Hazardous Waste Management Policy in the European Union: Case of Germany and Unification Illustrates Need to Consider Principle of Subsidiarity

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INTRODUCTION

Environmental legislation and especially that relating to hazardous waste management remains an area in which careful consideration has to be given to the nature of the problem before legislation is

harmonized and standardized. As this paper illustrates there is a need for harmonized legislation in some sectors such as the export of hazardous waste. As border checks disappear, hazardous waste is free to flow. In other areas, such as the treatment and disposal of hazardous waste, each country has to be able to deal with the problem individually; however, the goals and objectives in doing so must be harmonized in order to ensure a cleaner Europe for all. Germany will be used as a case study to illustrate the differences in environmental policy among the Member States of the European Union. German unification will be given special attention and the time granted to the former GDR in catching up with EC1 environmental legislation. This paper will highlight the difficulties faced in harmonizing environmental legislation as it remains an area assumed to be in conflict with economic growth. The implementation of legislation at the national, and sometimes regional level, is necessary at times in order to obtain long-lasting solutions to environmental problems. Solutions vary from region to region, therefore, the principle of subsidiarity will be especially important in this discussion.

EC HAZARDOUS WASTE LEGISLATION

The Environmental Action Programs

The 1957 Treaty of Rome makes no reference to environmental issues. The first time that the environment is mentioned in an EC document is in 1967, in conjunction with the directive on standards for classifying, packaging, and labeling dangerous substances. The First Environmental Action Program of 1973 establishes the first framework for EC environmental issues. The Program focuses on finding solutions to the elimination of wastes and to international toxicity and non-degradability problems. In addition, it asserts the need to harmonize environmental legislation in the EC in stating that, “major aspects of environmental policy in individual countries must no longer be planned or implemented in isolation...and national policies should be harmonized within the community.”2

The 2nd Environmental Action Program of 1977 states three objectives; 1) the prevention and reduction of quality non-recoverable waste, 2) the recovery, recycling and reuse of waste for raw materials and energy, and 3) proper management and harmless disposal of non-recoverable waste. It also expresses the need for the development of an EC environmental impact assessment system. These objectives were restated in 1983 by the 3rd Action Program. The third program also reflects the EC’s shift in priority from pollution reduction to pollution prevention. Between the First Action Program and 1985, over 120 regulations and directives were issued -- an indication of this area’s growing importance.

The current Fifth Environmental Action Program sets targets until the year 2000. This Program proposes increased interaction between different institutions in order to solve environmental problems. The Program reinforces priorities and strategizes resolutions, while stressing the need for preventative efforts in solving problems.

Polluter Pays Principle (PPP)

The polluter pays principle (PPP) was adopted on 22 November 1973 in a meeting of the Council of Ministers. This principle charges polluters with the cost of cleaning up pollution and encourages them to find less polluting products and technologies. Each member state is required to adopt the principle with the help of standards and charges. Product standards are to be used to specify the design of a product and the way in which it is used. Process standards are to apply to emissions, installation, and operations. Although the PPP does not set specific standards or targets, it establishes the framework for a common way of thinking about environmental problems in the EC. According to the text of the 1973 principle, charges are to be used to encourage polluters to comply with emissions and other standards. Income from charges may be used by the individual countries to finance pollution prevention mechanisms. When distortions arise between members’ policies, countries lagging behind would be allowed time to adapt their products or production processes to the new standards. Also, these countries may be granted “aid for a limited period and possibly of a degressive nature.”3 This aid may only be applied to existing production plants and processes.

The Growth Of The European Environmental Movement

The growth in the implementation of environmental regulations in the 1970s can be attributed to the increase in public concern about the state of the environment in the industrialized countries. Environmental organizations became more politically active during this time, while most governments expanded the scope of their own regulatory control over industry. Economic incentives to adopt environmental regulations existed as well. Individual EC countries realized the advantages of adopting stringent pollution standards -- making their products more competitive -- a measure that would cut costs and potentially create technical trade barriers. Individual countries took advantage of environmental measures that simultaneously improved their competitiveness and protected their industries from foreign competition. In order to prevent large trade-distorting disparities in pollution standards from one EC country to another, the EC was forced to implement European-wide emissions standards. A third reason for the surge in the 1970s is geographic proximity. A number of member states realized that they were directly affected by emissions in neighboring countries. The Netherlands, for example, is affected by the pollution that enters the Rhine river, upstream in Switzerland.

The realization of the need to harmonize was accompanied by protests from countries such as the United Kingdom and France who lacked the experience with environmental pressure groups. These countries opposed harmonization, effectively creating disagreements within the EC.

Germany especially, has seen the growth in environmental movements since the 1960s. The German tradition of conserving resources is a result of the scarcities suffered during and after World War II.4 The harmonization of environmental standards is a problem still evident today, and will be the focus of this paper.

