OPINION OF ADVOCATE GENERAL JACOBS

delivered on 26 September 2002 [1]

1. In this action brought under Article 226 EC, the Commission claims that objections raised by the Federal Republic of Germany against certain shipments of waste to other Member States to be used principally as fuel were unjustified and contrary to Article 7(2) and (4) of Council 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 ('the Regulation'). [2] The Commission accordingly seeks a declaration that Germany has failed to fulfil its obligations under Article 7(2) and (4) of the Regulation.

2. The case essentially turns on the distinction between operations for the disposal of waste and operations for its recovery, and in particular on the question whether the incineration of waste in an industrial process generating energy to be used in that process is correctly to be classified as a disposal operation or a recovery operation.

The relevant Community legislation

The Waste Directive

3. Article 3(1) of Council Directive 75/442/EEC of 15 July 1975 on waste as amended [3] ('the Waste Directive' or 'the Directive') requires Member States to take appropriate measures to encourage '(a) firstly, the prevention or reduction of waste production and its harmfulness' and '(b) secondly: (i) the recovery of waste by means of recycling, re-use or reclamation or any other process with a view to extracting secondary raw materials, or (ii) the use of waste as a source of energy'.

1 — Original language: English.

2 — OJ 1993 L 30, p. 1.

3 — OJ 1975 L 194, p. 39, as amended by Council Directive 91/156/EEC of 18 March 1991, OJ 1991 L 78, p. 32, and by Council Directive 91/692/EEC of 23 December 1991, OJ 1991 L 377, p. 48.

4. Article 5 of the Directive enshrines the principles of self-sufficiency and proximity. It provides as follows:

'1. Member States shall take appropriate measures, in cooperation with other Member States where this is necessary or advisable, to establish an integrated and adequate network of disposal installations, taking account of the best available technology not involving excessive costs. The network must enable the Community as a whole to become self-sufficient in waste disposal and the Member States to move towards that aim individually, taking into account geographical circumstances or the need for specialised installations for certain types of waste.

2. The network must also enable waste to be disposed of in one of the nearest appropriate installations, by means of the most appropriate methods and technologies in order to ensure a high level of protection for the environment and public health.'

5. The Directive defines 'disposal' as 'any of the operations provided for in Annex IIA'[4] and 'recovery' as 'any of the operations provided for in Annex IIB'.[5]

6. Annexes IIA and IIB to the Directive[6] are headed 'Disposal operations' and 'Recovery operations' respectively. Each annex is prefaced by a note to the effect that it is intended to list the operations 'as they occur in practice' and that in accordance with Article 4[7] 'waste must be [disposed of/recovered] without endangering human health and without the use of processes or methods likely to harm the environment'.

7. Annex IIA includes among the listed disposal operations:

'D10 Incineration on land'.

8. Annex IIB includes among the listed recovery operations:

'R1 Use principally as a fuel or other means to generate energy'.

4 — Article 1(e).

5 — Article 1(f).

6 — As adapted by Commission Decision 96/350/EC of 24 May 1996 adapting Annexes IIA and IIB to Council Directive 75/442/EEC on waste, OJ 1996 L 135, p. 32.

7 — Which requires Member States to take the necessary measures to the same effect.

The Regulation

9. The Regulation is based on Article 130s of the EC Treaty (now, after amendment, Article 175 EC). Its aim is to provide a harmonised set of procedures whereby movements of waste can be limited in order to secure protection of the environment. [8]

10. Title II of the Regulation is entitled 'Shipments of waste between Member States'. Chapters A and B of Title II lay down the procedures to be followed for the shipment of waste for disposal and of waste for recovery respectively.

11. The Regulation adopts the definitions of 'disposal' and 'recovery' used in the Directive. [9]

12. The procedure for shipments of waste for recovery varies according to the type of waste. Annexes II to IV to the Regulation classify specific waste in one of three lists. [10] Annex II contains the 'Green list of wastes', which 'should not normally present a risk to the environment if properly recovered in the country of destination'. [11] Annex III contains the 'Amber list of wastes' and Annex IV the 'Red list of wastes', regarded as particularly hazardous. Shipments of waste shown in Annex II for recovery are simply to be accompanied by a document containing prescribed information. [12] Shipments of other waste (including the waste the shipment of which gave rise to the present proceedings) for recovery and shipments of waste for disposal are subject to the following procedure.

13. Where the producer or holder of waste, generally referred to as the notifier, [13] intends to ship such waste from one Member State to another, he must notify the competent authority of destination and send a copy of the notification to the competent authority of dispatch [14] and to the consignee. [15]

14. Notification is to be effected by means of the consignment note to be issued by the

8 — Case C-187/93 *Parliament* v *Council* [1994] ECR I-2857, paragraph 26 of the judgment.

9 — Article 2(i) and (k).

10 — As adapted by Commission Decision 94/721/EC of 21 October 1994 adapting, pursuant to Article 42(3), Annexes II, III and IV to Council Regulation (EEC) No 259/93 on the supervision and control of shipments of waste within, into and out of the European Community, OJ 1994 L 288, p. 36.

11 — Recital 14 in the preamble to the Regulation.

12 — Articles 1(3) and 11 of the Regulation.

13 — Article 2(g).

14 — And, if relevant, of transit.

