

## INDUSTRIAL POLLUTION CONTROL AND RISK MANAGEMENT QUESTIONNAIRE

### IPPC Directive

#### *Legal reference*

Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control (Official Gazette L 257 10.10.1996 p. 26), as amended  
EUR-Lex hyperlink [html](#)

#### **A. Which parts of the provisions of the Directive have been transposed?**

There is a permitting system with different regulations regarding various environmental sectors (air, water, waste, noise, etc.). There are several competent authorities at different levels.

Industrial installations are identified and grouped under two main categories in Annex III (List of Activities Subject to Emission Permit) of the By-law on Industrial Air Pollution Control (Official Gazette: 07 October 2004, no 25606). The Annex covers the conditions for permits and emission limit values as general binding rules. Specifically, Article 43 (Emission Limit Values for Highly Air Polluting Installations) of the same By-law states the requirements for the operators and emission limit values.

The By-law on Control of Pollution by Dangerous Substances in Water and its Environment (Official Gazette: 26 November 2005, no. 26005) regulates permits for discharge of dangerous substances. Article 11 of the By-law requires that operators of plants having dangerous substances in their wastewater must take discharge permit for dangerous substances. Article 7 of the same By-law regulates rules and procedures considering pollution decreasing programs caused by discharge of dangerous substances.

Article 37 of the By-law on Control of Water Pollution (Official Gazette: 31 December 2004, no 25687) regulates Wastewater Discharge Permits required in case of discharges to receiving water bodies and Article 42 regulates Deep Sea Discharge Permits.

Articles 27, 28 and 29 of the By-law on Control of Hazardous Waste (Official Gazette: 14 March 2005, no 25755) lay down the provisions on pre-licensing, temporary permits and licensing procedures for hazardous waste disposal facilities.

Articles 24, 25 and 26 of the By-law on Control of Waste Oil (Official Gazette: 21 January 2004, no 25353) state the provisions on pre-licensing of waste oil recovery facilities, temporary permits and licensing for waste oil recovery facilities and cancellation of the licenses.

In the By-law on Start-up and Operation Licenses of Workplaces (Official Gazette: 10 August 2005, no 25902), Article 4.a designates start-up and operation licenses, Article 16 mentions the health protection zone, and Article 22 lists the documents required for licenses.

#### **B. When is transposition foreseen for the remaining measures?**

Technical studies are under way. Preliminary results of the technical studies are expected by the end of 2007. Evaluations for transposition of the remaining measures are estimated at the

end of 2008. Consultation with all relevant stakeholders constitutes an important part of this process. Actual transposition and implementation of the IPPC Directive shall be based on all these studies and take relatively long period considering the required investments, the complexity of the regulations and involvement of multiple public and private stakeholders.

### **C. What have been achieved as regards:**

- **Identifying the competent authority/ies (Arts. 2.8 & 16)**

Ministry of Environment and Forestry and Provincial Governorships are designated as competent authorities according to the Law on Environment No.2872 (Official Gazette: 11 August 1983, no 18132) as amended by the Law No.5491 (Official Gazette: 13 May 2006, no 26167), the Law on Establishment and Duties of the Ministry of Environment and Forestry No. 4856 (Official Gazette: 08 May 2003, no 25102), the By-law on Industrial Air Pollution Control, the By-Law on Control of Hazardous Wastes, and the By-law on Control of Waste Oil.

The By-law on Start-up and Operation Licenses of Workplaces designates competent authorities for licensing as Metropolitan Municipalities, Municipalities, Special Provincial Administrations and Organised Industrial Zone Administrations.

- **Establishing a system for identifying relevant installations (Annex I)**

Installations are identified in Annex III (List of Activities Subject to Emission Permit) and Article 43 (Emission Limit Values for Highly Air Polluting Installations) of the By-law on Industrial Air Pollution Control. Majority of IPPC plants are under the scope of List -A of the Annex III.

In addition, Annex II of the By-law on Start-up and Operation Licenses of Workplaces identifies installations which are subject to license.

- **Establishing an integrated permit system**

At present, majority of the activities, which are covered by the IPPC Directive, are listed in Annex III (List of Activities Subject to Emission Permit) of the By-law on Industrial Air Pollution Control in two parts, A and B, depending on their capacities and pollution loads. They are also categorized according to the sectors and production types, and majority of IPPC plants are under the scope of List -A of the Annex III.

Installations also are subject to Wastewater Discharge Permit and Deep Sea Discharge Permit according to the By-law on Control of Water Pollution.

Moreover, IPPC Annex I plants are subject to permit regarding noise generation as regulated in By-law on Assessment and Management of Environmental Noise (Official Gazette: 1 July 2005 No. 25862).

In addition, waste related activities which are covered by the IPPC Directive are subject to licenses as regulated by the By-law on Control of Hazardous Waste and the By-law on Control of Waste Oil. Besides, Annex II of the By-law on Start-up and Operation Licenses of Workplaces lists the installations to be licensed.

A technical study is carried out to establish an integrated permit system within the general context of transposing the IPPC Directive as explained above.

- **Ensuring the provision for application (Art 6)**

Rules and procedures on permit application are covered in the following legislation;

- Article 6 of the By-law on Industrial Air Pollution Control lists the installations which are subject to emission permit to operate and identifies the competent authority.
  - Articles 27, 28 and Annex XIII of the By-law on Control of Hazardous Waste stipulate the conditions for pre-license, temporary permits and licenses for hazardous waste disposal facilities.
  - Article 24, 25, Annexes VII and VIII of the By-law on Control of Waste Oil stipulate the conditions for pre-license, temporary permits and licenses for waste oil recovery facilities.
  - Article 17 of the By-law on Start-up and Operation Licenses of Workplaces addresses the application procedure for start-up and operation licenses and Article 22 lists the documents required for licenses.
- **Ensuring coordination if more than one competent authority is involved in the permit system (Art. 7)**

A technical study is carried out to analyse the existing permitting system and determine possible options for an effective coordination.

