

SOME LEGAL ASPECTS OF AIR POLLUTION CONTROL IN TURKEY

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Turkey is one of the most rapidly urbanizing countries in the Middle East. Although the percentage of urban population is only % 33.5 for the present, the annual rate of urbanization is somewhere between 6 % and 7 %. The main characteristics of urbanization seems to be the further growth and metropolitanization of a few urban centers which have already reached a certain size. For instance, the size of Istanbul is around 3 millions, almost twice larger than that of the second largest city, namely Ankara, the capital which is around 1.5 millions. The number of cities of 100,000 and more inhabitants has grown from 2 in 1927, to 4 in 1955, to 9 in 1960 and to 20 in 1970. Between 1960-1965, the annual average population increase was 2.5 % while it has been 6 % for urban population and 8.8 % for those places with a population of more than 100,000. According to the projections based on the future investment potentials, it is estimated that the tendency toward big cities will continue and some 75 % of urban population will be living in cities of more than 100,000 population in 1985, while this figure is only 56.8 % today.

This rapid concentration of population in metropolitan centers together with industrialization efforts and with the increase in the number of motor vehicles has made the control of air pollution an important urban problem in this country especially since 1950.

Ankara, Istanbul and Izmir are three cities where air pollution control has become a necessity for the government authorities in Ankara, the main reason is the dense chimney smoke and gases mixing into the air from buildings and residences due to the incomplete combustion of sub-bituminous coal and lignite. In Istanbul, the smoke emission is not felt as hardly as it is in the capital. Thirdly, a copper ore smelting plant at Murgul pollutes the air, with a concentration of sulphur dioxide gases emitted by a copper smelting plant in the township of Maden severely effects the health of all

life in the area. The most polluted city among these is Ankara. Ankara, by its meteorological and geological position is the most convenient city to have its air polluted. Surrounding the city are hills about 1,100 m high and the center is only 850 m (sea level). With this location it resembles a ditch. There are no continuous and prevailing winds. The use of lignite for heating is one of the main causes of air pollution in Ankara. Apart from these factors, the exhaust of cars and the dirty roads in the city also contribute to the air pollution. The number of motor vehicles is around 100,000 and 15,000 are operating with fuel. According to the prevailing international standards smoke in the air should not exceed 0.050, mgr. and sulphur 0.150 mgr. However, the concentration of these is respectively, 0.250 and 0.269 mgr. in Ankara in colder days.

It has been estimated that some health hazards such as chronicle bronchite, asthma and cancer increase in direct proportion with the increase in the city population.

Air Pollution Control Legislation

A. Policy: Principles and Methods

1. Air Pollution in General

Air pollution control has not interested the public opinion and the government until a few years ago. Therefore, it is not possible to say that it is included in a general programme of the protection of environment. Existing powers of the governmental authorities are divided between numerous agencies according to the legislation concerning environmental health.

There is neither an independent institution specially charged with the protection of the environment, nor a department attached to a particular ministry.

The Ministry of Health and Social Assistance has prepared a law project on Air Pollution control for some time ago. In this law project that is in the Parliament now, polluted air is defined and the degrees of pollution are grouped. If this project becomes a law, the Ministry of Health will have the power to issue instructions to establish anti-pollution standards and to determine the categories of pollutants in order to help the implementation of the legislation. The jurisdiction of the law will be determined by the Council of Ministers upon the proposal of the Minister of Health. Gover-

nors will be given the authority to control all kinds of building, dwellings, motor vehicles etc., from the standpoint of their effects on the pollution. They will be authorized to shut the sources of pollution, to forbid the sale of certain fuels if necessary and to limit the number of motor vehicles within the boundaries of their provinces.

Countrolling the implementation of the measures to be taken in order to prevent air pollution in industrial areas and obligatory preventive measures that should be taken by the governors will be within the joint responsibility of the Ministries of Industry and Technology, Health, Energy and Natural Resources.

According to this law project, a General Directorate of Air Pollution Prevention and Protection of Environmental Health will be set up within the Ministry of Health. There will be an Interministerial Control and Supervision Commission attached to this General Directorate. In addition to this, a provincial Air Pollution Collaboration Committee will be formed in each province under the chairmanship of the governor, comprising of the directors of Health, Public Works, Public Security, and of Mayors.