15 — Articles 3(1) (waste for disposal) and 6(1) (waste for recovery).

authority of dispatch.[16] The notifier is to complete the consignment note and, if requested by the competent authorities, supply additional information and documentation.[17] He is to supply on the consignment note information with particular regard to a number of factors including (i) the source, composition and quantity of the waste and (ii) the operations involving disposal or recovery as referred to in Annex IIA or IIB to the Directive.[18]

15. In the case of shipments of waste for recovery, the consignment note must also include details of (i) the planned method of disposal for the residual waste after recycling has taken place; (ii) the amount of the recycled material in relation to the residual waste and (iii) the estimated value of the recycled material.[19]

16. In the case of waste for disposal, the Member State of destination is responsible for granting authorisation for shipment. The Member State of dispatch[20] has the right to raise objections and the Member State of destination may issue the authorisation only in the absence of any such objections.[21] In the case of waste for recovery, the Member States of dispatch and destination[22] have the right to object to a shipment but, as a general rule,[23] no express authorisation is required.[24]

17. The most significant difference between the procedures applying to the shipments of waste for recovery and for disposal lies in the grounds on which the various competent authorities concerned may oppose the proposed shipment.

18. In the case of waste for disposal, the objections must be based on Article 4(3).[25] Under that article, in particular, (i) Member States may prohibit generally or partially or object systematically to shipments of waste in order to implement the principles of proximity, priority for recovery and self-sufficiency at Community and national levels in accordance with the Directive[26] and (ii) the competent authorities of dispatch and destination may raise reasoned objections to planned shipments if they are not in accordance with the Directive in order to implement the principle of self-sufficiency at Community and national levels.[27]

16 — Articles 3(3) and 6(3).
17 — Articles 3(4) and 6(4).
18 — Articles 3(5) and 6(5), first and fifth indents.
19 — Article 6(5), sixth, seventh and eighth indents.
20 — And, if relevant, of transit.
21 — Articles 4(1) and 4(2).
22 — And, if relevant, of transit.
23 — Where the waste is listed in Annex IV or has not been assigned to Annex II, III or IV, the competent authorities concerned must give their consent in writing (Article 10).
24 — Article 7(1) and (2).
25 — Article 4(2)(c).
26 — Article 4(3)(a)(i).
27 — Article 4(3)(b)(i).

19. In the case of waste for recovery, the objections are to be based on Article 7(4). [28] Article 7(4)(a) [29] lists five grounds on which the competent authorities of destination and dispatch may raise reasoned objections of which only the fifth is of relevance in the present case. That ground — set out in the fifth indent of Article 7(4)(a) — is as follows:

'— if the ratio of the recoverable and non-recoverable waste, the estimated value of the materials to be finally recovered or the cost of the recovery and the cost of the disposal of the non-recoverable fraction do not justify the recovery under economic and environmental consideration'.

The case-law of the Court

20. Two decisions of the Court are of particular interest in the context of the present case.

21. First, the Court ruled in *Dusseldorp* [30] that the principles of self-sufficiency and proximity do not apply to waste for recovery; such waste should therefore be able to move freely between Member States for processing, provided that transport poses no threat to the environment.

22. Second, the Court ruled in *ASA* [31] that the essential characteristic of a waste recovery operation is that 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, thereby conserving natural resources. That case concerned *inter alia* the correct classification for the purpose of the Regulation (namely, as a recovery or a disposal operation) of the deposit of waste in a former salt mine to secure hollow spaces (mine-sealing).

23. The Court also ruled in *ASA* that Articles 4(3) and 7(4) exhaustively list the cases in which Member States may object to a shipment of waste between Member States. [32]

The action for infringement

24. This action for infringement arises indirectly from several proposed shipments

28 — Article 7(2).

29 — Article 7(4)(b) concerns the objections which may be raised by the competent authorities of transit, not relevant to the present case.

30 — Case C-203/96 [1998] ECR I-4075, paragraphs 33 and 34 of the judgment.

31 — Case C-6/00, paragraph 69 of the judgment delivered on 27 February 2002.

32 — Paragraph 36 of the judgment.

of waste from Germany to Belgium. The shipments had been notified to the German competent authorities as shipments of waste intended for recovery; the German authorities considered that the proposed operations were in reality disposal operations.

25. The shipments concerned two categories of waste.

26. First, there was waste which had already been processed in Germany into a substitute fuel. Waste such as shellac, colorant, latex, oil and phenol sludges, halogenated and non-halogenated distillation residues from solvent recovery, non-halogenated solvents, sludges from cleaning tanks and washing vats, filter cakes, bleaching clay, aluminium sludge etc. had been mixed with sawdust; the mixture was intended for incineration in cement kilns, where it replaced up to one third of the energy from primary sources otherwise used. In certain cases the calorific value of the waste was at least 11 000 kJ/kg.

27. Second, there was waste which was to be processed in a plant in Belgium into a substitute fuel called 'Resofuel'. The waste consisted of activated carbon and graphite waste, distillation residues containing solvents, materials impregnated with solvents (absorbents, alumina and sawdust, the latter partly contaminated by organic and inorganic substances), residues of synthetic thermoresistant substances, mixed synthetic waste, sludges containing polymerised synthetic substances, wood shavings, sawdust, wood fibres and sludges from paper manufacture. The resulting 'Resofuel' was intended for incineration, in particular in cement kilns, where it could totally replace energy from primary sources.

28. The competent authorities in Germany for the purpose of the Regulation are at the level of the Länder. The authorities of North Rhine-Westphalia, Baden-Württemberg, Rhineland-Palatinate and Lower Saxony raised objections against the proposed shipments on the ground that the waste was intended for disposal and not for recovery and that the disposal should take place in Germany. In the case of the first two Länder, those decisions were based on circulars issued by the relevant Ministries of the Environment, laying down criteria for distinguishing between recovery and disposal in the case of waste to be burnt. In particular, in order for such an operation to be classified as recovery under head R1 of Annex IIB to the Directive ('Use principally

as a fuel or other means to generate energy' [33]), the waste in question — and in the case of mixed waste each constituent waste — must have a calorific value of at least 11 000 kJ/kg, at least 75% of the energy generated from the operation must be used and prescribed thresholds of polluting substances contained in the waste must not be exceeded. Unless all those conditions were met, the operation would be classified as disposal under head D10 or D11 of Annex IIA ('Incineration on land' or 'Incineration at sea').