- **Requiring ELVs to be set with regard to BAT (Art. 9.4) – Definition of BAT (Art 2(11) and Annex IV) – How BREFs are taken into account to determine BAT**

At present, ELV's are set either with respect to the types of activities in accordance with Article 43 of the By-law on Industrial Air Pollution Control (which lays down general binding rules such as emission limit values of certain sectors and activities, operational requirements to be fulfilled by the operators of the activities, and other conditions and precautions) or as general binding rules regardless of the type of activity in accordance with Article 39 of the By-Law on Industrial Air Pollution Control (which describes requirements for general cases, limit values in case of certain substances such as toxic, carcinogenic or persistent pollutants are involved or emitted in the process).

According to general provisions of the By-Law on Control of Waste Oil and the By-Law on Control of Hazardous Waste, hazardous waste and waste oil producers have to take all measures to minimise their waste quantity.

A technical study is carried out and BREF's are consulted among stakeholders and BAT assessment studies have been started.

- **Ensuring the provision for environmental quality standards (Art 10)**

Article 7 of the By-law on Industrial Air Pollution lays down conditions and the requirements for the installations in order to get the permit and prescribes local environmental standards to

be met in the paragraphs a, d, f, h and j which include provisions about measures to be taken in order for emissions and local air quality standards not to be exceeded.

- **Requiring competent authorities to be informed of proposed changes in operations (Art. 12)**

Article 14 of the By-law on Industrial Air Pollution Control describes what to do in case of changes to installations, when these changes are subject to permit and obliges the operator to inform the competent authorities when changes occur in installations.

- **Establishing a protocol for consultation with neighbouring Member States (Art. 17) [what happens when the neighbouring states are not EU MS?] and informing the public in case of transboundary effects**

Not applicable before membership.

- **Establishing a public participation procedure (Art. 15 (1) and Annex V)**

Article 8 of the By-law on Industrial Air Pollution Control describes pre-permitting procedure and public participation process.

- **Ensuring that the public has access to information in the permitting procedure (Art.15.5)**

Article 8 of the By-law on Industrial Air Pollution Control describes pre-permitting procedure and public participation process, including access to information.

In addition, public access to information is regulated by the Law on Right of Access to Information with general provisions.

- **Establishing a review process for the public concerned (new Art. 15a)**

Article 8 of the By-law on Industrial Air Pollution Control involves review process for the public in the emission pre-permit stage.

- **Establishing an effective inspection and enforcement system (Art. 14)**

In the present environmental compliance system, Turkey has already had the By-law on Environmental Inspection (Official Gazette: 05 January 2002, no 24631) for integrated environmental inspections. An Inspection Department within the Ministry of Environment and Forestry has the duty to implement the related legislation in an integrated manner.

In addition, it should be noted that the effectiveness of environmental enforcement system has been increased with the Law on Environment No.2872 (Official Gazette: 11 August 1983, no 18132) as amended by the Law No.5491 (Official Gazette: 13 May 2006, no 26167).

Inspection Department within the Ministry of Environment and Forestry is the contact point for the IMPEL activities. Hence the inspection system is being analysed in accordance with the Recommended Minimum Criteria for Inspections (Recommendation of the European Parliament and the Council for Minimum Criteria for Environmental Inspections-

2001/331/EC). In this respect, the Ministry of Environment and Forestry is trying to improve its integrated inspection system, which will also be valid for the IPPC Directive inspections.

- **Establishing a reporting system and database to enable information to be provided to the Commission (Arts. 16)**

Not applicable before membership.

- **Applying the requirements of Arts. 5.1 and 12.2 for the granting of permits for existing installations**

Provisional Articles 1 and 3 of the By-law on Industrial Air Pollution Control provide a time frame of 2 years for existing installations to fulfil requirements of this By-law.

- **Reconsidering and where necessary updating permit conditions (Art. 13)**

Article 14 of the By-law on Industrial Air Pollution Control describes what to do in case of changes to installations, when these changes are subject to permit and obliges the operator to inform the competent authorities when changes occur in installations. Article 15 lays down the requirements for the update of the information corresponding the permit conditions and describes principles for the periods of measurements, standards to be followed and reporting obligations. Article 17 describes the cases when the permit expires or should be renewed.

In addition, according to Article 28 of the By-law on Control of Hazardous Waste, a license is valid for three years, it can be extended if needed or given conditionally.

Dangerous Substances Discharge Permit is reconsidered every 4 years as stated in Article 11 of the By-law on Control of Pollution by Dangerous Substances in Water and its Environment.

Wastewater Discharge Permit is valid for 5 years according to Article 37 of the By-law on Control of Water Pollution. Deep Sea Discharge Permit is also valid for 5 years according to Article 42 of the By-law on Control of Water Pollution.

- **Ensuring that the permit includes all measures required under Art. 9 [this is also partly covered by the 5<sup>th</sup> bullet – maybe they could be combined or put one after the other]**

#### **Emissions to air:**

Article 7 of the By-law on Industrial Air Pollution Control lays down conditions and requirements for the installations in order to get permit.

#### **Waste:**

Under the scope of the By-law on Control of Hazardous Waste and Annex-I of the By-law on Control of Waste Oil, measurements are listed during the licensing procedure based on the scope of license.

- **Adopting general binding rules (if any)**

Article 39 of the By-law on Industrial Air Pollution Control describes requirements for general cases, limit values in case certain substances such as toxic, carcinogenic or persistent pollutants are involved or emitted in the process. Article 43 sets out the general binding rules such as emission limit values of certain sectors and activities, operational requirements to be fulfilled by the operators of the activities, and other conditions and precautions.