The Framework Directives on Waste

The first hazardous waste related piece of EC legislation was passed in 1975. This framework directive on waste defines waste and disposal for the first time. Waste is defined as "any substance which the holder disposes of, or is required to dispose of due to national law." 5 Disposal is defined as the collection, sorting, transport, and treatment of waste as well as storage, tipping, recycling, reuse and recovery. This framework directive excludes radioactive wastes, wastes from mineral resources, waste water, agricultural waste, and gaseous effluents. It includes a general provision encouraging members to recycle and recover, and it outlines basic requirements to ensure that,

waste is disposed of without endangering human health and the environment, without risk to water, air soil, plants and animals, without causing nuisance through noise and odors, and without adversely affecting the countryside.

Further general provisions in this framework directive include the requirement that member states designate proper authorities who must draw up a plan to organize waste disposal and write a situation report every three years for submission to the Commission. This framework also hints at the idea of the polluter pays principle which is an integral part of later legislation. This framework was very general and, therefore, open to abuse and misunderstanding. However, it marked the early beginnings of EC environmental policy.

Only three years later the framework directive on toxic and hazardous waste was adopted. This directive is similar to the 1975 directive on wastes, but contains a list of toxic and dangerous substances. Those substances are described as "waste containing or contaminated by one or more of the substances in the list in such quantities or concentrations as to constitute a risk to health or the environment. The wastes excluded from this directive include radioactive waste, animal carcasses, agricultural waste, hospital waste, mining waste and household waste. This directive contains the same objectives as the 1975 framework directive and in addition prohibits in particular the abandonment and uncontrolled discharge of toxic and dangerous waste. Under this directive, member states are required to designate an authority on hazardous waste, and give them permission to handle the waste. The Member States will also be obligated to keep records of wastes handled and send periodic progress reports to the Commission. The most important part of this directive is in the annexes containing the lists of hazardous substances. The 1970s therefore were years of experimentation with environmental legislation. The legislation was often not respected; however, this was in part due to the lack of experience with the field and the lack of any real authority overseeing environmental protection. After all environment was not yet included in any of the Treaties.

Transfrontier Movement of Hazardous Waste

The 1980s represented a turning point for EC legislation in this area. The Single European Act had the effect of incorporating environment into the Maastricht Treaty. Before the Maastricht Treaty was signed in 1991, however, the EC came face to face with the dangers of uncontrolled hazardous waste. In 1983, a shipment of barrels containing dioxin being transported from Seveso, Italy disappeared for several months after finally reappearing in Basle, Switzerland. This triggered fear on the part of legislators and citizens alike, mandating the need to revise lax hazardous waste legislation and the transfrontier movement of it. A Commission Enquiry into the Seveso affair was set up which involved a European Parliament investigation and cleared the way for a proposal for a directive on the transfrontier movement of hazardous waste.

The EP enquiry demonstrated the importance of the waste treatment sector and the extent to which transfrontier shipping of hazardous waste was taking place. As a result, the Parliament asked the Council to speed up its examination of the proposal on transfrontier shipment and expressed its wish that the legal form of the proposal be in the form of a legally binding and directly applicable "regulation" as opposed to a "directive". This drastic requirement was not honored by the Council of Ministers. The Council recognized that environment was not yet an area covered by a Treaty and, therefore, not as easily agreed upon as other legislation in less controversial areas. In 1984, however, a directive on the transfrontier shipment of hazardous waste was adopted on the basis of the 1978 framework directive. It highlights the problem of sending waste to other countries without proper labeling, classification or packaging. This directive covers all shipments within the EC and those between an EC Member State and a third country.

The technicalities of this directive are important in so far as they highlight the problems of adopting Community-wide legislation in this area. Checking for compliance in this area is difficult if not impossible when border controls are eventually eliminated between some of the EC Members. In addition, this directive highlights the different attitudes towards environmental issues between the member states The central element of this directive concerns the setting up of a compulsory system of prior notification. This means that anyone intending to ship waste across a border must notify the competent authority of the country responsible for receipt of the notification. Notification must be made in the form of a special uniform document called a 'consignment note'.6 This note must include, 1) source and composition of the waste, producer's identity, inventory of waste, identity of original producers, 2) provisions made for routes and insurance against damage to third parties, 3) measures taken to ensure safety of transport, 4) existence of any contractual agreement with consignee of waste who must also have a special permit. After notification is received, authorities in the receiving country have one month to acknowledge receipt or object to proposed shipment. This directive came into force in October 1985.

In 1985 the Commission sent the Council a proposal to improve the safety of shipments to third countries outside of the EC. After working with the Organization for Economic Cooperation and Development (OECD) and the United Nations Environment Program (UNEP) the Commission judged it necessary to adopt further safety measures. In the case of shipping to third countries, before shipping waste, the member state will obtain agreement from the third state before conducting the notification procedure outlined in the 1984 directive. This led to an amendment in 1986 which was followed by even more requests to enforce monitoring of the shipment of hazardous wastes in 1988. The communication from the Commission to the Council raised problems with the export of wastes to developing countries, stating that these exports took place in breach of elementary concern for human health. The directive on the shipment of hazardous waste, according to the Commission, should include a requirement of proof that the consignee possesses adequate technical capacity for the disposal of the waste in question presenting no harm to human health or the environment. This communication became the target of criticism from some member countries wanting to continue the export of hazardous wastes to third countries without having to go through additional paper work. The objective of this urgent proposal was to bring the trade of hazardous waste down to a minimal level. The Commission declared its intent to pursue the following steps; 1) to require maximum stringency of 1984 and 1986 directives, 2) to propose a new directive to strengthen the two previous ones, 3) to examine the need for further legislation, 4) to draft a mandate for UNEP participation, 5) to find ways to provide third countries with technical assistance.7