29. The Commission, having received several complaints concerning the German authorities' objections to proposed shipments of the abovementioned waste, initially wrote to Germany inviting an explanation. In its reply Germany maintained that the practice complained of complied with the relevant Community provisions and confirmed the view of the competent federal authorities that the shipments at issue concerned waste intended for disposal.

30. The Commission, unconvinced, sent Germany a letter of formal notice in which it expressed the opinion that the shipments at issue concerned waste intended for recovery and that the Germany authorities could accordingly rely only on the grounds of objection set out in Article 7(4) of the Regulation. The Commission took the position that the incineration of the waste in the Belgian cement kilns was a recovery operation falling under head R1 in Annex IIB to the Waste Directive, namely 'Use principally as a fuel...', or under head R13, 'Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)' read in combination with head R1.

31. In its reply, Germany maintained its position. Since the Commission remained of the view that the shipments to Belgium of the waste in question concerned waste for recovery and that consequently objections could be raised only on the basis of Article 7(4) of the Regulation, in February 1999 it sent Germany a reasoned opinion pursuant to Article 169(1) of the EC Treaty (now Article 226(1) EC). Still considering, despite Germany's response, that the measures complained of were contrary to the Regulation, the Commission has brought the present action for infringement.

33 — In fact at the time of the circulars, Annex IIB to the Directive had not been adapted by Commission Decision 96/350, cited in note 6. The operation now described under head R1 was then mentioned under head R9; in the German version, moreover, although not in the French or English, the wording was 'Use as a fuel (other than in direct incineration)'. Germany however refers throughout its pleadings to the current version of Annex IIB, recognising that the difference in the two German versions was the result of a drafting error.

Admissibility

32. Germany submits that the action against it is inadmissible on the basis that neither in the pre-litigation procedure nor in the application to the Court does the Commission specify the precise object of the proceedings sufficiently clearly to enable it to defend itself. The administrative decisions which the Commission seeks to put in issue cannot be identified from the letter of formal notice, the reasoned opinion or the application. The Commission simply refers to three circulars issued by the Länder of North Rhine-Westphalia and Baden-Württemberg. Those circulars however do not contain 'unjustified objections to certain shipments of waste to other Member States to be used principally as fuel' since they merely set general criteria for distinguishing thermic disposal from the recovery of energy.

33. The Commission submits that on the contrary it set out the subject-matter of the action with great precision both in the pre-litigation procedure and in the application. In particular the application confirms that 'the administrative practices of the competent authorities of the federal Länder of North Rhine-Westphalia, Baden-Württemberg, Lower Saxony and Rhineland-Palatinate are impugned on the ground that they do not comply with the Treaty'. That practice is exemplified both by circulars adopted by the competent ministries and by individual decisions taken by the competent authorities in which those authorities, partly on the basis of the circulars, raised objections against certain shipments of waste on the grounds set out in Article 4 of the Regulation.

34. It is settled case-law that the letter of formal notice and the reasoned opinion issued by the Commission delimit the subject-matter of the dispute so that it cannot thereafter be extended. The opportunity for the State concerned to submit its observations constitutes an essential guarantee intended by the Treaty, adherence to which is an essential formal requirement of the infringement procedure. [34] One purpose of the letter of formal notice is to ensure that the Member State concerned is aware of the points on which it may need to prepare its defence. [35]

35. The Commission's seven-page letter of formal notice refers in some detail both to the two complaints which initiated the proceedings and to the circulars issued by the authorities in North Rhine-Westphalia and Baden-Württemberg. It states clearly that the competent authorities raised objections on the basis of the circulars to the shipments concerned in the specific complaints. It refers also to further decisions by the authorities of Lower Saxony and Rhine-

34 — Case C-365/97 *Commission* v *Italy* [1999] ECR I-7773, paragraph 23 of the judgment.

35 — Case 211/81 *Commission* v *Denmark* [1982] ECR 4547, paragraph 8 of the judgment.

land-Pfalz, in both cases giving dates and indicating that the decisions were based on the assumption that the intended operations were disposal rather than recovery operations. The letter of formal notice states that the Commission considers that the shipments are to be regarded as destined for recovery and that Article 7(4)(a) of the Regulation is the appropriate provision for possible objections. In particular it specifies that the Commission is of the view that the operation falls under head R1 of Annex IIB to the Directive ('Use principally as a fuel...') and not under head D10 of Annex IIA ('Incineration on land'). The letter of formal notice concludes:

'On the basis of its current state of knowledge the Commission accordingly considers that the Federal Republic of Germany has infringed its obligations under [the Regulation], the second paragraph of Article 189 [of the EC Treaty, now Article 249 EC] and in particular Article 7(2) and (4) of [the Directive].'

36. In my view the letter of formal notice, given the contents as described above, adequately indicated as required by the case-law of the Court the essential elements of the Commission's position. In response, Germany sent the Commission an 18-page response in which it set out its arguments in full. It expressed the view that, until the Community legislature had better defined recovery and disposal, the national authorities were bound to set specific criteria for operations under heads D10 of Annex IIA and R1 of Annex IIB to the Directive. In Germany's view, recovery presupposed that the principal objective of the operation was the generation of energy. The various criteria used sought to ensure that only when that definition was satisfied would an operation be classified as recovery.