- **Ensuring that any standards determined as applicable under IPPC also take precedence over any less strict requirements under LCP and WI?**

Technical studies are under way.

## **LCP Directive**

### ***Legal reference***

Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants (OJ L 309 27.11.2001 p. 1) EUR-Lex hyperlink [html](#) [pdf](#)

### **A. Which parts of the provisions of the Directive have been transposed?**

The By-law on Industrial Air Pollution Control (Official Gazette: 7 October 2004, no 25606) is the main regulation in this field.

Installations, which are subject to permit, are identified in Annex III of the By-law by listing the installations in two parts, A and B, in terms of their capacities and pollution loads. These are also categorized according to the sectors and production types. With respect to this By-law, large combustion plants are under the scope of List A of the Annex III; and combustion plants using solid, fluid or gaseous fuels, combined cycle, combined heat and power plants, internal combustion engines and gas turbines exceeding 1 MW (thermal power) are subject to emission permit.

Article 43 states the fuel type (solid, fluid, gaseous, petroleum coke, biomass) and thermal power associated with the emission limit values which are provided for SO<sub>2</sub>, NO<sub>x</sub>, dust. Especially, for the case of Gas Turbines, Article 43 Paragraph A.8 of the By-law complies with the Directive.

The By-law on Air Quality Control (Official Gazette: 02 November 1986, no 19269) introduces limit values for emissions from the stacks of industrial installations and standards for ambient air quality.

Technical studies on this Directive were started in 2004 with the EU funded Twinning project on Air Quality (TR03/EN-01/TR03-02.03) and these studies are still in progress.

### **B. When is transposition foreseen for the remaining measures?**

Technical studies on Large Combustion Plants Directive are being carried out under the EU funded Twinning project on Air Quality (TR03/EN-01/TR03-02.03).

### **C. What have been achieved as regards:**

- **Identifying the competent authority/ies**

According to the By-law on Industrial Air Pollution Control, the Ministry of Environment and Forestry and Provincial Governorships are designated as competent authorities.

- **Defining and classifying LCPs (Art. 2.7)**

Article 5 and Article 43 of the By-law on Industrial Air Pollution Control identify the combustion plants under 8 sub-headings, which are combustion plants using solid, fluid or

gaseous fuels, biomass or petroleum coke, combined cycle, combined heat and power plants, internal combustion engines and gas turbines. Pollutants mentioned in the Directive have limit values depending on the type of fuel and heat input of the combustion plants.

- **Establishing an operating licensing system for LCPs (Arts. 2.9 & 2.10) (to the extent not already covered by IPPC)**

Installations which are subject to permit are identified in Annex III of the By-law on Industrial Air Pollution Control by listing the installations in two parts, A and B, in terms of their capacities and pollution loads. They are also categorised according to the sectors and production types.

Majority of the plants which are likely to fall into the scope of the IPPC Directive remain in List A of the Annex III; and Article 43 lays down general binding rules, such as emission limit values of certain sectors and activities, operational requirements to be fulfilled by the operators of these activities, and other conditions and precautions. Moreover, in the same article, ELV's are stated at normal conditions (0°C, 1atm) and dry base with reference to O<sub>2</sub> volumetric percentage of waste gas. The references comply with the Directive whereas ELV's are different from the IPPC Directive.

Furthermore, Operation License is under the scope of the By-law on Start-up and Operation Licenses of Workplaces (Official Gazette: 10 August 2005, no 25902).

- **Establishing a system to determine total annual emissions from existing plants (Art. 3.3 and Annex VIII (B))**

Technical study on Large Combustion Plants Directive in Turkey is being carried out under the EU funded Twinning Project on Air Quality (TR03/EN-01/TR03-02.03).

- **Establishing a system to determine total annual emissions from new plants (Annex VIII B)**

Technical study on Large Combustion Plants Directive in Turkey is being carried out under EU funded Twinning project on Air Quality (TR03/EN-01/TR03-02.03).

- **Achieve significant emission reductions ( Art. 4.3)**

Technical study on Large Combustion Plants Directive in Turkey is being carried out under the EU funded Twinning Project on Air Quality (TR03/EN-01/TR03-02.03).

- **Requiring operators to monitor emissions (Art. 12 and Annex VIII(A) and Art. 14)**

Article 41 of the By-law on Industrial Air Pollution Control describes periodic and continuous measurements depending on thermal power and mass discharge rate of pollutants when they are required. Also it explains the principles (e.g. sampling points, measurement program and duration, number of measurements, etc.) to be used, and reporting of the emissions.

In addition, Article 43 obliges the operators to monitor certain parameters based on the type of fuel and heat input of the combustion plants. In this respect, in the combustion plants



burning petroleum coke, temperature is monitored continuously, as well as other parameters depending on thermal power and mass discharge rate of pollutants.

- **Establishing approved monitoring methodologies (Annex VIII(A))**

Article 41.f of the By-law on Industrial Air Pollution Control describes the principles for mounting, maintenance and calibration of measurement equipment, and standards and methods to be used.

- **Establishing an effective inspection and enforcement system (Art.16)**

The By-Law on Industrial Air Pollution Control is the main legislation with respect to the inspection and enforcement system. In this regard, Article 15 lays down the requirements for the update of the information corresponding to the permit conditions and describes principles, periods of measurements, standards to be followed and reporting obligations.

Article 41 describes periodic and continuous measurements depending on thermal power and mass discharge rate of pollutants when they are required. Also it explains the principles (e.g. sampling points, measurement program and duration, number of measurements, etc.) to be used, and reporting of the emissions.

Article 38 sets out the principles and frames of inspecting the installations and responsibilities of the competent authority and the operator.