A second law project was prepared by the Anti-Pollution Association of Ankara. This is a more elaborate document possessing provisions concerning city planning and industrial zones, measurement of the pollution, buildings and motor vehicles. The creation of an Air Protection Office to investigate the reasons for the air pollution and look for the preventive measures is provided in this project. This office will be directly attached to the Prime Minister. The second law project includes several other provisions regarding penalties and the transfer of harmful establishments elsewhere.

2. Methods of Regulation

Authorized institution at the central level to take legislative measures for the control of air pollution is the Parliament which consists of 450 deputies and 150 members of the Senate.

Regulatory measures are within the powers of the central government, as well as within those of local government units. Ministry of Health, Ministry of Reconstruction and Resettlement, Ministry of Energy and Natural Resources are the main central government departments that can take measures against air pollution. Standing committees of the municipalities and mayors themselves can be regarded as local executives organs having similar powers.

Although it does not exist a law in Turkey, nor a coherent legislation specially designed to control air pollution, the Constitution of Turkey (article 49) states that «the State shall ensure that every one shall be physically and morally in good health». The Public Hygiene and Health Law authorizes the government «to improve the health conditions of the country, to control the factors which are harmful for the health of human beings and to ensure healthy growth of future generations.» These activities are, at the same time, the main functions of the Ministry of Health provided in its organic law.

A law on the Socialization of Health Services defines its conception of «health», as being completely well, not only in its physical, but at the same time in moral and social senses. There is no doubt that people living in an extremely polluted atmosphere can not be considered as completely well.

Air pollution is, first of all, an urban problem. Therefore, the function of controlling pollution belongs to municipalities. According to the Public Hygiene and Health Law (Art. 20, par. 6 and 9) supervising the health conditions of dwellings and trying to put an end to the factors that are apparently harmful to the well being of the public are the main municipal functions concerning general hygiene.

The law of Municipalities empowers these local government units, in a general way, without mentioning air pollution at all, with taking necessary measures to control the location of industrial establishments, market places, treshing floors, gas depots, coal depots, cemeteries, dust and rubbish heaps, and to issue license for their establishment. There is no doubt that air pollution control which did not exist 40 years ago in this country, when the Law of Municipalites had been passed, has become one of the most serious problems before the municipalities during the last two decades.

The Law of Municipalities makes a distinction between municipal functions from one city to another. Most of the important functions are obligatory for all municipalities, while some others are obligatory for only certain cities with sufficient yearly revenue. The above mentioned municipal functions which are closely related with public health are considered obligatory for all municipalities.

Municipalities, to perform their functions properly, issue municipal police ordinances. These ordinances possesses provisions concerning minimum standards of the dwelling units and the principles formulated for the orderly and healthy development of communities. For instance, to

have ready air pollution controlling equipments, to construct chimneys not below a certain height and to use filters in all chimneys can be made obligatory by the municipalities as an implication of their police functions.

Town Planning Law (No: 6785) considering planning as the most direct solution for the pollution problems, states (Art. 52) that municipalities can demand from the users of smoke generating establishments to discontinue hazardous operation of their establishments and, if the concerned people do not take appropriate measures within the prescribed time, they officially act in accordance with the law and can stop the continuation of that activity. In these cases, disobedient citizens have the obligation to pay all expenditures incurred to the municipality, plus 10 % fine. (Art. 54).

Not only municipalities, but the provincial local authorities, too, has some responsibility vis à vis the prevention and reduction of the unhealthy effects of air pollution. The Public Hygiene and Health Law puts commercial and industrial establishments into three different categories in terms of the nuisances they create for the well being of the public. The competence to open those falling in the second and the third categories belongs to the governors and subgovernors. (Préfets et sous-préfets). Their official permission for the opening of these institutions has to be relied upon the positive reports of the local health authorities. (The Public Hygiene and Health Law, Art. 268-272). What are these establishments? The second category institutions are those that although they must not be separated from the residential areas, a prior inquiry is necessary to see whether they cause harm for the families living near them. The third category establishments are those that may be set up within residential areas though under strict control of the health authorities.

