# CHAPTER XXI ENVIRONMENTAL PROTECTION

#### A- COMMUNITY ACTION PROGRAMME

Since 1973 the Community has embarked on a policy for the environment which has resulted in a number of directives and the legislative process continues. The guiding principles are the conservation and protection of natural resources and amenities coupled with the principle that "the polluter pays for the prevention and elimination of environmental nuisance."

The policy is based not only on ethical and social considerations but also on the appreciation of the fact that disregard of the environment has wider repercussions in the areas of consumer protection, energy, industrial and regional policy as well as competition since manufacturing costs can be reduced at the expense of the damage to the environment.

Whilst the Community lays down the standards in the directives the Member States are responsible for their implementation and enforcement. In addition to the directives dealing with specific problems there is also provision for an environmental assessment of any major industrial or infrastructure project likely to have an impact on the environment. This concern led to measures for the protection of wild-life, the preservation of the natural habitat of endangered species affecting farming, hunting and the use of land generally.

The directives so far issued aim at the protection of the aquatic environment by controlling pollution through discharge of certain dangerous substances and establishing a common procedure for the exhange of information on the quality of surface water; combatting atmospheric pollution by controlling, in particular, air quality standards for lead, air quality for sulphur dioxide and the use of fuel oils; the control of noise levels for different types of motor vehicles, construction equipment and domestic appliances; the control of chemicals in the environment and the management of waste disposal. In addition the programme aims at action at international level and the promotion of scientific research and improvement of information, training and awareness of environmental problems.

International commitments comprise adhesion to international conventions and cooperation with various international organizations and non-member states.

#### B- IMPLICATIONS FOR TURKEY<sup>1</sup>

A number of handicaps face Turkey with regard to the environmental protection policy. Firstly, being a developing country Turkey comes up against financial difficulties which constitute serious problems to deal with for Turkey compared to some developed economies of Europe. Secondly, sufficient environmental data concerning air, land and waters of Turkey have not yet been gathered. And thirdly, environmental legislation both in terms of substantive law and administrative organization (i.e. the enforcement mechanism by public authorities) is not at a satisfactory level.

The first and second problems stated here are to be considered and solved in the long term¹a. In terms of environmental legislation, however, European Community provides a sufficient model which can be adopted by Turkey in a relatively short period.

Considering the Community environmental legislation as a model, Turkey has to move in two directions. Firstly, certain gaps in Turkish environmental legislation must be filled in harmony with the Community legislation and the existing Turkish environmental standards must be amended to be brought in line with the relevant Community standards. (After this chapter had been submitted to the Editor, two important legislative developments took place: A separate "Ministry of the Environment" has been established (21.8.1991, R.20967) which is given executive powers in "protection of the environment, prevention of the environmental pollution and improvement of the quality of the environment"; and a Regulation on Environmental Impact Assessment ("Çevresel Etki Değerlendirmesi Yönetmeliği", 7.3.1993, RG. 21489) has been passed which is mainly modelled on the corresponding EC Directive (i.e. Council Directive 85/337 on the assessment of the effects of certain public and private projects on the environment). Secondly, Turkey must accede to some of the international treaties to which the Community is a party.

## Protection Of Air Quality

- a) The Community has laid down very detailed rules regarding the protection of air quality. The only regulation in Turkish law which corresponds to these detailed rules is the "Regulation on Protection of Air Quality" which has been published in compliance with the Environment Act 19833. Below is a list of the EC legislation which is in full harmony with this Regulation. (There are a number of negligible differences concerning some of the numerical values):
  - -Council Directive 84/360 (on the combating of air pollution from industrial plants),
  - -Council Directive 82/884 (on a limit value for lead in the air),
- -Council Directive 87/217 (on the prevention and reduction of environmental pollution by asbestos,
- b) However there is also some EC legislation regarding protection of air quality which has no counterpart in Turkish law. And some of the rules which had been laid down in the above mentioned Turkish Regulation have to be revised to be brought in line with EC clean air standards.