- **Establishing a reporting system and database (Annex VIII B)**

The By-law on Industrial Air Pollution Control is the main legislation concerning reporting system and database. In this regard, Article 15 lays down the requirements for the update of the information concerning the permit conditions and states the principles, periods of measurements, standards to be followed and reporting obligations.

Article 41 describes periodic and continuous measurements depending on thermal power and mass discharge rate of pollutants, when they are required, principles (e.g. sampling points, measurement program and duration, number of measurements, etc.) to be used, and reporting of the emissions. Moreover, according to the same Article, monitoring records have to be kept by the operator for the review of the competent authority.

- **Establishing a consultation system with other Member States in case of transboundary effects (Art.11)**

Not applicable before membership.

- **Deciding whether to set emission limit values (ELVs) or to have a national reduction plan (NERP) for existing installations (Art.4.3), or a combination of the two**

Article 43 of the By-law on Industrial Air Pollution Control sets out emission limit values. Pollutants mentioned in the Directive, as SO<sub>2</sub>, NO<sub>x</sub> and particulate matters have limit values depending on the type of fuel and heat input of the combustion plants for both new and existing plants.

## **Waste Incineration Directive**

### *Legal reference*

Directive 2000/76/EC of the European Parliament and of the Council of 4 December 2000 on the incineration of waste (OJ L 332 28.12.2000 p. 91)

### **A. Which parts of the provisions of the Directive have been transposed?**

The requirements and provisions of the Directive about incineration of hazardous waste and co-incineration have been partially transposed into National Legislation by the By-law on Hazardous Waste Control (Official Gazette: 14 March 2005, no 25755) (Articles 20, 21 and Annexes XV, XVI and XVII), the By-law on Medical Waste Control (Official Gazette: 22 July 2005, no 25883)(Article 33, 34) and the Communiqué on Usage of Waste as an Alternative or Additional Fuel (Official Gazette 22 June 2005 no.25853).

Following provisions of the Directive on Waste Incineration exist in the national legislation: Article 3 - (1, 2, 4, 11, 12), Article 4 - (1, 2, 3), Article 6 - (1, 2, 3, 5), Article 7- (1, 2), Article 8-(1,2), Article10- (5), Article11- (1, 2 ,8 ,10) and Annexes I, III and V.

### **B. When is transposition foreseen for the remaining measures?**

Under the Waste Management (TR 03/IB/EN/01) component of “Support To Turkey In The Field Of Air Quality, Waste Management And Chemicals Project” financed under 2003 EU Pre-Accession Financial Assistance, technical studies are carried out to establish the necessary capacity within the Ministry of Environment and Forestry to transpose and implement 6 EU Directives including Incineration Directive (2000/76/EC).

Technical studies regarding the preparation of a draft By-law on Incineration of Waste are in progress.

### **C. What have been achieved as regards?**

- **Designating the competent authority/ies**

Based on Articles 2 and 9 of the Law No.4856 on Establishment and Duties of Ministry of Environment and Forestry (Official Gazette: 08 May 2003, no 25102), the Ministry of Environment and Forestry is the competent authority on waste management.

Furthermore, pursuant to the Law No.5216 on Metropolitan Municipality (Official Gazette: 23 July 2004, no 25531) and Law No.5393 on Municipality (Official Gazette: 13 July 2005, no 25874), municipalities are responsible for implementing disposal measures.

- **Establishing a permit system for plants (Art. 4) (to the extent not already covered by IPPC)**

According to Articles 20, 21, 27 and 28 of the By-law on Hazardous Waste Control, Article 5 of the Communiqué on Usage of Wastes as an Alternative or Additional Fuel and Article 45

of the By-law on Medical Waste Control, all incineration and co-incineration operators have to apply to the Ministry of Environment and Forestry in order to obtain a license.

- **Establishing a system for identifying categories of waste (Arts. 4.4 & 4.5)**

Article 21 of the By-law on Hazardous Waste Control and Article 6 of the Communiqué on Usage of Wastes as an Alternative or Additional Fuel lay down the provisions on this issue. The licensing procedure requires to have an incineration operation for testing the emission values. During the test incineration, waste categorization and menu have to be determined according to emissions due to waste feeding rate in order to ensure that the facilities do not exceed emission values.

The operator of a waste incineration plant is obliged to analyse the waste which is decided to be incinerated before it is accepted to incineration plant.

List of waste is given in the By-law on Hazardous Waste Control as Annex VII and in Communiqué on Usage of Wastes as an Alternative or Additional Fuel as Annex V. These lists are based on EWC.

- **Reconsidering and where necessary updating permit conditions (Art. 4.7)**

Article 21 of the By-law on Hazardous Waste Control and Articles 7 and 8 of the Communiqué on Usage of Wastes as an Alternative or Additional Fuel lay down the provisions on this issue. The duration of licence is 3 years in the By-law and the Communiqué. After 3 years this licence has to be renewed in order to continue operation. On the other hand, if facility operator wants to increase capacity by adding new unit(s) or changing waste menu which is incinerated, this licence also have to be renewed.

- **Establishing an effective delivery and waste reception system (Art. 5)**

3<sup>rd</sup> and 4<sup>th</sup> Sections of the By-law on Hazardous Waste Control have provisions about waste transportation and reception. During the licensing procedure, incineration plant operators have to submit their operation plans to the Ministry of Environment and Forestry. In this scope, waste reception procedure of plant is being evaluated.

- **Establishing operating conditions for plants (Art. 6)**

For the incineration plant, operation conditions are given in the Articles 20 and 21 of the By-law on Hazardous Waste Control. Additionally, operation conditions for co-incineration plants are given in the Annexes II, III and IV of the Communiqué. These conditions are in line with the Directive.

- **Setting air ELVs (Art. 7)**

For the hazardous waste incineration plants, air emission limit values are given in Article 20 of the By-law on Hazardous Waste Control. As for the co-incineration plants, these values are given in the Annexes II and III of the Communiqué. These emission limit values are in line with the values in the Directive.