The administration has not only the power to permit the establishment of these institutions, but at the same time to close those that were set up without prior permission, or they become operating not in accordance with the conditions of the permission. An appeal to the Council of State which is the highest administrative court, against a decision of a governor closing a bakery issuing harmful gases and smokes was not accepted by the court.

In addition to local authorities, several central ministries have some regulatory powers pertaining to air pollution control. They use these powers either directly or indirectly as a result of their tutelage functions. For instance, the function of the Ministry of Health is to improve health conditions

of the country to take any measures which seem necessary for the well being of the public. Opening of the first category of harmful industrial and commercial establishments (which was referred above in connection with the distinction of the Public Hygiene and Health Law) depends upon the decision of the Ministry of Health. Although the Ministry had the power to transfer this kind of establishments to elsewhere, or to pull them down, so many factories, workshops and similar places creating serious dangers for the environmental health have continued to exist even after 1930 when the above mentioned law had come into force.

Secondly, the Ministry of Reconstruction and Resettlement is interested in air pollution as the highest policy-making institution responsible for town and country planning. Its power includes the regulation and controlling of mapping and planning activities at the local level, and taking measures for their implementation. This function has a close bearing on the form and location of cities which is directly related to air pollution.

Another function of the Ministry of Reconstruction and Resettlement concerns the geographical distribution of population and economic activities in the country and taking policy measures so as to ensure that this distribution should not be unbalanced. This has also a bearing on the atmospheric pollution which is accentuated by the excessive concentration of population in particular centers.

Thirdly, the major pollutants are industrial, commercial and residential establishments and fuels used for power generation and heating, all concern functions of this Ministry are to administer industrial and mining extraction activities in accordance with the public interest and to take measures to provide necessary coordination among institutions in this field.

The Ministry of Energy and Natural Resources, too, concerns itself with air pollution. This Ministry has published an ordinance in 1964 to train managers of the apartments how to use burning equipments, lignite and fuel oil burning boilers properly. This was a necessity because the heating boilers in the city of Ankara and Istanbul are very old, 1920 models. Present boiler construction is not suitable for lignite burning because of the absence of the secondary combustion chamber and their grotes condition. Most of the boilers of old style are being without any modification to suit the needs of fuel oil consumption. Surveys have shown that the old style semi cylinder boilers contribute more to air pollution than the newer modern boilers. Chimney construction in this country is very much out

of present technology and based on rule of thumb-like calculation. The cited ordinance forbids the employment of those who are not trained in the procedures of burning coal and fuel in boilers properly.

As it is seen from the above mentioned review of functions, regulations are both adopted at national as well as at local level. Even they are issued at local level, all ordinances are subject to the tutelage control of the central government, namely of certain central ministries. Although the Constitution of Turkey does not allow the creation of regional government, governors, as the chief executives of the provincial administration and as the representatives of the central government can use certain powers against the air pollution in areas larger than one province. This is a direct result of the deconcentrated nature of the Turkish administrative structure.

Regulations concerning air pollution are not uniform for the whole of the country since they are not based on a general law. Municipal police ordinances are favorable to provide necessary diversification in the implementation of the control measures. For the time being, only several cities are complaining from chronicle air pollution.

3. Principles of the Regulations

As it is mentioned above, *existing regulations* aim both at preventing air pollution by controlling the sources and at the same time by trying to reduce the effects of pollution on environmental health. The method used for the air pollution control has been rather pragmatic so far, without establishing specific criteria for the quality of air and specific standards for each type of pollutants. Since a relatively short period of time, the Scientific and Technical Research Council of Turkey has started air quality investigation on a regional basis in such metropolitan areas as Ankara and Istanbul.

Although existing regulations require a prior authorization for the creation of possible sources of air pollution, corresponding control measures are not provided. Even in cases where a prior authorization is necessary its aim is to deal with all sources of pollution, but not specifically with air pollution.

As it is explained above, it is the direct implication of the Public Hygiene and Health Law that all harmful installations will be modified at the expense of their owners when the legislation was put into effect. Similarly, according to the same law, expenditures for the prevention will be taken care of by the agents of pollution, but not by the community.