EC documents which have to be considered in this respect are as follows:

-Council Directive 75/716 (relating to the sulphur contents of certain liquid fuels): Turkish standards No.3082 which applies to diesel oil does not accord with this Directive. The diesel oil which is produced in Turkey contains % 0.7 sulphur. This level should be brought down to % 0.3. For this reason, Turkish oil refineries should set up new sulphur eliminating units.

-Council Directive 85/203 (on air quality standards for nitrogen dioxide): Turkish standard regarding the maximum nitrogen dioxide value in the air (300 M/m3.) should be reduced to 200 M/m3.

-Council Directive 70/220 (relating to measures to be taken against air pollution by gases coming out of motor vehicles): The Turkish rule corresponding to this Directive is Article 47 of the Regulation on Protection of Air Quality. According to this Regulation, the maximum value for air polluters from motor vehicles shall be in compliance with Turkish Standards No.4236 and, where there is no applicable value in the Standard No.4236, the relevant EC standards shall be directly applicable as Turkish standards. Standards No.4236 lays down standard values for acceptable level of gas pollutants' emission from motor vehicles. There is also another Turkish

Standard, Standard No.5648 which lays down testing methods for the control of these maximum levels. These two standards are based on Standard ECE-R-15 of the United Nations and are generally in harmony with the EC standards. However, Turkey has not yet established an enforcement mechanism for implementation of these standards. Such a mechanism must be established promptly. Two recent amendments which have been made to the Council Directive 70/2204 must also be considered by the Turkish authorities.

-Council Directive 72/306 (relating to measures to be taken against the emission of pollutants from diesel engines): There is no Turkish legislation directly corresponding to Council Directive 72/306<sup>5</sup>. The principles of Directive 72/306 (and amending Council Directives 91/542 and 88/77) should be incorporated into Turkish environmental legislation.

-Council Directive 85/210 (concerning lead content of petrol): The corresponding Turkish legislation is Turkish Standard No.2885. The Standard No.2885 is below the Community standard given in the Council Directive 85/210. Turkish oil refineries have been producing "unleaded petrol" since 1989 which is in conformity with the EC standard (i.e. containing % 0,13 gram lead per litre); however, since Turkish Standards regarding the design of car engines do not require car manufacturers to adapt their production according to the use of unleaded petrol, consumption of this type of fuel remains very low.

-Council Directive 88/609 (on the limitation of emission of certain pollutant into the air from large combustion plants): Relevant numerical values in the Turkish Regulation on Protection of Air Quality are not much different from the standards of the Council Directive. However the control on Turkish industrial plants appears to be loose in this respect.

# Protection Of Water Quality

Protection of Water Quality in Turkey is subject to the "Water Pollution Control Regulation" which has been laid down according to the Environment Act 1983.

a) Below is a list of the EC legislation which is in harmony with the (Turkish) Water Pollution Control Regulation:

-Council Directive 76/160 (concerning the quality of bathing water): The Council

Directive 76/160 is generally in harmony with the Water Pollution Control Regulation. Some Turkish standards (total and fecal coliform and phenol) are stricter than the standards which are required in the Council Directive. However there is no need to lower these standards since they do not impair the competition capacity of the relevant Turkish industry.

On the other hand, the frequencies of sampling and analysis of bathing water under the Turkish Regulation is below the Council Directive's standard.

-Council Directive 76/464 (on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community): The Turkish legislation which is corresponding to and in full harmony with Council Directive 76/464 is the Directive on Dangerous and Hazardous Substances in Water8.

-Council Directives 82/176 and 84/156 (on limit values and quality objectives for mercury discharges): The standards which have been required by the above mentioned (Turkish) Water Pollution Control Regulation is in harmony with the Council Directives 82/176 and 84/156.

-Council Decision 77/795 (establishing a common procedure for exchange of information on the quality of surface fresh water): The "Water Pollution Control Regulation" (ss. 5-11) establishes a system which has been laid down by the Council Decision 77/795. There would be no difficulty for Turkey to accede to the Community procedure for exchange of information in this respect.

