
COMPLIANCE AGREEMENTS FOR ENVIRONMENTAL RISK MANAGEMENT IN THE CZECH REPUBLIC

CÍZKOVÁ, HELENA

International Environmental Programs Manager, Ministry of the Environment of the Czech Republic, Regional Project Management Unit in Ostrava, Prokesovo nam. 8, 702 00 Ostrava, Czech Republic

SUMMARY

In the Czech Republic, environmental protection policy has been developing rapidly over the period from 1990 to 1995. Starting from strong repressive enforcement, Czech environmental policy was modified to adopt a more difficult, but in a long-term perspective more efficient strategy of compliance agreement procedures. Lessons learned from the Silesia Project, environmental and human health risk assessment and risk management program run by the Czech Ministry of the Environment with significant support of the United States government are presented in this paper as a model example illustrating the viability and sustainability of such an approach.

1 “ENFORCEMENT PHASE” IN THE CZECH ENVIRONMENTAL POLICY

1.1 Historical background

After the principal democratic political changes in 1989, the government of the former Czechoslovakia (the Czech and Slovak Federal Republic was split into the independent Czech Republic and independent Slovak Republic on January 1, 1993) facing many economical, social and environmental problems raised during the communist regime. A polluted environment and unsatisfactory human health conditions were the most serious ones. Requests for a cleaner environment were the same level of priority as requests for building a strong democratic political system and a stable free market economy. That is why Czechoslovakia started to form an institutional and legislative system of environmental protection at the same time the base for the economical reconstruction and the privatization process was founded.

1.2 Institutional and legislative framework

The first steps toward making significant changes in the environmental protection practice were taken in the field of institution building. The Ministry of the Environment was established and a system of state administration at the district and municipal levels were formed and implemented. Environmental protection activities were officially included in a public administration system performed by elected representatives in municipalities (at the level of “self-management” for municipal authorities). In 1991, the Czech Inspection of the Environment (integrated from previous inspection bodies operating independently in different environmental sectors) was formed to provide state supervision in environmental protection issues.

During an intense period from 1990 to 1992, the basic legislative framework of environmental protection was prepared. Important new Acts were passed (i.e., the Environmental Protection Act, the Waste Management Act, the Nature Protection Act, the Environmental Impact Assessment Act, a new version of the Clean Air Act) and other related Acts were amended.

Both the new Czech institutional and legislative environmental protection systems were based on a long-term European tradition of environmental enforcement, mostly preferring deterrent (charges, fines, penalties) to measures of “positive stimulation” (tax relieves, systems of subsidies). Standards specifying acceptable levels of environmental pollution were constructed on the “emission (source) principles” for individual pollutants accordingly to standards used in countries of the European Union. To reach the requested environmental quality sooner, some of these standards were more strict than similar ones in Germany, France etc. As large investments were expected and necessary to follow the strong legislation, specific “softer” conditions were set for the period of transition (1992 to 1998). This option should enable industrial and other polluters to make the investments “step by step” and thus to overcome the difficult investment period easily.

1.3 Current problems in environmental enforcement

Experience gained during the recent two years can confirm now (relatively close to the deadlines set for the “period of transition”) that the original expectations tied with the desired impacts of the new environmental legislation were too optimistic. The state administration, inspectors and polluters are facing situations which cannot be directly solved by implementing traditional enforcement techniques, officially used in the Czech Republic. For example:

- To be economically viable, some industrial companies have to invest at first in improvements of their production technologies and equipment, to build new, more efficient capacities. Continuing in the current strong deterrent environmental enforcement (i.e., forcing companies to invest in very expensive environmental protection options, requesting payment of progressive charges, fines and penalties for environmental pollution currently caused) can lead the companies to bankruptcy with serious economic and social impacts.
- Reaching the stringent environmental pollution standards (specifically those more stringent than in the European Union Countries) is - in some cases - beyond possibilities provided even by the best available technologies.
- The environmental enforcement process based on the “stack” principle is being applied in the same way in the whole country. The stack principle means that emission standards have been set for individual sources of pollution, without specific attention to conditions at the place where the source is located. Despite limited financial resources, there is no explicit possibility to set priorities in the enforcement effort. This fact can result in situations in which the cost of environmental protection is much higher than benefits provided by this option, and in general, the efficiency of environmental protection is lower than could (and should) be.
- In some cases, standards for specific kinds of pollutants which can make a significant impact on the environment and/or on the human health, have not been included into legislation as yet; in fact, there is no explicit legislative way to force polluters to reduce such risks.