37. As for the reasoned opinion, the Court has ruled that the purpose of the requirement in Article 226 EC that the Commission deliver a reasoned opinion is 'to give the Member State an opportunity to justify its position and, as the case may be, to enable the Commission to persuade the Member State to comply of its own accord with the requirements of the Treaty. If this attempt to reach a settlement is unsuccessful, the function of the reasoned opinion is to define the subject-matter of the dispute.' [36]

38. The reasoned opinion in the present case is in similar terms to the letter of formal notice; in addition the relevant

36 — Joined Cases 142/80 and 143/80 *Essevi and Salengo* [1981] ECR 1413, paragraph 15 of the judgment.

Community legislation is set out and the relevant case-law summarised. The Commission prefaces its analysis of the alleged infringement with the statement:

'The Commission maintains the view that the shipments in question are destined for recovery, and that a Member State therefore may object to a shipment of waste only on the basis of criteria set out in Article 7(4)(a) of Regulation 259/93 or by invoking Article 130t EC, and that the measures taken by the Federal Republic of Germany are not justified and therefore infringe Community law.'

39. The reasoned opinion also contains a summary of the German arguments put forward in the reply to the letter of formal notice followed by the Commission's refutation of those arguments. It concludes with the declaration that Germany 'has infringed Regulation EEC No 259/93 Articles 7(2) and (4)'.

40. Again, Germany sent a response to the reasoned opinion, repeating its earlier position and referring to the 'lack of clarity' of the reasoned opinion.

41. It may be that the letter of formal notice and the reasoned opinion could have been drafted with greater precision. However it is apparent from the above summary of their contents that the documents gave a sufficient indication of the subject-matter of the dispute as required by the case-law of the Court. The reasoned opinion did not moreover broaden that subject-matter as compared to the letter of formal notice (or the application compared to the reasoned opinion), which would not have been permissible.

42. I accordingly conclude that the action brought by the Commission is admissible.

The issues before the Court

43. The Commission submits that the administrative practice of the German Länder in question is contrary to Article 7(2) and (4) of the Regulation: it is clear from Article 7(2) that the competent authorities of the Member State of dispatch may raise objections against the shipment to another Member State of waste for recovery only on the basis of Article 7(4), which does not include the principle of self-sufficiency apparently relied on by the competent authorities of those Länder, on the basis of administrative circulars, in their objections against the shipments of waste. At issue essentially therefore is whether the operation to which the waste in question was to be subject constitutes

recovery or disposal. In particular the parties are at odds over the questions whether the Länder were entitled to formulate criteria not to be found in the Community waste legislation in order to distinguish between the two types of operation for the purpose of application of the Regulation, what precisely is meant by 'Use principally as a fuel or other means to generate energy' in head R1 of Annex IIB to the Directive and whether the specific criteria set by the Länder in the present case are lawful in the sense that they correctly reflect criteria inherent in the Directive. I shall consider those issues in turn.

Member States' discretion to set criteria

44. Germany submits, first, that the Member States have the power to lay down their own criteria for distinguishing between disposal and recovery operations in cases such as those at issue, given the potential overlap between the disposal operation under D10 'Incineration on land' and the recovery operation under R1 'Use principally as a fuel or other means to generate energy' and the lack of further guidance in the Community legislation.

45. Germany refers to several other Member States which have also set criteria for the distinction, in particular by imposing a minimum calorific value (apparently of 5 000 kJ/kg in France, between 9 500 kJ/kg and 15 000 kJ/kg in the Flemish region of Belgium, between 11 500 kJ/kg and 15 000 kJ/kg in the Netherlands and 21 000 kJ/kg in the United Kingdom).

46. It also refers to my Opinion in *Tombesi*,[37] where I referred to 'the Member States' need to lay down practical rules and guidelines for the day-to-day application of the Directive providing the necessary degree of legal certainty for individuals' and stated:

'As the Directive stands at present, I think it must to some extent be left to Member States to develop more detailed criteria to apply the term "recovery operation" to the various situations which may occur in practice.'

47. In similar vein Germany refers to the Opinion of Advocate General Tesauro in

37 — Joined Cases C-304/94, C-330/94, C-342/94 and C-224/95 *Tombesi* [1997] ECR I-3561, paragraph 56 of the Opinion.

Commission v *Council*,[38] which concerned the correct legal basis for Council Directive 91/156[39] which substantially amended the original version of the Waste Directive.[40] The Advocate General stated:

'[The Directive] sets out the broad lines of the action which the Member States are to take in order to ensure that waste management within the Community is conducted so as to guarantee protection for the environment and health. However, the Member States remain substantially free to define the content of that action and the means which they employ.

...

As regards in particular the conditions of competition, the directive does not... lay down common rules relating to the activity of waste management, but merely defines the principles by which action by the Member States is to be guided. It follows that each Member State may adopt *in subiecta materia* the provisions which, in its view, are most appropriate for the purpose of attaining the prescribed objectives. Consequently, the rules on waste disposal and recycling may differ — even to a significant degree — from one Member State to another...'

48. In my view however the situation in *Tombesi* was different in a material respect from the present case: the question before the Court was whether certain substances including residues from production or consumption cycles constituted waste. In order to approach that question I considered, given the definition of waste in the Directive, that under the Directive 'the sole question is whether the substance in issue is subject to a disposal or recovery operation within the meaning of Annex IIA or B'.[41] Since Italy had imposed additional criteria for the definition of waste which were not mentioned in the Directive, I stated in the paragraph following that relied on by Germany: 'It is in fact probably unnecessary in the present cases to determine the extent of any discretion left to the Member States since it is clear that the Italian decree-laws which prompted the national courts' questions are inconsistent with the Directive.'[42] It is manifest therefore that — unsurprisingly — I was not suggesting that Member States had an unfettered discretion to delimit the notions

38 — Case C-155/91 [1993] ECR I-939, paragraphs 8 and 9 of the Opinion.