-Council Directive 80/68 (on protection of groundwater against pollution caused by certain dangerous substances): The (Turkish) Water Pollution Control Regulation (sec.22) is in harmony with the Council Directive 80/68. Besides, a special regulation, "The Groundwater Regulation 1961" makes provision to the similar effect.

b) There are also some areas in which Turkish water protection and management legislation is not in harmony with the EC law.

The EC documents which have to be considered in this respect are as follows:

-Council Directives 75/440 and 79/869 (concerning quality of surface water for the abstraction of drinking water and the methods of measurement and frequencies of sampling and analysis of such surface water): The Turkish legislation corresponding to Council Directive 74/440 is the "Water Pollution Control Regulation". The numerical values which have been introduced by this Regulation are generally in harmony with the EC Directive. There are a number of negligible differences, however, which could be eliminated.

The counterpart of Council Directive 79/869 in Turkish law is "Water Pollution Control Regulation Directive on Methods of Sampling and Analysis" Methods which have been introduced by this Directive are in general, in harmony with the Directive 79/869. But there are also some dissimilarities (especially with regard to the analysis methods for KOI, BOI5, dissolved oxygen saturation, phenol, cyanide, fluorides, arsenic, boron) which must be eliminated. In addition, Turkish Directive has no provision with regard to the analysis methods for "faecal streptococci" and "salmonella". This gap should be filled.

On the other hand, the above mentioned Turkish legislation provides for certain parameters and analysis methods for which the EC legislation makes no provision as yet11.

-Council Directive 79/923 (on the quality required of shellfish waters): Council Directive 79/923 has no real equivalent in Turkish law. Turkish "Water Products Act 1971" is too general in its scope and makes no provision for shellfish waters. The same is true for the "Water Products Regulation 1973" which has been laid down under the Water Products Act 1972. More specific legislation in accordance with Council Directive 79/923 is needed in Turkey.

-Council Directive 83/513 (on limit values and quality objectives for Cadmium discharges): The standards which have been introduced by the Directive 83/513 are much more stricter than those which have been required in the above mentioned Turkish Water Pollution Control Regulation. Water Pollution Control Regulation must be amenided in accordance with Council Directive 83/513.

-Council Directive 84/491 (on limit values and quality objectives for discharges of hexacholorocyclohexane): This Directive has no equivalent in Turkish law. The Water

Protection Control Regulation deals only with discharges of "Lindane" (a component used in some pesticides) and the limit values for this substance are also much higher than those acceptable in the Directive 84/491. Turkish Water Pollution Control Regulation should be amended in accordance with this Council Directive.

-Council Directive 86/280 (on limit values and quality objectives for discharges of carbontetrachloride, DDT and Pentachlorophnole): The Turkish Water Pollution Control Regulation which contains no provision in this respect, should be amended in accordance with Directive 86/280.

#### Protection Of Wildlife

- a) The Turkish environmental legislation contains the following statutes concerning the preservation and protection of wildlife. Forest Act 1956<sup>14</sup>, Hunting Act 1937<sup>15</sup>, Water Products Act 1971<sup>16</sup>, The Act on Preservation of Cultural and Natural Values 1983<sup>17</sup>. In addition, Turkey is a party to the following international conventions:
  - -Convention on the Protection of Birds 18.
  - -Convention for the Protection of the World Cultural and Natural Heritage<sup>19</sup>.
  - -Convention on the Conservation of the European Wildlife and Natural Habitats<sup>20</sup>.

The above mentioned laws are compatible with EC directives.

- b) On the other hand, the EC legislation which must be considered by Turkey to improve the Turkish legislation in this respect is as follows:
- -Council Regulation 81/348 (concerning imports of whales or other cetacean products)
- -Council Regulation 91/3254 (prohibiting the use of leghold traps in the Community and introduction into the Community of pelts and manufactured goods of certain wild animal species originating in countries which catch them by means of methods which do not meet humane trapping standards)
- -Council Regulation 82/3626, as amended by the Council Regulation 91/3675 (on implementation in the Community of the Convention on International Trade in Endangered Species of Wild Fauna and Flora)