In 1988, the Environmental Council adopted a resolution to 1) recognize the ban on imports of hazardous waste imposed by some third countries, 2) welcome UNEP cooperation, 3) stress the urgency of agreeing to a system, 4) request member states to give priority to requests from developing

countries pertaining to correct disposal and technical assistance, and 5) invite the states to further develop disposal systems for all types of waste. The 1988 communication to the Council was met by resistance from several of the member states as it infringed upon state sovereignty and freedom to act independently in the area of trade. The Commission was supported by only Denmark and the Netherlands on its proposal to require prior informed consent and notification of the dangers of the substance if being exported for the first time. and if the substance is one which is restricted within the EC. The directive was agreed upon in a compromise form as it required unanimity to pass in the Council of Ministers. In 1988, the framework directives on wastes and hazardous wastes were amended again to include an expanded list of hazardous waste. The 1978 hazardous and toxic waste directive was narrowed in definition to include only hazardous waste in accordance with the OECD definition. It also banned the mixing of hazardous waste with other waste unless necessary for the treatment or recycling of that waste.

The controversy over the shipment of hazardous waste is two-fold. On the one hand, shipments within the Community are now restricted to those countries unable to deal with waste flows nationally. As of May 1994 a new EC waste directive allows member states to ban the import of hazardous wastes destined to be landfilled or incinerated.8 On the other hand the more controversial issue has to do with hazardous waste shipments to developing countries. A proposal to ban such exports was opposed by Germany in 1993. The Commission urged to push ahead without Germany in accordance with the Basle Convention which bans such exports. The only EC signatory country to the Basle Convention is France. Germany and the United Kingdom claim that they can continue shipping hazardous wastes to be reused and recycled. It is, however, very difficult to ensure that these wastes are in fact reused and recycled.

Germany's opposition to the ban on exports of hazardous wastes has to be seen in light of the debates going on within the German Bundestag in March of 1992. Proceedings in the Bundestag indicate sharp differences between the political parties. On one side are the Bündnis 90/Grüne, represented by Dr. Klaus-Dieter Feige, the SPD, represented by Marion Caspers-Merk, and the PDS/Linke Liste, represented by Dr. Dagmar Enkelmann. The PDS and the Linke Liste in a March 19, 1992 proceeding called for the immediate banning of all hazardous waste shipments to developing countries. The majority coalition CDU/CSU and FDP agreed that the export of hazardous waste to these countries is wrong. However, they claimed that it is acceptable in cases where a country is unable to deal with the disposal of the waste within its own borders. ("Abfallexporte aus der Bundesrepublik Deutschland dürfen nach dem eindeutigen Gesetzesbefehl nur dann stattfinden, wenn eine Entsorgung in der Bundesrepublik Deutschland selbst nicht möglich oder nicht sinnvoll ist " 9) In general the majority coalition was more willing to make exceptions to the total ban on hazardous waste exports.

It is important to look at the discussions going on in Germany in order to understand that there was more than just one voice at work. The opposition to the export of hazardous waste seemed to be the overriding sentiment in the Bundestag; yet a year later Germany voted against a ban on this same issue. The latest developments in this area indicate that a solution has been found to the problem. Under a recent law Germany is now required to take back illegally exported toxic wastes.

The question over the free movement of goods and hazardous waste was brought up during the March 19, 1992 proceedings by a SPD parliamentarian who stated that if hazardous waste were to be treated as a product and the disposal of it as a service, then the borders would have to be opened for those goods. This, in her opinion, would represent a tremendous set-back for the EC and would mandate the need for new hazardous waste disposal legislation. This necessitates taking a closer look at the SEA and environmental policies.

The SEA and Environmental Policy

The Single European Act became the first EC Treaty to include a section on the environment. Article 103R establishes the following objectives, principles and conditions of implementation: 1) to preserve, protect, and improve the quality of the environment, 2) to contribute towards protecting human health, 3) to ensure a prudent and rational utilization of national resources. These are very general objectives and are further followed by a disclaimer to the third objective which states that, "the community's activities in this [national resources] area of the environment should not interfere with national policies regarding the exploitation of energy resources." 10 The SEA, therefore, contains no specific environmental regulations and no enforceable policies. It states the principles that form the

basis of EC environmental policy as being those of preventative action, polluter pays, rectification at source of environmental damage and integration of the environmental dimension in other Community policies. However, those principles should take into consideration: 1) environmental conditions and economic development of the regions, and 2) potential benefits and costs of action or lack of action.