39 — Cited in note 3.

40 — Directive 75/442, cited in note 2.

41 — Paragraph 57 of the Opinion.

42 — Ibidem.

of disposal and recovery. Where — as in *Tombesi* and, as I will suggest, as in the present case — national law or practice is manifestly inconsistent with the Directive, the question of discretion becomes irrelevant.

49. As for the statements of Advocate General Tesauro in *Commission* v *Council*, it appears from a closer reading of his Opinion that he was considering the framework rules on national waste management proposed by the Directive and not the specific terms there defined: indeed he prefaces his discussion with the words 'If we now turn to its *content*, the directive (apart from defining the terms which determine its scope), establishes...'. [43] The differences between Member States' practice to which the Advocate General alludes may be taken to concern national policies in the field of waste management, for example to encourage the reduction of waste production and its harmfulness and to encourage the recycling of waste. It must be borne in mind that *Commission* v *Council* was a challenge to the legal basis chosen by the Council for Directive 91/156, [44] and hence the discussion focused on the objectives of the legislation. There is nothing in the Opinion — or in the judgment of the Court — to suggest that the Advocate General envisaged Member States applying their own criteria to the disposal and recovery operations described in Annex IIA and IIB to the Directive.

50. Germany also refers to the statement of the Court in *ARCO* [45] that:

'In the absence of specific Community provisions on proof of the existence of waste, it is for the national court to apply the provisions of its own legal system in that regard, while taking care that the objective and effectiveness of [the Waste Directive] are not undermined.'

51. That proposition cannot however be relevant to the present case given the existence in the Directive of 'specific Community provisions' describing disposal and recovery operations. It may be noted that the Court in the immediately following paragraph stated that 'what is commonly regarded as waste... is irrelevant in view of the express definition of waste in Article 1(a) of [the Waste Directive]'. Contrary to Germany's view, therefore, the Court's statements in *ARCO* support the proposition that Member States may

43 — Paragraph 8; emphasis in original.

44 — Cited in note 3.

45 — Joined Cases C-418/97 and C-419/97 *ARCO Chemie Nederland* [2000] ECR I-4475, paragraph 70 of the judgment.

not further qualify definitions contained in the Directive.

52. The unacceptable consequences of Member States' being permitted to apply their own criteria in such a way are evident from the diverse minimum calorific values which, according to Germany, certain Member States require of waste in order for its incineration with recovery of heat generated to be classified as a recovery operation under head R1 in Annex IIB to the Directive. As mentioned above, those calorific values range from 5 000 kJ/kg in France to 21 000 kJ/kg in the United Kingdom. The application by different Member States (and possibly different regions in the same Member State) of such wide-ranging thresholds would clearly run counter to the objectives of both the Directive, whose aims include a 'common terminology... to improve the efficiency of waste management in the Community',[46] and the Regulation, which is built on the premiss that different Member States will apply the same procedures to waste intended for particular operations. As the Commission points out, if Member States were free to set their own divergent criteria determining which operations were to be classified as recovery operations, the impact of Article 7(4) of the Regulation, which exhaustively lists the cases in which Member States may object to shipments of waste for recovery,[47] would be much reduced.

53. That is not to say that a uniform criterion based on calorific value might not be a useful and workable means of distinguishing between recovery and disposal operations if set at Community level. However it appears that it has not been possible to agree such a criterion to date.

54. Both the Commission and Germany refer to a working document submitted by the Commission to the Technical Adaptation Committee in 1999[48] pursuant to the Directive, which provides for the amendments necessary for adapting the Annexes to the Directive to scientific and technical progress to be adopted in accordance with a prescribed procedure involving a committee composed of representatives of the Member States.[49] That document put forward a number of suggestions for limiting movements of waste to be incinerated. One of the options considered was the development of criteria for distinguishing more clearly between 'Incineration on land' under head D10 of Annex IIA and 'Use principally as a fuel or other means to generate energy' under head R1 of Annex IIB. One of the criteria discussed

46 — See the third recital in the preamble to Directive 91/156, cited in note 3.

47 — *ASA*, cited in note 31, paragraph 36 of the judgment.

48 — 28 January 1999, XIE3/KW D(99).

49 — Articles 17 and 18.

was calorific value: it was suggested that a calorific value of 17 000 kJ/kg be used as a limit value. However, it appears that a distinction based on that calorific value was not accepted by the majority of Member States.

'Use... as a fuel or other means to generate energy'

55. Germany submits that 'Use... as a fuel or other means to generate energy' in the description in head R1 of Annex IIB to the Directive should be interpreted by reference to the objective of the operation. In order to constitute recovery, therefore, the specific aim of an incineration operation must be that the waste is used as a source of energy. Germany considers that that principle, which underlies the practice of the Länder at issue in the present proceedings, precisely reflects the criterion laid down by the Court in *ASA*,[50] which is also expressed in terms of the operation's principal objective.

