DETERMINATION AND APPLICATION OF ADMINISTRATIVE FINES FOR ENVIRONMENTAL OFFENCES:
Guidance for Environmental Enforcement Authorities in EECCA Countries

OECD

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This guidance document was developed as part of the OECD/EAP Task Force's work programme in support to reforms of administrative enforcement tools in countries of Eastern Europe, Caucasus, and Central Asia.

The opinions expressed in this document are the sole responsibility of the authors and do not necessarily reflect those of the OECD or the governments of its member countries.

Financial support for the development of this guidance was provided by the Netherlands and Switzerland.

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FOREWORD

Forcing an offender to return to compliance is the primary but not the only goal of enforcement actions. If all the competent authority did was to restore compliance every time there was a violation of legal requirements, many firms would wait to comply until they were caught breaking the law. This is why the government must impose appropriate penalties to deter regulated entities from future offences.

Monetary penalties (fines) are the most widespread administrative environmental enforcement instrument in countries of Eastern Europe, Caucasus and Central Asia (EECCA) as well as internationally, intended both to punish non-compliance and prevent its future re-occurrence. Fines can be fixed (in the legislation) or variable, administrative or judicial. This document focuses on variable administrative fines whose size is determined by a government authority according to a number of factors.

At present, administrative fines in EECCA are widely considered too small to act as a deterrent, with many offenders preferring to pay the fines as a "lesser evil" compared to the benefit they draw from the violation. Analytical tools to estimate (and legal means to recover) financial gains from non-compliance as well as to account for the gravity of violations and affordability of fines are lacking, compromising the proportionality and fairness of a penalty and leaving room for abuse.

This methodological guidance document was prepared by the EAP Task Force Secretariat in response to requests from environmental authorities in EECCA countries which are eager to improve their administrative enforcement tools. It adapts the internationally recognised approaches (including those used in the US and the UK) to the legal and institutional realities in the EECCA region to help ensure effective and equitable treatment of non-compliance.

This guidance document:

- Briefly describes the current use of environmental administrative fines in EECCA;
- Summarises the fundamental principles of the design of effective environmental fines;
- Describes a methodology to assess economic benefits of non-compliance or delayed compliance;
- Explains how to take into account the seriousness of an environmental offence;
- Provides an approach to considering operator-specific factors in adjusting the size of a fine;
- Addresses the implementation issues, including the consistency, transparency, and enforceability of penalty decisions; and
- Provides specific short- to medium-term recommendations for EECCA countries that follow from the international best practices.

The methodological guidance was developed in the framework of the EAP Task Force Policy Programme which with financial support from the governments of the Netherlands and Switzerland. The EAP Task Force is an intergovernmental initiative that aims to facilitate reform of environmental management systems in the EECCA region. Its secretariat is provided by the OECD Environment Directorate's Environmental Performance and Information Division.

The guidance was compiled by Eugene Mazur of the EAP Task Force Secretariat. It was discussed at a regional expert meeting in Tallinn, Estonia in March 2009 and endorsed at the annual meeting of the EECCA Regulatory Environmental Programme Implementation Network (REPIN) in Chisinau, Moldova in June 2009.

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1. CURRENT USE OF ENVIRONMENTAL ADMINISTRATIVE FINES IN EECCA

While administrative fines are widely used in environmental enforcement in EECCA countries, their design and application does not ensure effective deterrence against violations. This chapter briefly outlines the main features of the existing EECCA systems of administrative monetary penalties for environmental offences.

1.1 Scope of Application

EECCA countries diverge with respect to the scope of application of administrative enforcement. Administrative liability may cover only individuals (physical persons), with important differentiation between regular citizens and 'officials' (managers of legal entities or individuals with decision-making power), as is the case in Ukraine, Moldova, Armenia, Kyrgyzstan, etc. A category of individual entrepreneurs is identified in Belarus and Kazakhstan. Several other EECCA countries (e.g., Russia, Kazakhstan, Belarus, and Georgia) have, in addition, established administrative penalties for legal entities (juridical persons). Those countries that do not have provisions for administrative fines against companies rely on pollution charges and damage compensation claims to make businesses pay for violating environmental requirements.