Article 130S deals with the decision procedure within the Council which is to be by unanimity, however, by qualified majority at the Council's discretion. The third section dealing with the environment is Article 130T which specifies that the measures taken by the EC do not prevent any member from maintaining or introducing more stringent protective measures provided these are compatible with the Treaty.

Article 130T, as we shall see, conflicts with the Internal Market principle of the free movement of goods. In cases where environmental standards limit the movement of goods the decision over whether to allow the implementation of national standards is made by the European Court of Justice. Legislation approved under Article 130T requires unanimity in the Council of Ministers. These articles, therefore, illustrate the vagueness of environmental policy in the SEA and the extent to which the implementation and decision-making is left up to the member states.

Article 100A in the internal market chapter of the Maastricht Treaty "provides for the approximation of laws concerned with the functioning of the common market - to be approved by a qualified majority."11 According to Johnson and Corcelle, "the new Article 100A gives the member states the right, after the adoption of a harmonization by the Council acting by qualified majority to apply more severe national provisions on grounds relating to the protection of the environment or working environment."12 The existence of Community level environmental standards will guarantee that at least minimum standards are observed in all member countries. Individual countries will have the right to strive for environmental standards higher than those at the Community level. According to a Commission Task Force publication, "countries adopting comparatively stringent standards will reap benefits from higher environmental quality, which would tend to compensate for higher costs of environmental protection."13 In addition, this publication argues that the harmonization of environmental policies would come about as a competitive process. A country with low environmental standards will see polluting industries entering the country, and with time, will want to raise standards.

Monitoring for Compliance

The monitoring of compliance with EC hazardous waste directives, especially the transfrontier shipment of it, has become increasingly difficult with the opening of the internal borders. The Commission is responsible for checking compliance with and integration of Community directives into national law in each member country. Complaints made by individuals sometimes brings to light the lack of compliance. Over the years since environmental policies were first introduced, the following problems have arisen: 1) delayed inclusion of law, 2) partial incorporation, 3) directives were considered as recommendations, and 4) some cases, even those in which the European Court of Justice recognized the infraction, have not been followed. Article 169 of the EEC Treaty deals with infraction proceedings which state that if a member state does not comply after a certain period of time the issue is taken to the European Court of Justice. In order for directives to be implemented efficiently, increased communication with regional, national and environmental authorities is necessary. Directives are required to be implemented by each member state, but how is left up to each individual country. Infringements have risen since 1978 and checking implementation remains problematic.

The removal of internal borders and, therefore, border controls makes checking for compliance with hazardous waste legislation very difficult, because "under the Treaty member states are not permitted to restrict imports from other Community countries."14 This change has necessitated the creation of a control system in accordance with the Basle Convention to replace border controls. In addition, the internal market has mandated the need for the harmonization of hazardous waste incinerators, landfills and waste treatment. Hazardous waste legislation has caught manufacturers in a difficult situation. The stringent conditions placed on the disposal of hazardous waste can cause manufacturers to transport hazardous wastes over longer distances than normal waste to countries where enforcement is less stringent and costs of disposal lower.

Subsidiarity and Environmental Policy

The principle of subsidiarity stipulates that regulations be adopted at the lowest possible level of government. In other words, "the burden of proof lies with those who argue in favor of

centralization."15 To complement and in a way limit the power of the Member States, the principle of mutual recognition was established in 1978 with the Cassis de Dijon case. The European Court of Justice ruled in favor of the French liquor manufacturer and required Germany to open up its markets to this beverage even though it did not satisfy German definitions of a liquor. The two principles have "effectively provided a framework for competition among rules and regulators. The problem is that it is not set in stone. The principle of mutual recognition can be rejected if the issue at stake is in the national interest of a Member State. The Court of Justice rules on issues of mutual recognition on an ad hoc basis.

The issue over whether to harmonize environmental policy or allow individual countries to adopt stricter national standards is the most pressing problem facing the implementation of EC environmental regulations. At issue is whether to move towards integration but at the cost of adopting common minimum standards, or whether to allow the principle of the free movement of goods to be violated in favor of a healthier environment.

The problem of letting some environmental standards lag in poorer countries who would pay a higher cost for compliance is not in the spirit of the Community. It is imperative that Portugal and Spain catch up to Community standards with the help of structural funds. Letting industries in the Northern countries take advantage of lax standards in the South is not a solution to the EC hazardous waste problems. The subsidiarity principle should be used on the one hand in order to allow for the implementation of Community-wide standards to prevent the environment from becoming a barrier to trade. On the other hand, the principle should provide for minimum standards.

Member states should be given maximum flexibility in choosing how to meet environmental standards and should be free to impose environmental standards higher than the community norm insofar as this is possible within the terms of the Treaty.16

The difficulties facing Portugal and Spain in catching up to EC standards are multiple and include: 1) limited resources and facilities, 2) cost of compliance 25% higher than in Northern countries, and 3) the rapid growth of cities. The problems faced in Spain and Portugal are similar to the ones facing the unified Germany. However, some in Germany complain that the former GDR where the environment was completely degraded is forced to comply with standards in a shorter period of time than was allowed for Spain and Portugal. In order to understand the changes taking place in the former GDR one needs to have an understanding of hazardous waste legislation in Western Germany.