4. Methods other than the regulation of pollutants

The government does not follow a policy to encourage anti-pollution activities by providing subsidies or other fiscal incentives. The support of the government tends rather to include the encouragement of scientific research into the air pollution problems.

Scientific and Technical Research Council of Turkey that is a governmental institution started a large scale investigation in 1968 with respect to air pollution in large urban centers. Investigation Group of this Council decided to divide the research subject into 7 sections like the following:

1. An economic study
2. Heating and fuel research
3. The means and improvement of heating in districts
4. Research of vehicles
5. Other causes of pollution
6. The measurement of polluted air
7. Research on administrative and legislative measures.

Research projects that are underway include manufacture and production of smokeless solid fuels, investigation of methods to overcome corrosion factors and the effects of air pollution of fuel oil and coal burning equipment. Another study of central heating problem of the city of Ankara is also continuing. The government participates directly in financing all these research projects by appropriating funds out of the general budget.

B. Application of the Legislation and Sanctions

1. Controlling Implementation

Control function on the implementation of the regulation concerning air pollution is exercised in accordance with the principles governing our administrative structure. The first are various organs of the municipality. Second are the representatives of the central government, such as the governor and the sub-governor, who have the power to use certain controls over the decisions of local authorities. These chief-executives not only control the decisions of local authorities, but, at the same time, those of various officials working in the field-organizations that are responsible for the proper implementation of the anti-pollution legislation and regulations.

It is obvious that air pollution problem in Turkey is as a matter of lack of legislation and regulations as the implementation of existing provisions. Some academicians believe that even with the existing powers, the administration can effectively deal with the air pollution problem. They base their views on the possibility of taking measures against future pollution problems, using city development plans, and the regulations concerning dwelling equipment and construction standards.

This means that citizens complaining from the harmful effects of pollution should have a right to complain from this problem. This is provided by the right to apply to the Council of State against the decisions of regulatory agencies, in other words, of the administration. Two kinds of recourse seem possible. One is to ask for the annulment of certain administrative decisions. For instance one can apply to the Council of State for the annulment of a decision of a governor issuing a licence for the opening of a cement factory just near the exclusive residential area in which he lives. Or, if a municipality allocated some funds in the budget for one of its optional functions, while so many obligatory functions, including the air pollution control have not satisfactorily been performed, then again citizens will have the right to go to the Council of State, demanding the annulment of the above mentioned allocation decision. Because it is unlawful to appropriate funds for optional functions, according to the Turkish Law of municipalities without satisfactorily meeting the needs that are represented by obligatory municipal functions.

Second kind of appeal has to do with asking for the compensation of the damage or the nuisance that pollution caused in the patrimony or in the health of the concerned citizen as a result of an administrative decision which permitted the setting up of an industrial installation just in the middle of a residential area. However, it must be noted that it is not easy to establish the relationship of «causality» between the damage and the operation of an establishment issuing harmful gases,

Finally, the Turkish Civil Law (art. 661) formulated the «right of the neighbor» according to which any person using his own property or operating and industrial establishment has to keep away of causing harm to his neighbor; and especially, he must avoid to issue smoke, soot, smell, dust, steam and noise, of an intolerable intensity. The same law accuses those who do not obey this provision and force them to compensate for the damages incurred. The Supreme Court of Appeal, in many instances, found the owners of factories and residential buildings responsible for their actions.

However, it should be noted that issuing smoke and sulphur dioxide is no more an offence imputable to one or to a few residents of the cities. Most of the buildings have central heating equipments and therefore it has become extremely difficult to determine who is causing harm and who is the sufferer. Maybe, everyone is both sufferer and the generator of the discomfort or nuisance at the same time. Air pollution today is much larger than a small scale conflict among neighbors.

2. Sanctions and Compensation of the Damages

Administrative sanctions consist in closing down the concerned establishments. Municipalities have the right to penalize the owners of the establishments that do not obey municipal health and police ordinances.

Apart from this, Turkish Penal Law does not possess any provision concerning air pollution. However, in general, there is a penalty in the law for the actions of those who have not obeyed lawful orders or measures taken with the intention of public security, public order and public health. Even though the actions are not qualified as an offence, those who committed them are condemned to imprisonment and to fine (Penal Law Art. 526/1).