2 “COMPLIANCE PHASE” IN THE CZECH ENVIRONMENTAL POLICY

To solve the problems with environmental enforcement (including these ones specified above), a modified approach to environmental policy and its enforcement was accepted. As making the current environmental legislative framework “softer” in general is not possible, the Czech Ministry of the Environment developed new possibilities for using the environmental compliance process to provide an “extra dimension” to environmental enforcement.

The principles describing this approach were included into the new “State Environmental Policy”¹ prepared by the Czech Ministry of the Environment and approved by the Government of the Czech Republic in August 1995. Based on the leading principle (the responsibility of the present generation to preserve and transmit fundamental life values to future generations) the document specifies a “socially acceptable level of environmental and health risks” as the main criterion for decision-making in dealing with the environmental and/or human health protection. The government expects that implementation of the “State Environmental Policy” will increase significantly long-term effects and efficiency of the environmental protection. Normative, economic and informative measures defined in the document should stimulate environmental compliance processes as a way to reach the expected environmental goals as efficiently as possible, without negative social and economic side-effects.

3 COMPLIANCE AGREEMENTS FOR ENVIRONMENTAL RISK MANAGEMENT — THE SILESIA PROJECT

3.1 The Silesia Project

The Silesia Project has been accepted as an example that principles included into the new “State Environmental Policy” (with specific emphasis on the environmental compliance approach) are viable and sustainable.

The Silesia Project is an environmental risk assessment and risk management project designed to identify actions to reduce human health risks caused by environmental pollution originated in the coal-mining and iron and steel-producing region surrounding Ostrava (the Czech Republic). The project is coordinated by the Czech Ministry of the Environment in cooperation with the United States Environmental Protection Agency and founded by both the Czech and United States Governments. During the period June 1991 to May 1992, the initial screening risk analysis was performed for fields of environmental pollution (air pollution, surface water pollution, drinking water contamination, food contamination, waste disposal, occupation health) in the specified region. Based on the result from the comparative risk assessment, environmental priorities were set in July 1992 by representatives of central government, local governments (districts and municipalities), regional industries and scientific research institutions. Consequently, the management strategies to address the most significant risks were developed in the form of industrial demonstration projects.

3.2 Reducing risks of coke oven emissions — risk management strategy

Results of the screening risk analysis were released in 1992, were that air pollution risks are considerably higher than those posed by any other category of environmental pollution in the Ostrava Region. Reducing human health risks caused by coke oven emissions was identified as the top priority in regional environmental protection.

In March 1993 (after difficult considerations dealing with a risk management approach in general), the demonstration project was started. The goal was to minimize risk posed to human health by emissions (organic compounds, particles) from 6 coke plants operated by 4

companies in the region. Starting conditions were very “unfriendly”: industries did not agree with the risk assessment results, municipalities (mainly Ostrava City Council) decided to use any possibility to stop coke production in the Ostrava City and considered the proposed project activities as worthless ones. In addition, the current Czech legislation did not set any specific standards for these types of risky emissions, therefore the Czech Inspection of the Environment looked upon the proposed project as an unfair activity against the Czech environmental legislative system. The situation was felt to be an important and sensitive political issue as well.

To solve this problem, the following steps were taken:

3.2.1 Project preparation phase: March to May 1993

This phase included: developing the project proposal; attracting and involving all necessary participants; forming a project management team; obtaining necessary financial sources; and preparing and approving the detail project description and work plan.

3.2.2 Technical and environmental audit: June to September 1993

Detailed audits were performed for each of the coke oven batteries at each of the operating coke plants to evaluate technical status of the facilities, identify sources of risky emissions and estimate their quantity.

3.2.3 Coke market analysis: September 1993 to January 1994

Market analysis were prepared for each of the coke plants and for the total regional coke production in three alternatives of scope: Czech Republic market - European market - World market.