- **Setting ELVs for water discharges (Art. 8)**

These values are listed in Article 37 of the By-Law on Water Pollution Control (Official Gazette: 31.12.2005, no 25687) and Annex XVII of the By-law on Hazardous Waste Control.

The limit values set in the Annex XVII of the By-law on Hazardous Waste Control are in line with the values in the Directive.

- **Requiring storage capacity for, inter alia, contaminated rainwater run-off (Art. 8.7)**

Technical studies are in progress.

- **Establishing an effective control and monitoring system (Arts. 10 & 11)**

Some requirements as periodic measurements, continuous measurements and measurement methods in Articles 10 and 11 of the Directive have been transposed by Articles 20 and 21 of the By-law on Hazardous Waste Control and Communiqué on Usage of Wastes as an Alternative or Additional Fuel for co-incineration plants.

Other provisions will be taken into consideration in the technical studies on the preparation of a draft By-law on Waste Incineration.

- **Establishing an effective information gathering system (Art. 11.9)**

One of the licensing obligations is record keeping about all kind of operation in the facility and submitting these documents to the Ministry of Environment and Forestry. By this way, all kind of information about operation condition of facility are being inspected and gathered effectively.

- **Establishing a mechanism for access to information and public participation (Art. 12)**

Public participation meetings are being done according to the By-law on Environmental Impact Assessment (EIA). (Official Gazette: 16 December 2003 no 25318). This issue will be taken into consideration during the technical studies on the preparation of a draft By-law on Waste Incineration.

- **Establishing permit conditions for abnormal operation (Art.13)**

Technical studies are in progress under the Twinning Project on Waste Management (TR 03/IB/EN/01).

- **Establishing an effective inspection and enforcement system (Art.19)**

Rules and procedures of environmental inspection are determined by the By-law on Environmental Inspection (Official Gazette: 30 January 2003, no 25009) which also covers hazardous waste incineration plants. On the other hand, an effective inspection and

enforcement is obtained by controlling and cross-checking of Waste Declaration Forms, Waste Transportation Forms and Mass Balance Forms which have to be kept in the facility and submitted to the Ministry of Environment and Forestry by all parties (waste producers, transporters and disposers). These provisions are also obligatory for waste incineration plant operators.

- **Ensure that the provisions of this Directive apply to existing plants (Art 20)**

Technical studies are in progress under the Twinning Project on Waste Management (TR 03/IB/EN/01).

## Asbestos Directive

### *Legal reference*

Council Directive 87/217/EEC of 19 March 1987 on the prevention and reduction of environmental pollution by asbestos (OJ L 085 28.03.1987 p. 40) EUR-Lex hyperlink [html](#)

### **A. Which parts of the provisions of the Directive have been transposed?**

There are four By-laws comprising the provisions related to asbestos. These are By-law on Industrial Air Pollution Control (Official Gazette: 7 October 2004, no 25606), By-law on Hazardous Waste Control (Official Gazette: 14 March 2005, no 25755), The By-law on Control of Pollution by Dangerous Substances in Water and its Environment (Official Gazette: 26 November 2005, no. 26005), and By-law on Health and Safety Measures for Working with Asbestos (Official Gazette: 26 December 2003, no 25328). In this regard,

- Article 4 of the By-law on Health and Safety Measures for Working with Asbestos defines asbestos in line with the Article 2 of the Directive.
- Various articles of the By-law on Industrial Air Pollution Control for flue gas (at the stack) emissions and the The By-law on Control of Pollution by Dangerous Substances in Water and its Environment (Official Gazette: 26 November 2005, no. 26005) The By-law on Control of Pollution by Dangerous Substances in Water and its Environment define best available technologies for effluent.
  - Article 39 of the By-law on Industrial Air Pollution Control states limit values for concentration of asbestos emitted through the discharge ducts into the air.
  - Article 9 of the By-law on the The By-law on Control of Pollution by Dangerous Substances in Water and its Environment defines aqua effluent recycling and limit values of aqueous effluent discharge.
  - Articles 41 and 15 of the By-law on Industrial Air Pollution Control (BISAPC) and Article 12 of the The By-law on Control of Pollution by Dangerous Substances in Water and its Environment describe the procedures for measurements of emissions into the air and discharge of aqueous effluent, respectively.
  - Article 39 of the By-law on Industrial Air Pollution Control and Articles 13 and 14 of the By-law on Health and Safety Measures for Working with Asbestos describe significant environmental pollution by asbestos fibre or dust and demolition of building structures and installations.

### **B. When is transposition foreseen for the remaining measures?**

Measurements concerning air emissions at stack are based on Turkish standards, DIN, EPA or CEN. These measurement methods need to be assessed with regard to those stated in the Asbestos Directive.

## **C. What have been achieved as regards?**

### **1. Identifying the competent authority/ies**

The Ministry of Environment and Forestry is designated as the competent authority according to the Law on Environment No.2872 (Official Gazette: 11 August 1983, no 18132) as amended by the Law No.5491 (Official Gazette: 13 May 2006, no 26167).

In addition, the Ministry of Labour and Social Security according to the Law on Labour No.4857 (Official Gazette: 10 June 2003) and the Ministry of Health according to the Law on Public Hygiene No. 1593 (Official Gazette: 06 May 1930, no 1489) have responsibilities in related issues.

### **2. Establishing limit values for asbestos emissions (Arts. 4 & 5)**

According to Article 39.j of the By-law on Industrial Air Pollution Control, concentration limit of asbestos emitted through discharge ducts into the air during the use of asbestos is defined as 0.5 g/h (grams/hour) and up 0.1 mg/Nm<sup>3</sup> (milligrams of asbestos per m<sup>3</sup>) of flue gas discharged for the air emissions at the stack.