HAZARDOUS WASTE LEGISLATION IN GERMANY

German hazardous waste policy creates a regulatory framework for the collection, transport, treatment, storage, and disposal of most toxic wastes, but leaves implementation related responsibilities in the hands of Länder officials. This allows the individual Länder to vary in ability and willingness to meet program and management responsibilities. As a result some German states have serious waste problems, while others such as "Hesse and Bavaria have established a reputation for innovation and professionalism."17 This split is best illustrated by looking at some specific cases.

The German Waste Oil Directive

In 1968 Germany adopted a waste oil directive which was to become a model for the EC directive on waste oils. The German waste oil directive set up collection of waste oils by the Federal Office for Trade and Industry in quantities over 200 liters and arranged storage facilities for smaller quantities. Any mixture containing at least 4% oil could be picked up and those samples containing more than 12.5% contaminants would be charged a prearranged fee by the collector. This arrangement created damaging competition among collectors. The directive also established a subsidy system to be administered by the Office for Trade and Industry. Those firms recycling waste oils through regeneration of lubricants or burning with energy recovery were eligible for the subsidy, with the payments derived from a tax on lubricants. The cost of the levy was therefore transferred to consumers in line with the PPP. The costs that formed the basis of the subsidy included "the cost of collecting and transporting, and the cost of disposing of waste residues."18 In 1984, the phase-out of the subsidy started because the system had become self-sustaining.

The problem came in the 1980s with a PCB scare. Although the waste oil law had been successful and had led to the collection of 77.4% of waste oils in 1983, the conflict between the waste oil directive and the waste disposal law led to the demise of the waste oil directive. The waste disposal directive in Germany forced manufacturers and others to successfully and safely dispose of wastes. In order to avoid higher fees for waste disposal many chemicals escaped the law by mixing with waste oils. The result was a high percentage of waste oil contamination. Among other things highly toxic PCB was found in some recycled waste oil. The levels of PCB were further increased due to the constant recycling of the waste oils. The only alternative was to include waste oils in the waste disposal law which required the incineration of contaminated waste oils. The purpose of the waste oil law was to encourage recycling of oils. Because of the loop-hole in the law the recycling scheme that was to become a model for the EC, failed.

The German waste oil law was seen as a model for other countries and even the EC ended up adopting a directive based on the original German law. Germany then had to amend its changed law somewhat in order to comply with the EC directive. The EC adopted a waste oil directive in 1975 which closely resembled the German law. In 1985 the EC adopted an amendment in order to limit the field of application of the directive to mineral-based waste oils, excluding synthetic oils such as those containing PCB. Those containing PCB would be covered by a separate directive. This was a way of dealing with waste oils that the German law failed to attempt.

The German Waste Law

The German Federal Environmental Agency, (Umweltbundesamt, or UBA) established in 1974, funds research and development projects in all fields of pollution control including waste reduction, recycling, and waste management. The UBA can provide up to 50% of a private research effort for new processes to reduce waste generation. The UBA, with no regulatory authority, in 1983 provided $8.5 million to assist with research efforts. Changes to the German Waste Law of 1972 makes waste minimization and recycling an integral part of federal waste requirements and provides individual states with broad powers. According to Piasecki and Davis, “when new production facilities or modifications to existing facilities are being licensed, the use of waste minimization measures can be required as a condition of license.”19 This law authorizes the federal government to require certain wastes to be separated from others for purposes of recycling, requires producers and sellers to take back waste, and authorizes the ministry to require special labeling and packaging. As an individual state the state of Hessen previously put one of the provisions of this law to work in the area of waste minimization under the Federal Emission Protection Law.

In 1977, the Abfallbeseitigungsgesetz (waste disposal law), which established a public-private subsidized effort, was implemented. By 1980, five-tenths of the state governments had used their power to establish joint-venture companies. The successful implementation of this policy was due to 1) assigned authority to a sympathetic body, 2) established hierarchy in an integrated system, 3) delegated authority to state governments, and 4) financial resources and a polluter pays tax.20 The German example of waste laws implemented at the state level and given the authority and financial resources to institute the polluter pays principle is a model for EC legislation. The principle of subsidiarity as used in the German case illustrates the need to in some instances delegate authority to local governments.

Subsidiarity, together with the availability of some financial resources, would enable legislation and compliance to be left up to the Member States within the EC. The difference in the EC, however, is that EC legislation is often imposed with no financial resources made available to the member states. If all Member States were as successful as Germany in implementing their own waste laws, environmental policy could well be left up to the Member States under the principle of subsidiarity.

In the case of the former GDR, waste disposal activities are decentralized from Community legislation. However, compliance is expected and laid out in a specific directive regarding transitional measures in the new German Länder. According to a Commission publication, “measures to remedy environmental damage inherited from the past, as a result of previous environmental neglect, are principally the responsibility of member states.”21 It seems that the new Länder would fall under this provision, however, the legislation imposed by the EC in this area deserves a closer look.