Administrative enforcement procedures in EECCA are dictated by the Codes of Administrative Offences (CAO) and similar legal acts. Administrative fines can be imposed by a government authority or by a court (while a fine is the only penalty available to government agencies, courts can also suspend an activity and even confiscate property). Apart from state environmental inspectorates or equivalent bodies, administrative sanctions against certain types of environmental violations can be applied by sanitary, technological, or fire inspectorates. In some EECCA countries, the higher the position of the enforcement official imposing a penalty, the larger the size of the penalty he/she is authorised to apply (up to the legal limit). Some serious offences (in Kazakhstan – repeated offences), as well as those contested by the offender, can be enforced against only judicially[1]. Administrative actions can also be initiated by a prosecutor's office which has an oversight function over competent enforcement agencies and may order the imposition of a sanction or initiate an administrative enforcement case and refer it to the competent authority for an appropriate decision.

If an administrative fine was imposed by an enforcement agency, it can be appealed either first to a higher administrative authority (e.g., the environment ministry) and then in a local court, or, in some EECCA countries like Moldova, directly in court.

The minimum and maximum limits for administrative fines are fixed for different types of violations in each country's CAO. The offences punishable by administrative fines can be roughly divided into four categories:

- Violation of basic environmental requirements (e.g., providing false environmental reports);
- Violation of general environmental protection regulations (for air, water, forests, etc.);

[1] A case of administrative violation can be considered by an administrative law judge of a local court, a special administrative court, as in Kazakhstan, or an "amicable" court in Russia. Very rarely do courts impose administrative fines in the first instance.

- Violation of regulations concerning environmentally protected areas (e.g., nature reserves); and
- Violation of environmental requirements for economic activities (e.g., permit conditions).

The boundaries between administrative and criminal offences are not always clearly defined in the legislation. Usually there are references to “death or widespread disease due to environmental pollution” or “significant damage” in the Criminal Code, although there are no definitions of these terms. In Belarus, a recurring identical administrative offence during one year triggers criminal prosecution.

1.2 Size of Administrative Fines

Fines in EECCA are often expressed as multiples of the minimum wage set in the law (e.g., in Armenia, Tajikistan and Uzbekistan) in order to facilitate their adjustment to inflation. For the same reason, Moldova, Belarus, Kazakhstan and Kyrgyzstan use “conventional units” whose monetary value is regularly revised. Russia and Georgia have recently moved to the monetary denomination of administrative fines.

Fines are generally higher for officials than for regular citizens, and in those countries that have fines for legal entities those may be up to an order of magnitude higher than those for individuals. Kazakhstan even distinguishes the rates between small and medium-sized enterprises and large businesses.

The maximum limits vary dramatically across the region, both in relative values of multiples of the minimum monthly wage (MMW) and in monetary terms. For example, whereas in Armenia the maximum fine for officials is 150 MMW, in Tajikistan it is 20 MMW. In Moldova the maximum fine is about 450 €, while in Kazakhstan it is around 10,000 €.

There are general criteria laid out in each country’s CAO, guiding the competent authority in deciding on the exact amount of a fine in a particular case. Commonly, the attenuating circumstances relevant to environmental violations include the following:

- Voluntary reporting of the violation by the offender before it was discovered by the competent authority; and
- Prevention by the offender of possible damage from the violation, or its voluntary compensation or remediation by the offender.

The aggravating circumstances include, among others:

- Continued violation despite the order of the competent authority to cease it;
- Repeated violation of a similar nature; and
- Violation under emergency circumstances.

In a unique case in the EECCA region, Kazakhstan has a provision in the CAO setting administrative fines for violation of (air) emission limit values by large enterprises at ten times the pollution charge rate applicable to the exceedance amount. For wastewater discharge and waste management violations by large businesses, Kazakhstan’s CAO makes the fine equal to the monetary value of the damage inflicted by the violation.

There are no formal requirements to relate the size of a monetary penalty to the economic benefit to the offender from the violation (especially considering the fact that only a few EECCA countries have administrative penalties for enterprises), to the violator’s intent, or the violator’s ability to pay the penalty.