#### Noise Pollution

a) "Noise Control Regulation"<sup>21</sup> which has been issued according to Art. 14 of the (Turkish) Environment Act 1983 lays down very detailed provisions and standards in Turkey. Some of these provisions and standards are in harmony with the corresponding EC legislation. Below is a list of these Turkish provisions and the relevant EC directives:

-Council Directive 78/1015, as amended by Council Directive 89/235 (concerning the permissible sound level and exhaust system of motorcycles): The Turkish legislation corresponding to this Directive is the "Regulation regarding the Manufacturing, Modification and Fitting of Vehicles"<sup>22</sup>. For the present, this Regulation is in harmony with the Council Directive 78/1015 though there are some negligible dissimilarities. However, the "target values" in this respect which are going to take effect in the years 1993 and 1994 under Directive 89/235, involve much lower limit values. The above mentioned Turkish Regulation should be amended by that time.

-Council Directive 79/113, as amended by Council Directive 81/1051 (relating to the determination of the noise emission of construction plant and equipment): The above mentioned Turkish Noise Control Regulation is in harmony with this Directive.

-Council Directive 86/662 (on the limitation of noise emitted by hydraulic excavators, rope-operated excavators, bulldozers, loaders and excavator loaders): This Directive is in harmony with the standards which have been laid down in the Turkish Noise Control Regulation.

-Council Directive 80/51, as amended by Council Directive 83/206 (on the limitation of noise emission from subsonic aircraft): This Directive is based on the International Convention on Civil Aviation. Turkey has acceeded to this Convention by the Public Law No.4749<sup>23</sup>. The Turkish Civil Aviation Act 1983<sup>24</sup> makes also provision for giving effect to the standards and recommendations which have been stated in the annexes of the same Convention (Art. 48).

-Council Directive 89/629 (on limitation of noise emission from civil subsonic jet aeroplanes): This Directive is similarly based on International Convention on Civil Aviation and, therefore, it is in harmony with the above mentioned Turkish legislation based on the same Convention.

b) There are also some dissimilarities between Turkish and EC legislation in this area. Accordingly, the following Council Directives must be considered:

-Council Directive 70/157 (relating to permissible sound level and exhaust system of motor vehicles): At the outset Turkish noise Control Regulation used to be in harmony with Council Directive 70/157. However the subsequent Council Directives 77/212 and 84/424 brought new limit values for sound levels and laid down an adaptation period for motor industry. Still later, Council Directive 89/491 increased the permissible sound level for vehicles which are designed to consume unleaded petrol. These developments should be incorporated into the Turkish Regulation and the Turkish motor industry must be encouraged to manufacture motor vehicles which may consume unleaded petrol.

-Council Directive 84/533 (relating to the permissible sound level of compressors): The relevant limit value in the Turkish Noise Control Regulation is 113 dBA. This standard should be lowered to 100 dBA to be brought in line with Council Directive 84/533.

-Council Directive 84/534 (relating to the permissible sound level of tower cranes): The standards which have been laid down in this Directive have no equivalent in the above mentioned Turkish Noise Control Regulation. This gap should be filled.

-Council Directive 84/535 (relating to the permissible sound power level of welding generators): The Turkish Noise Control Regulation lays down stricter standards in this respect.

-Council Directive 84/536 (relating to the permissible sound power level of power generators): The standards which have been laid down in this Directive has no equivalent in the Turkish Noise Control Regulation. This gap should be filled.

-Council Directive 84/537 (relating to the permissible sound level of powered hand-held concrete-breakers and picks): The Turkish Noise Control Regulation lays down stricter standards in this respect.

-Council Directive 84/538 (relating to the permissible sound power level of lawn-mowers): The standards which have been laid down in this Directive has no equiv-

alent in the Turkish Noise Control Regulation. But the use of lawnmowers is also prohibited in the hours 20.00 - 08.00. This gap should be filled.

-Council Directive 86/594 (relating to noise emitted by household appliances): This Directive has no equivalent provision in the Turkish Noise Control Regulation. This gap should be filled.

## Waste Management

a) The EC legislation concerning waste management makes provision both for the "(Ordinary) Waste Management" and for the "Management of Dangerous and Hazardous Waste".