The limit which is 30 grams of total suspended solid matter per m<sup>3</sup> in the wastewater arising from the manufacture of paper, cement, plaster and similar materials is determined in Article 9 of the By-law on Control of Pollution by Dangerous Substances in Water and its Environment (Official Gazette: 26 November 2005, no 26005).

### **3. Establishing measures to reduce asbestos emissions at source (Art. 3)**

**For the air emissions (at the stack);** Measures to reduce asbestos emissions at source are defined in the Article 39.j of the By-law on Industrial Sourced Air Pollution Control, as well as in Articles 15, 22, 23, 25 and 42.

### **4. Establishing measures to ensure that asbestos is used in accordance with BATNEEC (Art. 3)**

Articles 15 and 39.j of the By-law on Industrial Air Pollution Control, state the measures to reduce asbestos emission at source.

Besides, Articles 5 and 9 of the By-law on Control of Pollution by Dangerous Substances in Water and its Environment address the measures to reduce asbestos emissions at source.

### **5. Establishing sampling and analysis procedures (Art. 6)**

Articles 15 and 41 of the By-law on Industrial Air Pollution Control lay down the provisions regarding sampling and analysis procedures for the air emissions at the stack.

The reference methods of sampling and analysis of total suspended matter are made according to Communiqué of Water Pollution Control Instruction Methods of Sampling and Analysis (Official Gazette: 7 January 1991, no 20106).

## **6. Recycling of effluent from asbestos cement manufacture and asbestos paper or board manufacture (Art. 5)**

According to Article 9 of the By-law on Control of Pollution by Dangerous Substances in Water and its Environment all aqueous effluent arising in the manufacture of asbestos paper or board should be recycled.

## **7. Ensuring that other activities do not cause significant environmental pollution (Arts. 7 & 8)**

Articles 13 and 14 of the By-law on Health and Safety Measures for Working with Asbestos lay down the provisions on preventive measures to demolition of buildings, structures and installations containing asbestos and removal of asbestos or materials containing asbestos.

In addition, Articles 12 and 13 of the By-law on Hazardous Waste Control address the measures relating to transport of waste containing asbestos fibres or dust and the Section 7 of the By-law defines the measures relating to disposal of waste containing asbestos.

For the air emissions (at the stack); activities involving working on the products containing asbestos and not causing significant environmental pollution by asbestos fibres or dust are defined in the By-law on Industrial Air Pollution Control, Article 39.j.

## **8. Establishing an effective inspection and enforcement system**

Articles 24 and 38 of the By-law on Industrial Air Pollution Control state an effective inspection and enforcement system for the air emissions at the stack. Articles 12 and 13 of the The By-law on Control of Pollution by Dangerous Substances in Water and its Environment set out provisions on inspection and enforcement system.

Inspections are carried out according to the By-law for Environmental Inspection (Official Gazette: 05 January 2002, no 24631). In addition, based on Article 16 of the Law on Environment No.2872 inspections can also be organized by the Ministry of Health upon complaints.

## **9. Establishing a procedure for reporting to the Commission**

Not applicable before membership.



## Solvents Directive

### *Legal reference*

Council Directive 1999/13/EC of 11 March 1999 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations (Official Gazette L 085 29.03.1999 p. 1) EUR-Lex hyperlink [html](#) [pdf](#)

### **A. Which parts of the provisions of the Directive have been transposed?**

The By-law on Industrial Air Pollution Control (Official Gazette: 7 October 2004 No. 25606) is the main legislation with respect to the volatile organic compounds due to the use of organic solvents in certain activities and installations.

Pursuant to the Article 39 of the By-law, volatile organic compounds are handled in three groups according to emission limit values varying with the group of substances according to their potential impacts on environment.

Article 43 of the By-law states activity-oriented emission limit values for existing installations. Emission limit values for highly air polluting installations lay general binding rules such as emission limit values of certain sectors and activities, operational requirements to be fulfilled by the operators of these activities, and other conditions and precautions. Emission limit values are mg/Nm<sup>3</sup> expressed in hydrocarbons. The paragraph 21 of the same Article of the By-law defines a condition for permit, use of paints with low or no organic solvent content, or stack gas cleaning systems to be installed.

The By-law controls VOC's in a wide extent, regarding the permit mechanism and parameters.

### **B. When is transposition foreseen for the remaining measures?**

Technical studies are under way.

### **C. What have been achieved as regards:**

- **Identifying all relevant installations**

Installations are identified in the By-law on Industrial Air Pollution Control. Annex III of the By-law includes the list of activities subject to emission permit in two parts, A and B, depending on their capacities and pollution loads. They are also grouped according to the sectors and production types. Annex III and Article 43 of the By-law lay down general binding rules such as emission limit values of certain sectors and activities, operational requirements to be fulfilled by the operators and other conditions and precautions.

- **Identifying competent authority/ies (Art. 2.5)**

The By-law on Industrial Air Pollution Control defines the Ministry of Environment and Forestry and Governorships as competent authorities for permitting of the installations.

- **Establishing the registration and authorisation system for new installations (Art.3)**

Regarding new plants, installations are identified in Annex III of the By-law on Industrial Air Pollution Control, depending on the capacities. Article 8 of the By-law lays down the procedures and conditions to be fulfilled in pre-permitting of the installations covered by the Annex III.

- **Deciding whether to set emission limit values (ELVs) or to have a national reduction plan (NRP) (Art. 5.2/Article 6)**

Emission limit values are set in Article 39 of the By-law on Industrial Air Pollution Control. Emission limit values for installations are subject to emission permit. It describes requirements for general cases, limit values in case certain substances such as toxic, carcinogenic or persistent pollutants involved or emitted in the process. According to the Article 43, emission limit values for highly air polluting installations lays down general binding rules such as emission limit values of certain sectors and activities, operational requirements to be fulfilled by the operators and other conditions and precautions.