1.3 Implementation Practices

The fines are collected either by the environmental inspectorate itself (as, for example, in Armenia and Moldova) or by an executive body of the Ministry of Justice (as in Georgia). The revenues in most EECCA countries (e.g., Russia, Armenia, Kyrgyzstan) go to the general budget, while a few others (e.g., Moldova and Uzbekistan) channel them to special Environmental Funds. The fines are practically used as a revenue raising instrument, and sometimes there are even fiscal plans for the assessment and collection of environmental fines.

Administrative fines in EECCA must generally be imposed within a fixed period (e.g., 15 days in Russia) from the submission by an inspector of a statement of violation. Although this deadline can be extended with appropriate justification, it may be too short to allow for potential analysis of such factors as the economic benefit and the seriousness of non-compliance.

If an individual offender refuses to pay a fine by a legal deadline (usually, 30 days from its imposition), the competent authority or a court enforces its withholding from the offender's salary or assets. If the non-paying violator is a business, its bank account is "attached" to the penalty order (i.e., the bank is required to withdraw the penalty amount from the violator's account). Despite these payment enforcement procedures, the collection rates of administrative fines in EECCA are quite low. Depending on the year, they can be as low as 31-32% (e.g., in Georgia in 2005 and in Moldova in 2006) but are generally between 60% and 80%. Tajikistan, however, reports collection rates exceeding 90%.

Most EECCA countries' environmental enforcement authorities maintain records on the imposition and sizes of administrative fines (and even use this information as one of their principal performance indicators). However, this information commonly aggregates different categories of offenders (individuals, officials, and legal entities) and types of violations, making it difficult to draw conclusions about the pattern of application of this instrument. A rare piece of available detailed information, Russia's data for 2003 (Tables 1 and 2) indicate that while the administrative fines on officials account for about half of the cases, the fines on legal entities represent two-thirds of the fines' total monetary value. As for the types of violations, waste management offences are punished by fines most often (25% of the cases) but violations of environmental impact assessment requirements represent over a quarter of the value of the fines imposed.

Table 1.The Use of Administrative Fines for Different Categories of Offenders for Environmental Violations in the Russian Federation, 2003

Category	Number of Cases, % of total	Monetary Value of Fines Imposed, % of total	Collection Rate, %
Legal entities	14	67	60
Officials	48	25	67
Regular citizens	38	8	66

Source: Ministry of Natural Resources of the Russian Federation, 2003 Annual Report.

Table 2.The Use of Administrative Fines for Key Categories of Environmental Violations by Legal Entities in the Russian Federation, 2003

Category	Number of Cases, % of total	Monetary Value of Fines Imposed, % of total
Violations in the siting, design, or operation of facilities (CAO, Art. 8.1)	15	6
Violations of the environmental impact assessment (State Environmental Review) requirements (CAO, Art. 8.4)	12	29
Waste management related violations (CAO, Art. 8.2)	25	12
Water use and water pollution related violations (CAO, Art. 8.13 and 8.14)	12	14
Air pollution related violations (CAO, Art. 8.21)	9	16

Source: Ministry of Natural Resources of the Russian Federation, 2003 Annual Report.

The available data are also insufficient to assess the effectiveness of administrative fines in EECCA in terms of repeated non-compliance by already sanctioned offenders. At the same time, the limited scope of application of administrative fines (excluding legal entities) in most EECCA countries and the lack of systematic consideration of many, particularly economic, factors of non-compliance in determining the penalties indicate a need for improvement based on best international practices.

Given the shortcomings of the system of administrative fines, most EECCA countries use pollution charges for exceedance of the permitted limits (whose rates are 5-25 times higher than the basic rates for individual pollution parameters) as a surrogate for fines, reflecting the toxicity of the respective pollutants and, therefore, the gravity of the offence. Revenues from fines go to the general budget whereas revenues from pollution charges are channelled in most countries into environmental funds or special budget accounts earmarked for environmental expenditures. This makes pollution charges more attractive to environmental enforcement authorities. The system of environmental damage compensation also serves more to punish offenders and collect revenue than to remediate the environment. The interaction between these three instruments – fines, charges and damage compensation – in often non-transparent (for example, an enterprise can have fines waved if it has paid charges for pollution exceedances). This is why the reform of administrative fines for environmental offences must be considered in a broader context of improving administrative and civil environmental enforcement in EECCA[2].