THE NEW GERMAN LÄNDER AND WASTE MANAGEMENT POLICY

The Situation Before Unification

The collection of data and information on hazardous waste management in the former East Germany has been difficult as this data was not really kept. However, the degree of environmental degradation in the new Länder points to the inefficiency and high consumption of energy coupled with lax hazardous waste disposal standards. The SeRo system in East Germany was set up to collect waste but was accused of charging excessive fees. There are an estimated 11,000 designated hazardous waste sites, 10,000 of which are uncontrolled. 28,000 sites in the new Länder have to be screened for possible contamination.22 It is estimated that 10% of all land in the new Länder is ecologically damaged by contamination from agriculture and industry. The problem with municipal waste was minimal; the lack of products in general kept the municipal waste stream low.. However, industrial waste was created and incinerated at high levels. Records account for 700,000 tons of hazardous waste created annually (the actual figures are closer to 10 million tons), 90,000 of which was incinerated in 21 registered installations. Only three of the installations were equipped with gas-cleaning devices. 20,000 tons of hazardous waste were incinerated in non-registered installations, and the rest was disposed of in landfills with few precautionary measures taken. It remains to be seen if the environment in the new Länder is salvageable. Some measures have already been taken to start the clean-up.

Clean-up in the New Länder

The German government wants the new Länder to start on the right foot with efficient infrastructure designed to minimize emissions and other pollution. A memorandum drafted by the German government contains the details of which the following are included; 1) to achieve high environmental standards by the year 2000, 2) to avoid standstill in environmental policy-making, and 3) to continue resuming responsibilities for the environment in the European and global context.23 The short-term objectives of the German government include; 1) closing down unsafe landfills and reorganizing the entire waste-management system, 2) investigating and classifying contaminated sites, and instituting emergency measures to protect the population against hazards, and 3) banning hazardous substances in order to protect the ozone layer. In addition, it is expected that existing German waste laws be adopted completely and that a moratoria and implementation delays be used for complete restructuring of the industry, agriculture and transportation system. In the medium-term the following waste measures are to be taken; 1) develop strategies for waste avoidance and reduction, 2) reorganize hazardous waste management, 3) reorganize municipal waste management authorities, and 4) install complete management systems for clean-up.

According to minutes from a 14 May 1991 Bundestag meeting, the largest hazardous waste facility at Schönberg is equipped now with all the safety measures laid down by TA Abfall which went into effect in October of 1990. This facility was the recipient of 620,000 tons of hazardous waste in 1989.24

The New Länder and EC Legislation

The new Länder are operating on a tight schedule and expectations are high. They are expected to "jump over several stages in just a few years to do what it took the West Germans almost two decades to do."25 Expectations come not only from the German government in Bonn but also from the European Commission in Brussels. A Council Directive of 4 December 1990 outlines "the transitional measures applicable in Germany with regard to certain Community provisions relating to the protection of the environment."26 In regard to waste oils the new Länder are expected to comply with EC article 87/101/EEC by the time of German unification. This is manageable as it does not involve clean-up but rather the setup of a new disposal mechanism. Under Article 16 of 90/656/EEC, the new Länder are required to comply with provisions of the framework directives of 1975 and 1978. According to Article 9 of the 1978 framework directive the new Länder will have to comply with the following by 31 December 1995 at the latest:

Installations, establishments or undertakings which carry out the storage, treatment, and/or deposit of toxic and dangerous waste must obtain a permit from the competent authorities...the permit referred to in paragraph 1 shall cover in particular: the type and quantity of waste; the technical requirements; the precautions to be taken; the disposal site(s); the methods of disposal.27

In addition, the Federal Republic of Germany is required to submit an improvement plan to the Commission no later than 31 December 1991. This plan should conform with Article 12 of 78/319/EEC which states that,

the competent authorities shall draw up and keep up to date plans for the disposal of toxic and dangerous waste. The plans should cover in particular: the type and quantity of waste to be disposed of; the methods of disposal; specialized treatment centres where necessary; and suitable disposal sites.

The plans will be made public and the Commission together with the member states will "arrange for regular comparisons of the plans in order to ensure that implementation of this Directive is sufficiently coordinated."28 The last article concerning waste disposal in the new Länder refers to "adjusting measures to fill obvious loopholes and to make technical adjustments to those provided for in this Directive may be adopted."29 The process of adopting adjusting measures is one which involves voting on in the Council of Ministers by a qualified majority. "The Commission shall adopt the measures envisaged where these are in accordance with the opinion of the Committee."30

According to these Articles, the grace periods given to the new Länder are shorter than those envisaged by the German government, and "shorter than those granted to Spain and Portugal, even shorter than originally provided for in Community directives."31 According to Palinkas, "the environmental legacy could well hinder the process of economic recovery in the former GDR."32 Environmental clean-up measures are definitely needed in the former GDR; however, the short grace periods imposed by the EC, may not be compatible with economic development. The same problem will arise when the rest of the Eastern European countries become members of the EC. Before this happens there is a desperate need for EC "green foreign policy".33