- **Implementation of ELVs or the NRP (Arts. 5&6)**

According to the Article 39 of the By-law on Industrial Air Pollution Control, volatile organic compounds are handled in three groups with varying emission limit values for different groups of substances.

Article 43 of the By-law states activity-oriented emission limit values for existing installations. Emission limit values for highly air polluting installations lay down general binding rules such as emission limit values of certain sectors and activities, operational requirements to be fulfilled by the operators and other conditions and precautions. Emission limit values are in mg/Nm<sup>3</sup> expressed in hydrocarbons. The paragraph 21 of the same Article of the By-law defines the condition for permit based on the use of paints with low or no organic solvent content or stack gas cleaning systems to be installed.

- **Replacement of hazardous substances and preparations according to the provisions of Article 5(6)-(9)**

According to the Circular (Official Gazette: 9 December 1994 No. 15488) by the Ministry of Health, use of AZO-based paint materials is banned in leather, textile and clothing industries. Further technical studies need to be initiated.

- **Implementing an effective monitoring and enforcement system (Arts. 8-10 & 14)**

Monitoring of VOC's in the emissions and in ambient air quality has been envisaged according to the By-law on Industrial Air Pollution Control. The Article 15 includes obligations for verification of permit conditions and lays down the requirements for the update of the information corresponding to permit conditions and reporting obligations. The Article 40 prescribes air quality monitoring in the plant impact area and estimation of plant's contribution to the local air pollution and when these assessments are needed. Moreover, the

Article 41 includes the determination of emissions, describes periodic and continuous measurements (depending on mass discharge rate of pollutants) when they are required, principles (sampling points, measurement program and duration, number of measurements, etc.) to be used and reporting of the emissions.

- **Implementing a system for providing information to the public (Art. 12)**

Article 8 of the By-law on Industrial Air Pollution Control lays down the procedures for informing the public to be carried out for pre-permit of the installations covered by the Annex III.

- **Applying obligations to existing installations (Art. 4)**

The By-law on Industrial Air Pollution Control applies to all new and existing installations.

## **EPER Decision**

### *Legal reference*

Commission Decision of 17 July 2000 on the implementation of a European pollutant emission register (EPER) according to Article 15 of Council Directive 96/61/EC concerning integrated pollution prevention and control (IPPC) (notified under document number C(2000) 2004) (OJ L 192 28.07.2000 p. 36)

### **What have been achieved as regards:**

- **Establishing an inventory of all individual facilities to which the IPPC Directive applies**

Technical studies have been carried out to identify the relevant installations and to establish an inventory system. Yet, further studies are on the way.

- **Establishing quality control of the data received from the industrial facilities**

The Article 41(f) of the By-law on Industrial Air Pollution Control includes the principles and rules for, mounting, maintenance and calibration of measurement equipment, standards and methods to be used and accreditation requirements.

In addition, technical studies are carried out for establishing a data quality system.

- **Status of preparation for ratification and implementation of UNECE-PRTR Protocol**

Technical studies need to be initiated.

## EMAS Regulation

### *Legal reference*

Regulation (EC) No 761/2001 of the European parliament and of the council of 19 March 2001 allowing voluntary participation by organisations in a Community eco-management and audit scheme (EMAS) (OJ L 114 24.04.2001 p. 1) **EUR-Lex** [hyperlink](#) [html](#) [pdf](#)

Turkey has not yet established EMAS. However, there is a nation wide ISO-14001 certification system and certification for ISO-14001 is done by Turkish Standards Institution and private companies.

Technical studies need to be initiated.

### **A. What have been achieved as regards:**

- **Designating competent body/ies (Art. 5)**
- **Identifying the body for the accreditation of independent environmental verifiers (Art. 4.1)**
- **Establishing a mechanism for registering organisations (Art. 6)**
- **Establishing a system of accreditation and supervision of independent environmental verifiers (Art. 4)**
- **Establishing a mechanism to promote the participation of organisations, in particular SMEs (Art. 11)**
- **Establishing a mechanism to inform organisations and the public about EMAS (Art. 12)**
- **Establishing an effective enforcement system (Art. 13)**
- **Establishing a list of registered organisations and verifiers to be made publicly available (Art. 7)**

## Eco-labelling Regulation

### *Legal reference*

Regulation (EC) No 1980/2000 of the European Parliament and of the Council of 17 July 2000 on a revised Community eco-label award scheme (OJ L 237 21.09.2000 p. 1) EUR-Lex hyperlink [html](#) [pdf](#)

Eco-labeling mechanism is not established yet. Technical studies need to be initiated.

### **A. What have been achieved as regards:**

- **Identifying competent body/ies (Art. 14)**
- **Establishing a mechanism for applications for eco-labels (Art. 7)**
- **Establishing the terms of use of the eco-label (Art. 9 and Commission Decision 2000/729/EC)**
- **Establishing an effective monitoring and enforcement regime**
- **Establishing a mechanism for informing consumers, undertakings and the general public (Art. 10)**

## Seveso Directive

### *Legal reference*

Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances (OJ L 010 14.01.1997 p. 13) as amended by Directive 2003/105/EC of 16 December 2003 (OJ L 345 31.12.2003 p. 97) (Seveso II Directive)  
EUR-Lex hyperlink [html](#)

### **A. Which parts of the provisions of the Directive have been transposed?**

A Circular on Local Emergency Plan for Major Industrial Accidents No. 4906 was published by the Ministry of Environment and Forestry on 29 July 1996 based on Seveso I (82/501/EEC) Directive and United Nations Environment Programme/Awareness and Preparedness for Emergencies at Local Level (UNEP/APELL) Handbook. This Circular was officially sent to all governorships for ensuring preparation of the emergency plans to be implemented when necessary at the provincial level based on emergency criteria indicated in the Circular.

