in any event, ample evidence to justify a conclusion that the materials concerned are waste as defined. The definition of waste for the purposes of the Act is by reference to the European Waste Catalogue (s. 5 of the Waste Management Act 1996). Commission Decision 2000/532/EC updated the European Waste Catalogue with effect from 1st January, 2002. A specific section of the catalogue is headed Construction and Demolition Waste (s. 17) and includes concrete, bricks, tiles and ceramics, wood, glass and plastic and many other materials. Despite, therefore, the position initially adopted by the respondents there is more than ample evidence that what has been deposited at Weir Island is waste

(O'Regan Vs Cork 2005, p. 5)

During this case, an application for relief was sought using a unique interpretation of the wording of Section 57 of the Waste Management Act. The particular case rested on an interpretation of the word 'is'. The section states that the court must be satisfied that;

'Waste is being held, recovered or disposed of in a manner that causes or is likely to cause environmental pollution

(Waste Management Act 1996, Section 57)

While the Respondent in this case (O'Regan) could not contest the proceedings as he had already pleaded guilty to the charges of operating a waste facility without a licence and to disposing of waste in a manner likely to cause environmental pollution, he did question the validity of the case before the Court on the basis that the wording 'is' should require the offence to be ongoing and present at the time of the hearing. This would require the court to be satisfied that the waste was still being held, recovered or disposed of on the site in question.

In this case, Justice Clarke found that not only was he not satisfied that the respondents had not ceased their activity, but to accept the respondents case that the activity must be current at the time of the hearing, would 'make a nonsense' (O'Regan Vs Cork 2005, p. 5) of the section of the act.

This case is a good example of the Judge setting out some measureable criteria for the existence of waste in a particular situation. It is also significant that Justice Clarke did not require that environmental damage did exist, only that the risk of such damage was present. This is a conservative view compared to the ECJ which has paid only limited attention to the risk of environmental pollution, particularly in the case of Commission vs Spain (2005)

Chapter 10: End of Waste Criteria

Introduction

In investigating any definition of waste, it is also useful to know under what circumstances a material should cease to be defined as a waste. To this end, Article 6 of the Waste Framework Directive (2008/98/EC) prescribed key criteria which must be met if a material should no longer be considered waste. Work in this area is progressing within the Commission with a view to determining End of Waste criteria for 5 particular waste streams, namely;

Aluminium
Waste paper
Iron & Steel
Copper
Glass

While criteria for a further 16 waste streams are under detailed discussion. These include Waste Plastic, Other metals, Textiles, Construction and Demolition Wastes, Slags, Ashes, Tyre Rubber, Compost and Digestate, Biogas, Biodiesel, Waste Oil, Waste Solvents, Waste Wood, Waste Tyres and Refuse Derived Fuel from Municipal Solid Waste.

Discussion

The Key Criteria which must be met for a material to no longer be considered waste and reach the status of 'End of Waste' are;

- 1) The substance or object is commonly used for specific purposes.
- 2) A market or demand exists for such a substance or object.
- 3) The substance or object fulfils the technical requirements for the specific purposes and meets the existing legislation and standards applicable to products.
- 4) The use of the substance or object will not lead to overall adverse environmental or human health impacts.

Condition 1 of these criteria should allow the usefulness of the material to be easily determined.

Condition 2 in this instance prevents the storage of material under the guise of a product while waiting for a market to develop for the material.

Condition 3 suggests that technical criteria should exist to allow the waste material to be compared against these criteria in order to determine whether the waste material meets these criteria. In this instance, failure to meet specific standards should mean that the material should still be considered as a waste.

Condition 4 should consider the life cycle analysis of the material with a view to ensuring that recycling the material directly prevents damage to the environment

(though the recycling process and the use of virgin materials) and to human health in the event that the waste material is used for some purpose.

The overall effect of these criteria should mean that the material is less likely to be discarded in the first instance and should in fact be processed into a material of some value.

It meeting the above criteria, it is also obvious that material meeting the requirements of points 1 to 4 above should also be excluded from the requirements of waste legislation. The material may still pose a threat to the environment, but this can also be a relevant concern for many raw materials which would never be deemed to be wastes. The fact that the material has a value as an input or ingredient to some process would suggest that care would be taken in its handling, shipment or use.

This effort is not without its difficulties however. The overall effect of putting such a legal framework around 'End of Waste' may include;

- In meeting the criteria, the material is no longer considered a waste and should not be subject to the regulatory controls and legislation surrounding the movement and processing of waste. It is conceivable that a material will 'slip through the net' of existing controls and subsequently cause unnecessary and avoidable pollution.

- A 'dual market' of almost identical materials will emerge. Materials which are currently successfully traded as waste under existing controls may fail to 'make the grade' of meeting End of Waste criteria. They will retain their existing waste status, but in so doing, may find that they are at a commercial disadvantage in the open market compared with an almost identical waste stream which has successfully managed to achieve End of Waste Status. Traders of the former material will be inclined to offer less favourable commercial terms compared with the latter. As an example, one proposal would propose that paper from a co-mingled waste paper

collection system (such as exists in the Irish domestic waste collection market), could not achieve End Of Waste status (ref), while paper and card recovered from a source segregated waste collection system (such as exists in Germany or France) could achieve End Of Waste status.