Ordinary waste management is generally dealt with by the "Waste Control Regulation"<sup>25</sup> in Turkey. But there is no general Turkish legislation which makes provision for dangerous and hazardous waste. In this context the following EC directives are in harmony with the relevant Turkish legislation:

-Council Directive 75/439 (on disposal of waste oils): There is no exact equivalent of this Directive in Turkish law. However, the discharge of oils into water is subject to the above mentioned Water Protection Control Regulation and "Directive on Dangerous and Hazardous Substances in Water". The Turkish Regulation on Protection of Air Quality makes also provision for burning of waste oils. These provisions are more detailed than, but in harmony with Directive 75/439.

-Council Directive 86/278 (on the use of sewage sludge in agriculture): The limit values which have been laid down by this Directive regarding waste which contains heavy metal pollutants are in harmony with the Turkish Waste Control Regulation and the "Annex IV" thereto. More detailed provisions in this respect are laid down by the Turkish "Directive on Technical Methods regarding the Water Pollution Control Regulation"<sup>26</sup>.

-Council Directive 84/631 (on the supervision and control within the Community of the transfrontier shipment of hazardous waste): The Turkish Environment Act 1983 is amended in 1988 to be harmonized with this Directive<sup>27</sup>. Besides, Turkey has accepted an OECD decision on the control of transfrontier movements of hazardous waste which had also been accepted by the EC by Council Decision 90/170.

- b) The Council Directives below, on the other hand, remain to be considered by Turkey:
- -Council Directive 75/442 (on waste): At the outset, Turkish Waste Control Regulation was in harmony with the Directive 75/442. However, this Directive has been amended by Council Directive 91/156. Council Directive 91/156 makes provision for the development of clean technologies and less hazardous products and recycling or reuse of waste as secondary raw material or a source of energy. These aspects of waste management should also be dealt with by the above mentioned Turkish Regulation.
- -Council Directive 78/319 (on toxic and dangerous waste): There is no corresponding Turkish legislation in this field except the "Directive on Dangerous and Hazardous Substances in Water" 28. A regulation is desperately needed.
- -Council Directive 76/403 (on the disposal of polychlorinated biphenyls and polychlorinated terphenyls): There is no corresponding Turkish legislation except a single provision in the "Directive on Dangerous and Hazardous Substances in Water" which requires a permission to be obtained for the discharge of such substance. This gap should be filled.
- -Council Directive 78/176, 83/29 (on waste from titanium dioxide industry)<sup>29</sup> There is no corresponding Turkish legislation. This gap should be filled.

#### International Conventions

- a) Turkey is a party to the following international conventions relating to environmental protection, to which the EC is also a party:
  - -Convention on the conservation of European wildlife and natural habitats30.
  - -Convention on long-range transboundry air pollution31.
  - -Convention on the protection of the Mediterranean Sea against pollution32.
- -Protocol for the protection of the Mediterranean Sea against pollution from land based sources<sup>33</sup>.
  - -Vienna Convention for the protection of ozone layer34.

- -Montreal Protocol on substances that deplete the ozone layer35.
- b) Turkey should also accede to the following international conventions to which the Community is a party: (There are also a number of conventions to which the Community is a party, but which do not directly concern Turkey because of its geographical position<sup>36</sup>.
  - -Convention on the conservation of migratory species of wild animals (1979)
- -Convention on the prevention of marine pollution from land based sources (Paris Convention) (1974)
- -Convention on international trade in endangered species of wild fauna and flora (1982)
  - -Convention on the conservation of Antarctic marine living recourses (1980)
- -Protocol concerning cooperation in combatting pollution of the Mediterranean Sea by oil and other harmful substances in cases of emergency.