3.2.4 Mitigation options development: October 1993 to March 1994

Lists of mitigation options (in short-term and long-term perspectives) were prepared for each of the coke plants. Low-investment options began to be implemented immediately.

3.2.5 Detail risk assessment: March to November 1994

Based on the audit and lists of mitigation options, detailed risk assessments were performed individually for each of the coke plant and for the regional coke industry in general. The risk was evaluated regarding to the current situation and to the future conditions (after mitigation options will have been implemented).

3.2.6 Cost-benefit analysis of proposed options: November 1994 to April 1995

For each of coke plans and for regional coke industry in general, cost benefit analysis was performed to evaluate each of the proposed investment mitigation options.

3.3 Compliance agreement for supporting risk reduction options in the coke industry located in the Ostrava City area

In November 1993, the Ostrava City Council decided to apply land-use planning as a tool to close down two of the coke plants operated by the Ostrava-Karvina Coal Mines Comp. This decision would cause both troubling economic impacts on the Company and significant social problems in the Region. The deadline was set for December 31, 1997.

Through the Project Silesia, a negotiation process was recommended both to the City and the Company. The negotiation was to set complex conditions, necessary for reducing human health risks currently posed by these two coke plants. The proposal was accepted and started to

be implemented in February 1994. During facilitated discussions, results of studies mentioned above were used for drafting an agreement between the City and the Company. The agreement covered “gaps” in current legislation and identify:

- Which options should be implemented by the Company to reach the emission standards specifically set with the respect to the acceptable level of human health risks posed by coke oven emissions (based on recommendations confirmed by the Regional Institute of Hygiene and by the Regional Office of the Czech Inspection of the Environment).
- Deadlines set individually for each of the options requested by the compliance agreement.
- Enforcement mechanisms applied by the Ostrava City (including involving the public by forming a citizens’ “watch-dog group”).

In May 1995, the consensus of all the participants was finally reached and the 14th version of the compliance agreement (which was in fact much more stringent than the current Czech environmental legislation) was approved. The agreement was signed in June 1995. The information issued by the Ostrava City at the end of December 1995 has confirmed that the compliance agreement was fully respected and followed by the Company.

4 CONCLUSIONS

The negotiation between the Ostrava City and the Ostrava-Karvina Coal Mines Comp. had been started, run and successfully completed before any official support involved in the “State Environmental Policy” was expressed. Also another environment compliance process was started by the Silesia Project before this document was approved (i.e., a negotiation between the government authorities, Ostrava City and a company responsible for an extremely expensive complex remediation of a heavily polluted abandoned coke plant area in order to manage human health and environmental risks posed by soil and underground water contamination.)

Some potential problems could be identified based on this previous experience to avoiding difficulties in early phases of environmental compliance activities:

- The historic tendency “not to act and wait for a strong legislative requests or prescriptions” and to avoid actions based on voluntary approaches is very significant. Attracting all necessary participants to discussions about compliance goals, strategies and enforcement “in between” the current environmental legislation takes much time and needs much patience from facilitators (moderators) and participants.
- Identifying roles and responsibilities of all participants (and making them accept these roles and responsibilities) seems to be the key step to a constructive environmental compliance process. As the current system of the Czech environmental legislation and enforcement does not specify the roles and responsibilities taken in a compliance process by governmental authorities, municipalities (“self-management” authorities), public and polluters clearly, each problem should be approached individually, with sensitivity with respect to local economic, social and political conditions. In general’ most of the environmental compliance activities should be taken by municipal authorities, industry (polluters) and public. The government authorities should provide a guarantee for respecting the fundamental principles of environmental policy and the basic framework of the current environmental legislation (including encouraging participants to solve also problems “in between” the current environmental protection acts).

- Educating the public to leave the position of passive acceptors of environmental pollution risks (which resulted from the former “environmental and human health protection taboo” in the communist regime) and to accept an active role in compliance negotiations and enforcement is a difficult and long-term process which needs much effort made by the central and local governments, mass media and polluters.

Despite the difficulties specified above, the strategy of well enforced environmental compliance seems to be promising, viable and efficient even in countries which have to solve fundamental conversions toward a market economy.

REFERENCE

1. State Environmental Policy, Ministry of the Environment of the Czech Republic, Prague, 1995.