56. The Commission in contrast considers that the decisive factor for the purpose of head R1 of Annex IIB to the Directive is that the waste is used as a fuel. Waste will be used as a fuel only if first its combustion generates thermic energy and second the energy so generated is actually used; the waste being burnt is therefore in fact replacing other sources of energy. If those conditions are not satisfied, there is no use as fuel but simply incineration. The Commission notes that the waste to be shipped consisted of mixed waste to be used as fuel in the Belgian cement industry. The waste is unquestionably to be used in Belgian cement factories in such a way that its combustion generates thermic energy which is actually used, replacing in one case up to one third of the energy from primary sources otherwise used and in the other case all such energy. The waste is accordingly intended to be used as a fuel. With regard to the judgment in *ASA*, the Commission refers to the Court's statement that 'the essential characteristic of a waste recovery operation is that 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, thereby conserving natural resources'.[51] It considers that, in the light of its analysis summarised above, that criterion applied to the present case leads ineluctably to the conclusion that the use of mixed waste in cement factories must be classified as a recovery operation.

57. The Commission's analysis appears to me to be sound. As a matter of common

50 — Cited in note 31, paragraph 69 of the judgment.

51 — Paragraph 69 of the judgment.

sense and on a natural reading of the description, 'Use... as a fuel or other means to generate energy' must involve the two criteria the Commission proposes. First, if the incineration of waste does not generate more energy than it consumes — for example because the waste in question is not easily combustible, so that more energy is required to ignite it and/or keep it burning than is generated by the incineration itself — there will be no surplus energy available as a fuel. Second, even if surplus energy is generated the waste cannot be regarded as being used as a fuel or other means to generate energy unless that energy is itself used. The concept of using waste as a fuel or other means to generate energy thus inevitably entails that, to the extent to which it is so used, it replaces energy from primary sources. That is clearly consistent with the notion of recovery.

58. Moreover the principal objective of an incineration operation which is an integral part of an industrial process and which generates surplus energy to be used in that industrial process may be said to be the use of the waste as a fuel. Since the use of waste in such a way will evidently replace other fuel, natural resources will be conserved. So interpreted, the description in head R1 of Annex IIB to the Directive may therefore be seen as an application of the criterion laid down by the Court in *ASA*,[52] namely that the principal objective of a recovery operation is that the waste serve a useful purpose in replacing other materials which would have had to be used for that purpose, thereby conserving natural resources. As I suggested in my Opinion in that case, the decisive question is whether the waste is used for a genuine purpose: if it were not available for a given operation, would that operation none the less be carried out using some other material?[53] In the case of waste used as fuel for a cement factory, the answer to that question is clearly 'yes': in the absence of available waste, the factory would still operate using other fuel.

59. It is instructive to contrast the present case with *Commission* v *Luxembourg*,[54] another action for infringement which concerns proposed shipments of household waste for incineration with incidental recovery of the energy generated. In my Opinion also delivered today I state that, in the case of waste being incinerated in a plant developed for that purpose, the answer to the question set out above is clearly 'no': in the absence of available waste, there would be no incineration. In those circumstances it would not be right to describe the operation as recovery simply

52 — Cited in note 31, paragraph 69 of the judgment.

53 — Paragraph 86.

54 — Case C-458/00, paragraph 42 of the Opinion.

because, whenever waste is available and incinerated, the heat generated by the incineration is used, wholly or partly, as a means to generate energy. That fact does not of itself make the principal objective of the incineration the use of the waste as a fuel or other means to generate energy.

60. In the present case it appears [55] furthermore that the complaints to the Commission which ultimately prompted the present action for infringement were made by the cement manufacturers. It may be assumed therefore that it was advantageous to those manufacturers that the waste should be shipped, which also suggests that the principal objective of the operations at issue is the use of the waste as fuel. The fact that the cement manufacturers lodged complaints illustrates the adverse consequences both for the free movement of goods and for the Community's environmental policy which would flow from an interpretation of the legislation to the effect that operations such as those at issue were correctly classified as disposal. The Member State of dispatch would then be able — as Germany apparently wishes — to prohibit shipments of the waste on the basis of proximity and/or self-sufficiency; manufacturers in other Member States would be prevented from saving natural resources by using the waste as fuel in an industrial process and thereby contributing to the objective of prudent and rational utilisation of natural resources enshrined in Article 174 EC.

61. As the Court noted in *Dusseldorp*, [56] it was in order to encourage recovery in the Community as a whole, in particular by the development of the most efficient technologies, that the Community legislature stipulated that waste for recovery should be able to move freely between Member States for processing. Admittedly, the Court added the proviso that the transport should pose no threat to the environment. That proviso cannot however in my view be understood in absolute terms, since virtually all methods of transport currently involve some risk to the environment. I understand the Court rather to have been imposing a balancing exercise. As I noted in my Opinion in that case, the environmental arguments are much more finely balanced where the waste to be shipped is for recovery than where it is for disposal: while the transport of waste over distance may, depending on the type of waste, entail certain environmental risks, a single market in waste for recovery is likely to improve recycling, thereby reducing the volume of waste for disposal and conserving primary raw materials. [57]

55 — According to Germany's representative at the hearing.

56 — Cited in note 30, paragraph 33 of the judgment.

57 — Paragraph 61.

62. Again the contrast with *Commission* v *Luxembourg* is useful: in that case, where the objective of the operation at issue is primarily to dispose of the waste, it seems reasonable that the imperative of environmental protection should override the imperative of the free movement of goods, whereas in the present case, where the objective is to use the waste to fuel a manufacturing process thus sparing natural resources, the converse is true.

Quantitative criteria — the meaning of 'principally'

63. Even though it is not in my view lawful for Member States to superimpose further criteria on the description of the recovery operation in head R1 of Annex IIB to the Directive, 'Use principally as a fuel or other means to generate energy', Germany's submissions as to the lawfulness of the criteria it has laid down remain potentially relevant since it considers that the criterion of minimum calorific value correctly translates the requirement of 'principal' use. It submits that the concept of principal use requires that the principal objective of the operation be the recovery of energy. A use in which the waste is not principally used as a fuel but simply burned does not suffice: in order for the definition in head R1 to be satisfied, the greater part of the waste must be used as a source of energy. According to Germany's calculations, that occurs in general only when the calorific value of 11 000 kJ/kg is reached. Almost all incineration operations make some further use of the heat released: if that fact alone meant that the operation were recovery, virtually all incineration would be recovery.