The Feasibility of Environmental Clean-up in the New Länder

The economic situation in the former GDR means that workers are ready to accept environmental pollution. If German and EC environmental laws were applied right now, 70% of all enterprises would have to be shut down. This is not the solution to the problem. The official plan, however, is to apply new standards to new plants, shut down non-competitive ones and rehabilitate remaining ones until the year 1995-2000. The problem remains how to preserve workplaces and at the same time guarantee environmental protection. The FRG Law on Stability and Growth of 1967 even puts economic growth first and according to Günter Streibel, "ignores targets relaxed to environmental policy thus indirectly allocating task to environmental policy to repairing afterwards the consequential damages generated by economic growth." 34 The plan to develop ecological restructuring in the former GDR would result in the following: 1) reduction of health hazards, 2) change in economic structure: a decrease in energy and material intensive industries, 3) close-down of big polluting plants, and 4) reorganization of agricultural production. The apparent contradiction in the need for a competitive former GDR and the mandate for environmental clean-up is a big problem. However, the need to set a precedent and serve as a model is crucial for Germany, and "the benefits of 'staying the course' are substantial, not only for residents of Germany, but also for others, notably because such resolve and progress have a strong exemplary value."35

The reorganization of agricultural production to meet ecological goals would mean the banning of chemical fertilizers. These, however, are usually necessary in order to be economically competitive in the EC. In addition, the adoption of FRG environmental policies will give rise to new problems. For example, the use of catalytic converters will pose other health problems such as the increase of platinum. The mere unification of the FRG and the GDR will pose new health threats. The GDR will become more motorized which will lead to higher levels of emissions. The amount needed to eliminate the worst environmental damages is estimated at 400 billion DM (see Table 2) of which only 671 million DM will be allocated by the Federal Ministry of Environment.36

CONCLUSION: DIFFICULTIES IN HARMONIZING ENVIRONMENTAL LEGISLATION

The case of German unification illustrates the difficulties encountered when harmonizing environmental policy. On the one hand, harmonization of legislation is preferred as it ensures a

cleaner Europe. On the other hand, in some areas the principle of subsidiarity would rule in favor of national, even regional, legislation. The differences within the EC are striking. The North-South dichotomy is an often cited problem. In the case of water use, the Northern members are concerned with quality, whereas the Southern states worry about quantity. Germany suffers from acid rain and other symptoms of environmental degradation, the result of which is the implementation of stringent air quality and pollution standards. Germany's opposition to waste-to-energy incineration conflicts with policies favoring incineration in the United Kingdom. These generalizations serve only as examples. The case of waste disposal highlights differences among the Northern countries. The UK, for example, is surrounded by water and therefore emphasizes somewhat lax quality objectives. Germany, on the other hand, emphasizes strict emission standards. The challenge facing the EC is finding a regime suitable for all, one in which "international approaches that complement national measures and provides an adequate level of assurance in terms of outcomes"37 is employed.

As far as the North-South dichotomy in the EC is concerned, the solution may be to meet half-way. Minimum waste disposal standards should be harmonized in the short-run. Meanwhile, more stringent regulations are adopted on a multi-speed schedule with Germany adopting them today, and Portugal and Spain following suit in 15 to 20 years. This would at least set a high standard for other countries to strive for and would ensure the EU's competitiveness.

In some cases taking one country's environmental legislation as a model for Europe is appropriate; however, in others it is not. The German waste law was successfully incorporated into EC legislation even though it did not work as planned in Germany. In another case involving emission standards of industrial plants Germany's measures were not applicable to the rest of the EC. Germany experienced problems with acid rain which led it to retrofit industrial plants. This costly procedure was not justified in some countries including the UK which exports most of its emissions. A compromise was reached in which emission measures were left up to individual states, and which allowed Portugal to double its emissions while the EC average was set to drop 58% by the year 2003. This case, therefore, illustrates that "environmental management techniques that may be appropriate within a national context produce undesirable distortions when applied internationally."38 The success of the German waste disposal law indicates the appropriateness of implementing laws and delegating authority to local governments. This should indicate the necessity to allow national governments, even regional governments, to deal with localized environmental problems. Larger international problems that affect more than one country, however, should be solved at the EC level.

It remains difficult to determine the appropriate level of environmental action -- whether national or Community-wide. Community-wide environmental legislation should be continued to be implemented with special consideration in regard to the individual member states. The case of the former GDR illustrates the need to take each region within the EC as an individual case. The economic problems faced by the former GDR to some extent hinder the successful and timely implementation of EC environmental legislation. However, the EC should not fall into the trap of thinking as some economic policy makers do that, "environmental protection only sets in when a certain level of development has been reached."39

As trade is liberalized, higher levels of integration of environmental management become necessary. The Seveso case of transfrontier shipments of hazardous waste reveals that the mismanagement of hazardous waste can endanger the entire trade scheme set up in the EC -- another scandal could "risk bringing the structure of trade liberalization into disrepute."40 Directives aimed at limiting or banning the export of hazardous waste should therefore be harmonized.