#### NOTES:

#### 1 Sevim Budak

1a See Emre Gönen, "Çevre Sorunları: AT ve Türkiye'de Çerve Politikalarının Karşılaştırmalı Bir İncelemesi" (Envirormental Problems: A Comparative Discussion on Turkish and EC Environmental Policies), İKV Dergisi, January 1990, p.75; Zeynep Arat, Avrupa Topluluğu ve Türkiye'de Çevre Sorunları ve Çevre Politikaları (Environmental Problems and Environmental Policies in Turkey and the EC), DPT Yayını, February 1988 Ankara; Ali Karaca, "Çevre Sorunları - AT ve Türkiye" (Environmental Problems - EC and Turkey), İktisat ve Maliye, Volume 34, June 1987.

- 2 Hava Kalitesinin Korunması Yönetmeliği 21,11.1986, RG.19269
- 3 Public Law No:2872.
- 4 Commission Directive 89/491 and Council Directive 91/441
- 5 There is only a Turkish Standard regarding OPASIMETRE: An instrument for measuring the density of exhaust gases from diesel engines
- 6 Selçuk Sancar, Avrupa Topluluğunda Enerji Arzı-Çevre Dengesinin Optimizasyonu ve Türkiye'deki Uygulanabilirliği, (The Optimizing Energy Supply Environment Balance in the European Community and Applicability for Turkey) Ankara, 1992, p.89
  - 7 Su Kirliliği Kontrol Yönetmeliği 4.9.1988, Official Gazette, No.19919
  - 8 Suda Tehlikeli ve Zararlı Maddeler Tebliği, 12.3.1989,Official Gazette, No..20106.
  - 9 20.7.1961, 5/1465 sayılı Yeraltı Suları Tüzüğü
- 10 Official Gazette, No. 20748
- 11 These include parameters and analysis methods concerning bromide, iodine, total organic carbon, organic acids, tin, nickel, aluminium, cobalt, silver, calcium, vanadium
- 12 Su Ürünleri Kanunu Public Law No:1380
- 13 28.6.1973, 7/6719 sayılı Su Ürünleri Tüzüğü
- 14 (Orman Kanunu) Public Law No:6831
- 15 (Kara Avcılığı Kanunu) Public Law No:3167
- 16 (Su Ürünleri Kanunu) Public Law No:1380
- 17 (Kültür ve Tabiat Varlıklarını Koruma Kanunu) Public Law No:2683.
- 18 (Kuşların Himayesine Dair Milletlerarası Sözleşme) Public Law no:797
- 19 (Dünya Kültürel ve Doğal Mirasının Korunması Hakkında Sözleşme), Decision of the Council of Ministers of the Turkish Republic 8/4788, Official Gazette, No.17959.

- 20 (Avrupa Yaban Hayatının ve Yaşama Ortamlarının Korunması Sözleşmesi), Decision of the Council of Ministers 84/7601, Official Gazette, No. 18318
- 21 Gürültü Kontrol Yönetmeliği 11.12.1986, Official Gazette, No.19308
- 22 Araçların İmal, Tadil ve Montajı Hakkında Yönetmelik 19.6.1985
- 23 Official Gazette, No.6029
- 24 (Sivil Havacılık Kanunu), Public Law No.2920
- 25 See RG.20814, and the amending Regulation of 3.4.1991 (OG, No. 20834)
- 26 Official Gazette, No. 20748
- 27 Public Law No.3416
- 28 Supra
- 29 Council Directive 89/428 regarding the same subject was annulled by a judgment of the Court of Justice dated 11.6.1991 (OJ. C 180/11).
- 30 Decision of the Council of Ministers of the Turkish Republic 84/7601, Official Gazette, No.18318
- 31 Decision of the Council of Ministers 83/6007, Official Gazette, No.17996
- 32 Decision of the Council of Ministers 80/2067, Official Gazette, No.17369
- 33 Decision of Council of the Ministers 87/11520, Official Gazette, No.19968
- 34 Decision of the Council of Ministers 90/733, Official Gazette, No.20629
- 35 Decision of the Council of Ministers 90/733, Official Gazette, No. 20629
- 36 See OJ. L.240 19.09.77; OJ L 378 31.12.82; OJ 237 26.08.83; OJ L 378 30.12.78; OJ L 227 12.08.81; OJ L 162. 18.06.86; OJ L 321 23.11.91.