64. The Commission repeats that the only quantitative element in the definition in head R1 is the requirement that the waste must be *principally* used, which means that the greater part of the waste must be used as fuel. An operation in which only a minor portion of the waste is burned with use of the heat generated, while the major portion is recovered in another way, would not therefore be classified under head R1 of Annex IIB to the Directive.

65. The Commission's view to my mind is consistent with the wording of Annex IIB. All the language versions of head R1 reflect the requirement that the use must be principally as a fuel or, in slightly different words, that the principal use must be as fuel. If only a minor portion of a consignment of waste is burned with use of the heat generated, the operation evidently

cannot be regarded as constituting 'use principally as a fuel or other means to generate energy'. In order to fall within the description in head R1, the consignment as a whole must be 'principally' used.

66. Germany objects that the effect of that interpretation is that an operation will constitute recovery provided that a mere 51% of the waste is to be burned and the energy generated is to be used. It is not however the case that the Member State of dispatch must authorise all shipments of waste intended for such an operation. If the unincinerated portion of the waste is not itself to be recovered, the Member State of dispatch may be entitled to object to its shipment on the basis of the fifth indent of Article 7(4)(a) of the Regulation, which concerns the situation where 'the ratio of the recoverable and non-recoverable waste, the estimated value of the materials to be finally recovered or the cost of the recovery and the cost of the disposal of the non-recoverable fraction do not justify the recovery under economic and environmental considerations'. The Member State of dispatch will be in a position to make such an assessment since in accordance with the Regulation the consignment note must include information with regard to the planned method of disposal for the residual waste after recycling has taken place, the amount of the recycled material in relation to the residual waste and the estimated value of the recycled material. [58]

67. As discussed above, waste can be regarded as used as a fuel or other means to generate energy only where the operation results in a net production of energy and that energy is actually used. The requirement that the waste be 'principally' used as such applies in my view to both those elements of the definition. Thus not only must the greater part of a consignment of waste be burnt in a given incineration operation, the operation will not be recovery unless the energy generated is itself 'principally' used.

68. Provided that those conditions are satisfied, it seems to me that the requirements of head R1 in Annex IIB to the Directive are met and the operation will be a recovery operation. There is thus no need for presumptions involving the calorific value of the waste etc. As the Court stated in *ASA* [59] in the context of the correct classification of the deposit of waste in a disused mine, the competent authorities must assess proposed shipments of waste on a case-by-case basis. That principle appears to me to be equally applicable in cases such as the present: in order to determine whether the conditions discussed above are satisfied with regard to a given shipment of waste, the authorities will inevitably have to assess each case individ-

58 — Sixth, seventh and eighth indents in Article 6(5).

59 — Cited in note 31, paragraph 71 of the judgment.

ually. The use of general presumptions however clearly conflicts with such an approach.

which burn at a temperature sufficient to heat water. Germany argues that the 'incineration' of individually uninflammable waste is not therefore a 'means to generate energy' but on the contrary uses the energy generated by the other waste with which it is combined.

The status of mixed waste

69. Germany submits that, in order to determine whether mixed waste is to be genuinely recovered, the qualities of the constituent individual wastes must be considered and not the mixture itself. [60] That, it states, accords with the practice of the majority of the Member States. Germany argues that if mixed waste includes waste the incineration of which could not be regarded as a recovery operation either because it would not if burned alone generate surplus heat or because it would not burn at all, the incineration of that mixed waste cannot be so regarded either but is correctly to be classified as disposal. That point is illustrated by the example given by Germany: various sludges (sludges from cleaning tanks and washing vats, colorant and shellac sludges and phenol sludges) contained in the mixed waste at issue consist of at least 75% water, which does not burn, but evaporates because it is combined with inflammable substances

70. In my view however that argument does not take the matter much further: if in fact there is a net energy gain from the incineration of mixed waste and that energy is recovered, the operation is a recovery operation in accordance with head R1 of Annex IIB to the Directive. I do not see why that conclusion should be different merely because individual constituent parts of the waste would, if burned separately, not react in the same way. What is relevant is that the less inflammable waste, as a result of being mixed with more inflammable waste, in fact burns and the energy generated by the combined incineration is used.

71. Germany adds that if it is sufficient that the mixture alone, rather than the component elements, satisfy the definition of the operation in head R1 of Annex IIB to the Directive, the strict separation laid down by the Regulation between waste intended for disposal and waste intended for recovery would become impossible: all waste in fact unsuitable for use as a fuel and hence fit only for disposal could be simply mixed with waste which was so

60 — This appears to be feasible, since the first indent of Article 6(5) of the Regulation requires the consignment note to include information concerning 'the source, composition and quantity of the waste for recovery... and, in the case of waste from various sources, a detailed inventory of the waste'.

suitable; the first waste would thereby also be regarded as for recovery and thus escape the provisions of the Regulation applicable to waste for disposal. That argument however is also flawed: if those wastes not incinerable on their own are mixed with other, more inflammable, waste and the resulting mixture is in fact to be used principally as a fuel, it is surely appropriate that a shipment of such a mixture should be treated as a shipment of waste for recovery.

72. I accordingly do not accept Germany's submission that components of mixed waste must be assessed individually in order to determine whether the operation to which they are intended to be subjected is a recovery or a disposal operation.