Social regulation, such as that dealing with environmental issues has only come under the auspices of EC policy-making since the Single European Act. The question over how to deal with member countries conducting independent regulatory policy has to be answered in light of the fact that regulations act where the market fails. The common market concept "does not provide any guidelines as to how regulatory policies ought to be conducted."41 The Court has admitted that "consumer and environmental protection can, in given circumstances, justify the maintenance of obstacles to free movement."42 In determining how to reconcile regulatory differences with integration, it may be useful to realize that the problem is inherent to the very raison d'être of the EC. In other words, the problem is due to "the emphasis on market integration in the EEC Treaty, with the uniformity pressure it generates, and the difficulties linked to decision-making by consensus." 43

According to the Maastricht Treaty each member country reserves the right to adopt more stringent environmental measures than the Community norm. This should be a good sign for countries

such as Sweden now entering the EC with fears of having to lower its environmental standards. It remains to be seen at what level environmental legislation will be adopted, whether at the Community level or at the national level -- the principle of subsidiarity and the Council of Ministers voting by a qualified majority will nevertheless have the final word.

Table 1

Source: “1992” The Environmental Dimension

Table 2

Funds Required to Alleviate Worst Damages in former GDR (billion marks)

	Amount (Billion marks)
air pollution control	50-60
protection of the ozone layer	25-30
water pollution control	80-100
soil protection	5-10
clean-up of contaminated sites	40-45
nature conservation and protection of landscapes	2-5
TOTAL	202-250

Source: Environmental Protection: Problems and Prospects in East and West Germany
Note: The latest figures refer to about 400 billion marks
1 DM = 1.91 ECU

Table 3

Estimated level of investment required in Italy to raise environmental standards to Community norms

Country: Italy	Amount (Million ECU’s)
Water	10,940
Solid Waste	1,059
Soil Conservation	10
Protected Areas	300
Training	233
Data Collection and Processing	82
Other Measures	72
TOTAL	13,146

Source: “1992” The Environmental Dimension

Bibliography

Bongaerts, Jan. “Towards a Cleaner Germany: Post-unification Environmental Policy.” in Meet United Germany. FAZ Information Services: Frankfurt. 1991.

Commission of the European Communities. “Annex II Cost-Effectiveness of Environmental Policy Instruments”. in Potential Benefits of Integration of Environmental and Economic Policies.

Council Directive, 78/319/EEC on toxic and dangerous waste, 20 March 1978, reprinted in 21 OJ Eur. Comm. (No. 84) 43 (1978).

Council Directive 90/656/EEC on the transitional measures applicable in Germany with regard to certain Community provisions relating to the protection of the environment, 4 December 1990, reprinted in OJ Eur. Comm. (No. 353) 59 (1990).

Davis, Charles and James Lester. Dimensions of Hazardous Waste Politics and Policy. Greenwood Press: New York. 1988.

Dehousse, Renaud. "Integration vs. Regulation? On the Dynamics of Regulation in the European Community." Journal of Common Market Studies. December 1992.

Deutscher Bundestag. 12 Wahlperiode, 18 Sitzung, Bonn, Donnerstag, den 21 März 1991. pages 1110-1111.

Deutscher Bundestag. 12. Wahlperiode, 85 Sitzung, Bonn, Donnerstag den 19 März 1992. pages 7049-7063.

"Environmental Performance Review: Germany," Environmental Policy and Law, 24/1 1994, page 29-30.

Johnson, Stanley and Guy Corcelle. The Environmental Policy of the European Communities. Graham & Trotman: London. 1989.

Mangun, William. "A Comparative Analysis of Hazardous Waste Management Policy in Western Europe." in Dimensions of Hazardous Waste Politics and Policy. Greenwood Press: New York. 1988.

Morselli, L. "Legislation for Waste Management." in Technologies for Environmental Clean-up: Toxic and Hazardous Waste Management. ECSC, EEC, EAEC: The Netherlands. 1994.

Neven, Damien. "Regulatory Reform in the European Community." AEA Papers and Proceedings. May 1992.

Palinkas, Peter. "Comments on: Environmental Protection: Problems and Prospects in East and West Germany." in Economic Aspects of German Unification. Springer- Verlag: Berlin. 1992.

Piasecki, Bruce and Gary Davis. America's Future Toxic Waste Management: Lessons from Europe. Quorum Books: New York. 1987.

Shea, Cynthia Pollock. "Getting Serious in Germany," EPA Journal, July/August 1992.

Stares, Paul. The New Germany and the New Europe. The Brookings Institution: Washington, DC. 1992.

Streibel, Günter. "Environmental Protection: Problems and Prospects in East and West Germany." in Economic Aspects of German Unification. Springer-Verlag: Berlin. 1992.

Task Force Environment and the Internal Market. "1992" The Environmental Dimension. Economica Verlag: Bonn. 1990.

Vogel, David. "The Making of EC Environmental Policy." in Making Policy in Europe: the Europeification of National Policy Making. Sage: London. 1993.

Von Moltke. "A European Perspective on Trade and the Environment." in Trade and the Environment. Island Press: Washington, D.C. 1993.