Summary

A number of issues are immediately apparent while attempting to meet the criteria of 'End of Waste'. These issues are themselves products of the level of definition around the 4 criteria involved

- 1) In requiring a material have to have an existing demand, it could be argued that this condition precludes new processes and innovations from creating a demand for waste material. These new and novel processes could welcome the availability of low cost, easily available materials which could be used as a feedstock. The constraint that a demand must already exist, without putting some level of quantum on the type of demand and the market served, must be a disadvantage in the development and emergence of new and novel uses for waste materials. The case of Palin Granit is relevant in determining that the storage of material on a site can be seen to be a form of 'constructive' (Scotford, 2007) discarding and therefore the case for storage of material while awaiting the development of new processes which could make use of the material is weakened. The Court has already ruled that storage while awaiting reuse could deem the material to be waste. Scotford (2007) has suggested that this prioritization of the regulatory function of the directive over the need to prevent waste mentioned in the same directive.
- 2) In addition to the above, the value of material which is considered to be a waste is closely related to the cost of disposal. If a buyer is aware that the material is considered a waste, the value they put on the material is likely to approximate the cost of disposal. Again, this could in itself, preclude the emergence of alternative uses for the material.

- 3) The need for the material to ‘be commonly used for a specific purpose’ again raises concerns about the ability of the criteria to take account of the changing demands of the marketplace and the emergence of innovative new uses for waste materials. There are any materials which would have been considered a waste in the recent past which are now sought after. Even the use of the work ‘commonly’ lacks sufficient definition to take account of the level of use of specific materials in the Community Marketplace.

- 4) Once again, the mention of the requirement for ‘no adverse environmental or health impacts is also likely to cause comparisons to the earlier contradictions between Arco Chemie, Palin Granit and associated case law. This requirement would require an entire life cycle analysis (LCA) of the waste and the alternative proposed uses for the wastes. It is arguable that in some cases, landfilling of the waste, in a properly managed, engineered landfill could prove to be the least risky options compared to any alternative proposal. In considering the risk for environmental or health damage, the proposed process which the waste would undergo should also be considered and evaluated. This should evaluate the use of fossil fuels for any heating/cleaning steps, long term risk to health of the production workers and neighbours through exposure to fumes, emissions and chemicals in the proposed process as well as final disposal of the recovered material and whether this may prove less favourable from an environmental viewpoint.

In his analysis of the contradictions between Arco Chemie, Niselli and the Spanish Manure cases, (Scotford, 2007) suggested that there was an overemphasis on the regulatory purpose of the directives vis-a-vis the policy purposes of the directive. It could be further argued that in the case of End of Waste Criteria, the same issue exists in attempting to determine if truly a market or demand exists in advance of material meeting the stated End of Waste Criteria.

Chapter 11: Conclusions

This dissertation has examined the legislation currently in place both in Ireland and in Europe in respect of waste and waste definition. It is clear that there is considerable history of case literature and analysis of this literature to show that the definition of waste has changed considerably over the last 35 years. The early case history included prescriptive listing of types of waste, waste disposal lists and waste recovery operations. European case history has moved from simply consulting one of these listings towards assessing the intention to discard the material in question.

At a European level, it is also clear that some difficulties remain. The risk of environmental pollution appears to have been given only a minor weighting in some cases adjudicated before the ECJ (*Commission vs Spain* 2005). The Court has given some clarity regarding the level of reprocessing required for a material not to be considered a waste and it would appear that a considerable level of recovery operations must be employed to satisfy the requirements of the court (*Meyer Parry* 2003). It is clear that individual cases are still being brought before the courts for opinion and this would suggest that the question of definition remains. This is supported by the amount of academic literature which has examined the meaning of the words 'discard' and 'disposal'.

Irish waste legislation terminology and language does contain significant differences compared to the European standard. The Irish legislation and language could be considered to be vague when compared to the relevant directives. This is surprising given the fact that European Directives in this area were well established and predated the Irish legislation by nearly 20 years.

In the Irish Courts, there is evidence that the risk of environmental pollution is ranked highly when considering the presence of waste (*Brady vs The Environmental Protection Agency* 2007). This would suggest a more conservative approach is being adopted at a local level. It is also clear that there is considerable divergence between the terminology used in local legislation and that employed at a European level. It is

the opinion of the author that this difference of terminology is likely to continue to be tested before the Courts in an effort to avoid the regulation inherent in handling waste.

The development and emergence of 'End Of Waste' criteria is likely to add to the level of debate and confusion in the area of waste definition. The 4 criteria which are required to be met for a material no longer to be considered a waste will likely restrict the development of recycling programs. The particular requirement that a market or demand exists will clearly restrict the development of alternative uses for discarded materials.

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