### **B. When is transposition foreseen for the remaining measures?**

Technical studies are carried out based on the LIFE project entitled “Approximation of Seveso-II Directive in Turkey”, which was completed in January 2006. At the end of the project, Directive Specific Implementation Plan of Seveso II Directive, technical studies for drafting a By-law on Control of Major Industrial Accident Hazards, a Communiqué on Safety Report and Emergency Plans, a Communiqué on Public Information, and a Communiqué on Inspection have been undertaken. Consultation with relevant stakeholders continues. Besides, an Information System for Industry has been established as an outcome of the project.

### **C: What have been achieved as regards:**

- **Identifying the competent authority/ies (Art. 16)**

The Ministry of Environment and Forestry is the competent authority according to the Law on Environment No.2872 (Official Gazette: 11 August 1983, no 18132) as amended by the Law No.5491 (Official Gazette: 13 May 2006, no 26167). In addition, the Ministry of Labour and Social Security, the Ministry of Health, Provincial Administrations, Metropolitan Municipalities, and Municipalities have responsibilities according to the Law on Labour No. 4857 (Official Gazette: 10 June 2003) , Law on Public Hygiene No.1593 (Official Gazette Date: 06 May 1930 No:1489), Law on Provincial Administrations No. 5302 (Official Gazette: 4 March 2005, no 25745), Law on Metropolitan Municipalities No: 5216 (Official Gazette: 23 July 2004, no 25531) and Law on Municipalities No: 5272 (Official Gazette: 24 December 2004, no 25680) respectively.

- **Establishing a notification system (Art. 6)**

An “Establishment Data Sheet” comprising 45 questions was prepared and sent to all governorships by the Ministry of Environment on 31 July 2000 in order to determine

dangerous substances and the quantities of those substances in establishments covered by the Circular on Local Emergency Plan for Major Industrial Accidents No.4906.

Besides, software for the monitoring and control of the establishments, which has been prepared within the scope of the LIFE project, has been developed for notification and control processes. A web site (<http://seveso.cevreorman.gov.tr>), which includes the information related to the project and guidelines, has been established. By this way, installations are able to make their preliminary notifications during the project period through internet (539 installations have made their preliminary notifications so far).

- **Requiring operators to implement a major-accident prevention policy (Art. 7)**

There is a technical study document as an output of LIFE project which is still under discussion with relevant stakeholders.

- **Requiring operators to produce safety reports (Art. 9)**

A preliminary draft By-law on Control of Major Industrial Accident Hazards, which has been prepared as an output of LIFE project, is still under discussion with relevant stakeholders.

- **Requiring competent authorities to examine Safety Reports, to decide to allow or prohibit the use of the establishment and to communicate conclusions to the operator (Art.9 and 17) Establishing a system for identifying establishments or groups of establishments with possible "Domino effects" (Art. 8)**

A preliminary draft By-law on Control of Major Industrial Accident Hazards, which has been prepared as an output of LIFE project, is still under discussion with relevant stakeholders.

- **Requiring all Art. 9 establishments to draw up internal emergency plans (Art. 11)**

Installations, which are under the scope of the Circular No.4906, were obliged to elaborate internal emergency plans on 28 October 1997. As a result, the installations from 36 provinces prepared and tested their internal emergency plans, and submitted them to the Ministry of Environment and Forestry.

- **Requiring competent authorities to draw up external emergency plans (Art. 11)**

It was requested by the Ministry of Environment and Forestry from the Governorships to elaborate "Local Emergency Plan for Major Industrial Accidents" in accordance with the Circular No.4906. 36 governorships prepared their local emergency plans, tested and submitted them to the Ministry. 18 governorships did not prepare local emergency plans since there were no installations covered by the Circular.

- **Requiring operators to provide information on major accidents to competent authority (Art. 14)**

"Accident Reporting Form" was developed taking into consideration the "OECD Reporting Form for Industrial Accidents" and sent to all governorships on 20 October 1998 by the



Ministry of Environment to be filled and submitted to the Ministry as soon as possible following any accident.

- **Establishing procedures for investigating major accidents (Art. 14)**

A preliminary draft By-law on Control of Major Industrial Accident Hazards, which has been prepared as an output of LIFE project, is still under discussion with relevant stakeholders.

- **Consideration of major accidents in land-use planning(Art. 12)**

Health Protection zones between the industrial installations and residential area are determined by the competent authorities mentioned in the By-law on Permit Procedure for Industrial Commercial Establishments (Official Gazette: 10 August 2005, no 25902) in accordance with the methods, principles and reference distances of health protection zones prepared by the Ministry of Health according to the relevant articles of the Public Hygiene Law No 1593. Competent authorities for granting the operating licences are metropolitan municipalities, municipalities, special provincial administrations and managements of organized industrial districts.

Moreover, health protection zones around the organized industrial districts in accordance with the Article 4 of the Law of Organized Industrial Districts No 4562 (Official Gazette: 15 April 2000, no 24021) and around the industrial districts in accordance with the Article 4 of the Law of Industrial Districts No 4737 are determined by the Ministry of Health.

- **Establishing a procedure for information be made available to the public (Art. 9 & 13)**

A preliminary draft By-law on Control of Major Industrial Accident Hazards, which has been prepared as an output of LIFE project, is still under discussion with relevant stakeholders.

- **Establishing an effective inspection and enforcement system (Art. 18)**

Inspections are conducted in accordance with the By-law on Environmental Inspection (Official Gazette: 05 January 2002, no 24631).

Enforcement is done in accordance with Law No. 2872 on Environment

- **Establishing a reporting system (Art. 15)**

Not applicable before membership.