Finally, the Law of Municipalities, Municipal Penal Law and the Law of Public Hygiene and Health possess some penalty provisions for disobedience to municipal regulations. However, since all these legislation were adopted 30 to 40 years ago, decrease in the value of money has made all the fines provided in this old legislation, meaningless. Revenues from the fines should not be less than the cost of the installations and equipments necessary for reducing the effects of pollution.

In some cases, it is not easy to find appropriate penalty provisions in the regulations. For instance, as it is mentioned above, an ordinance of 1964 aimed at providing clean air in cities and burning the coal in boilers without causing waste and reducing corrosion in boiler and surrounding equipment by improving combustion conditions in boilers, by making obligatory for interested people to have a special license. There are no penalties in the ordinance for the lack of measures like the suitability of the types of boilers, characteristics of coals to be used in each type of boilers, etc. It would be appropriate to show the amount of fines for the owners of factories, buildings, workshops and similar places, operators and managers.

The only way for those who underwent a nuisance to his health because of the air pollution is to apply to the Council of State, as it is mentioned above, against the decision of the concerned administration. However, the jurisprudence is not, for the time being, so developed as to influence the general policy toward air pollution control.

Air Pollution Control on International Level

A. Principles

It seems to me that it is both possible and desirable to establish some general criteria at the international level, to adopt specific standards for each type of air pollution. Standards may be based both on the emissions and on the agents putting the polluting materials into the atmosphere.

B. Methods

An international instrument of general character may be useful in the field of air pollution control. However, taking into consideration the difficulties of acting in so much large environment, it may be easier to look at the problems from a regional standpoint.

The instrument may be a resolution of the United Nations, World Health Organization, or the Council of Europe, N.A.T.O., C.E.N.T.O. or R.C.D. (Regional Cooperation for Development) or a cadre-treaty fixing the major principles of future agreements. The first has the advantage of benefiting from existing institutions; and the advantage of the second alternative is to provide flexibility to each member state.

Whatever form takes the international regulation concerning the air pollution control, it must be integrated in a larger programme aiming at the protection of total environment. This can be realized by undertaking large scale regional planning projects in which air pollution problem can be controlled more adequately since it is obviously of a regional character. Planning and Development Section of the Bureau of Social Affairs in the United Nations can organize international seminars where common problems can be discussed and solutions are sought. It should be noted that the work of the Council of Europe regarding the protection of environmental

values can be extended to include air pollution problems. Conference of Local Authorities is already dealing with various aspects of air pollution control. However, this extension will not be satisfactory unless the members of the Council should find ways to make certain standards obligatory within their boundaries. The International Union of Local Authorities, too, may be interested in participating in the action that may produce fruitful results for cities suffering from chronic air pollution.

C. Implementation of the International Regulations

It is a well known fact that the effective application of international regulations has fundamental difficulties stemming from the sovereignty rights of each member state. Regulations concerning air pollution can not be an exception. However, periodically reporting to an international organism to be created specifically for this purpose may be helpful. Setting up a new organization that will exercise a control function is better than to content oneself with existing organizations.

D. International Cooperation in the Action against the Air Pollution

It is worthwhile to try to envisage the encouragement of the international community, through an international institution, to undertake certain research and action programmes. The United Nations or the Council of Europe seem to be the largest international institutions that can provide necessary cooperation. If this proves to be impracticable, then bilateral or multilateral cooperation should be sought either by the promotion of studies and research activities, or by the promotion of education and training of specialists and technicians.

A high level permanent commission to coordinate national activities in the field of air pollution may be set up. Exchange of information among countries within certain regions on research activities and achievements in the field of air pollution through documentation centers can be made possible. An inventory of people and institutions working in the field may be one of the first steps to be taken. Such a cooperation was initiated within the framework of the Central Treaty Organization (C.E.N.T.O.), between Turkey, Iran and Pakistan. A similar undertaking was realized within the framework of N.A.T.O. In the latter, Turkey is acting as co-pilot along with the Federal Republic of Germany in the air pollution project of NATO, Committee on the Challenge of the Modern Society (C.C.M.S.) where the U.S.A. is the pilot country.

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