Waste containing hazardous or harmful elements

73. Germany submits that, to the extent that components of the mixed waste constitute hazardous waste within the meaning of Council Directive 91/689/EEC on hazardous waste,[61] mixing them with other waste is contrary to Article 2(2) of that directive, which provides:

'Member States shall take the necessary measures to require that establishment[s] and undertaking[s] which dispose of, recover, collect or transport hazardous waste do not mix different categories of hazardous waste or mix hazardous waste with non-hazardous waste.'

74. However, mixing waste contrary to the provisions of Directive 91/689 cannot affect the meaning of 'recovery' and 'disposal' for the purpose of the Waste Directive and of the individual operations listed in Annex IIA and IIB thereto. That view is supported by Article 1(3) of Directive 91/689, which states that the definition of 'waste' and the other terms used therein — which include 'recovery' and 'disposal' — are to be those in the Waste Directive.

75. If Germany has reason to fear that hazardous and non-hazardous wastes are

61 — Directive of 12 December 1991, OJ 1991 L 377, p. 20.

being mixed contrary to the terms of the Hazardous Waste Directive, it must take the necessary measures as required by that directive to ensure that such practices are brought to an end.

76. The criteria laid down by the Länder concerned include the nature and quantity of polluting substances in the waste mixture: if the concentration of certain substances is above a prescribed threshold, incineration of the waste will be regarded as disposal. Germany explains first that this is because — as is clear from the note introducing Annex IIB to the Directive [62] — recovery operations must be harmless and compatible with the environment. However since the note introducing Annex IIA [63] governing disposal is in identical terms, that criterion alone cannot help to distinguish recovery and disposal operations.

77. Germany adds that the network of disposal installations required to be established by the Directive must enable waste to be disposed of 'by means of the most appropriate methods and technologies in order to ensure a high level of protection for the environment and public health' in accordance with Article 5(2) of the Directive. Recovery installations on the other hand do not always have in all Member States an equivalent level of technology. Member States may therefore impose a criterion of harmful content to distinguish between waste for disposal and waste for recovery and hence to ensure that waste containing harmful substances is disposed of in accordance with Article 5(2).

78. I cannot accept that argument.

79. First, Article 4(1) of the Directive imposes a general requirement on Member States to take 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'; again, therefore, there is no basis for a distinction between waste for recovery and waste for disposal by reference to different levels of environmental regulation of recovery and disposal operations.

80. Second, harmonised standards for air pollution from waste incineration plants are set throughout the Community, cur-

62 — Set out in paragraph 6 above.
63 — See paragraph 6 above.

rently by Directives 89/369 [64] and 89/429, [65] to be replaced in due course by Directive 2000/76. [66] In those circumstances, Germany cannot prevent the shipment of waste on the basis of alleged lesser compliance with those norms by other Member States. [67] That applies even though Germany may in accordance with the Directives and Article 176 EC maintain or introduce measures for the protection of the environment more stringent than those there laid down: [68] the Court has recently ruled that a Member State may not subject the shipment of waste for disposal to the condition that the intended disposal satisfy the requirements of the environmental protection legislation of the Member State of dispatch, [69] and it is clear from the terms of that judgment and the scheme of the Regulation that that principle will apply *a fortiori* to any analogous objection to the shipment of waste for recovery.

81. Third, the Court made it clear in *ASA* [70] that 'it does not follow from... the Directive that the hazardous or non-hazardous nature of the waste is, of itself, a relevant criterion for assessing whether a waste treatment operation must be classified as "recovery"'. There is nothing to suggest that that proposition will not be equally applicable where it is the allegedly harmful nature of individual components of mixed waste, rather than the fact that the waste as a whole is hazardous waste, which is at issue.

82. Finally, the Directive itself envisages that waste destined for recovery may contain dangerous substances: the third indent of Article 3(1)(a) requires Member States to take appropriate measures to encourage 'the development of appropriate techniques for the final disposal of dangerous substances contained in waste destined for recovery'.

83. For those reasons also I cannot accept Germany's further argument that, since certain other Community waste instruments regulate the extent to which specific types of harmful waste may be recovered rather than disposed of, the harmful content of individual components of mixed waste is a lawful general criterion which Member States may impose for distinguishing between waste for disposal by incineration and waste for recovery by use as a fuel.

64 — Council Directive 89/369/EEC of 8 June 1989 on the prevention of air pollution from new municipal waste incineration plants, OJ 1989 L 163, p. 32.

65 — Council Directive 89/429/EEC of 21 June 1989 on the reduction of air pollution from existing municipal waste-incineration plants, OJ 1989 L 203, p. 50.

66 — Directive 2000/76/EC of the European Parliament and of the Council of 4 December 2000 on the incineration of waste, OJ 2000 L 332, p. 91.

67 — See for example Case C-5/94 *Hedley Lomas* [1996] ECR I-2553, paragraph 20 of the judgment and the cases there cited.

68 — Final recital in the preamble to each directive.

69 — Case C-324/99 *DaimlerChrysler* [2001] ECR I-9897, paragraphs 48 to 65 of the judgment.

70 — Cited in note 31, paragraph 68 of the judgment.

84. I accordingly do not accept that the hazardous or harmful nature of elements of mixed waste is relevant to determining whether the waste should be classified as waste for recovery or waste for disposal.

Conclusion

85. I am accordingly of the opinion that the Court should:

(1) declare that, by raising objections on the ground of self-sufficiency in the disposal of waste to shipments of waste to other Member States to be used principally as a fuel, the Federal Republic of Germany has failed to fulfil its obligations under Article 7(2) and (4) of Council 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;

(2) order the Federal Republic of Germany to pay the costs.