[2] See different OECD documents with recommendations on the reform of the pollution charge systems in EECCA countries at http://www.oecd.org/document/35/0,3343,en_2649_34339_26401699_1_1_1_1,00.html. The EAP Task force is planning to dedicate a separate project (in 2009-2010) to the analysis of options to reform the system of liability for environmental damage in EECCA.

2. THEORY OF EFFECTIVE MONETARY PENALTIES

In order to be an effective enforcement instrument, administrative fines should be designed following a number of key principles[3]:

- Aim to deter future non-compliance;
- Aim to eliminate any financial gain or benefit from non-compliance;
- Be proportionate to the nature of the offence and the harm caused; and
- Be responsive and consider what is appropriate for the particular offender and regulatory issue.

This chapter outlines the theoretical fundamentals of the design of environmental monetary penalties that would respond to these principles.

2.1 Achieving Deterrence of Non-compliance

The first goal of a penalty is to deter people from violating the law. Specifically, the penalty should persuade the violator to take precautions against falling into non-compliance again (specific deterrence) and dissuade others from violating the law (general deterrence). Successful deterrence is important because it provides the best protection for the environment. In addition, it reduces the resources necessary to administer the laws by addressing non-compliance before it occurs. In some countries, such as Norway, the threat of so-called "coercive fines" may be used even before a violation is identified, as a preventive instrument to achieve compliance with the requirements.

Traditional environmental economics theory assumes that regulated entities are rational when making compliance decisions: they decide whether to comply or not based on the balance between expected compliance costs (i.e., expenses for technological and management improvements to meet environmental requirements) and non-compliance costs (i.e., value of monetary penalties, civil liability, etc.). In other words, if it is 'cheaper' to violate a requirement, an operator would do so. Under this theory, to achieve 'fair' enforcement, competent authorities must raise the costs of non-compliance by raising the probability of detection of an offence (via intensive compliance monitoring); making non-compliance response swift and certain; and imposing penalties high enough to outweigh non-compliance benefits; and raising awareness of enforcement actions.

On the other hand, the economic theory of 'optimal' penalties approaches the issue of deterrence from the perspective of economic efficiency rather than that of fairness. It assumes that the economically efficient penalty balances the harm inflicted by the offence against the cost of deterring the offence. The optimal penalty is based on the harm caused by the offence, not the gain to the offender. The gain to the offender may be much smaller than the inflicted damage (e.g., in case of a toxic spill). This theory implies that the appropriate methodology for calculating a fine is to charge an amount per offence equal to the monetary value of the harm, divided by the probability of punishment.

Measuring environmental harm is inherently difficult, and in practice different measurement techniques can produce different results. This is one of the reasons why most environmental enforcement agencies do not

[3] *"Regulatory Justice: Making Sanctions Effective"*, Richard B. Macrory, Final Report, November 2006.

make economic efficiency the goal of their activities but try to base the fines on gain to the violator rather than harm from the offence. The size of the harm may be reflected in a component of a fine, as it is done in the United States.

2.2 Two Components of a Penalty

If a penalty is to achieve deterrence, both the violator and the general public must be convinced that the penalty places the violator in a worse position than those who have complied in a timely fashion. Moreover, allowing a violator to benefit from non-compliance punishes those who have complied by placing them at a competitive disadvantage. This creates a disincentive for compliance. For these reasons, penalties generally should, at a minimum, remove any economic benefit resulting from failure to comply with the law. This amount is commonly referred to as the *"benefit component" of the penalty*.

The removal of the economic benefit of non-compliance places the violator in the same position as he would have been if compliance had been achieved on time. However, both deterrence and fundamental fairness require that the penalty include an *additional* amount to ensure that the violator is economically worse off than if it had obeyed the law. This additional amount usually reflects the *seriousness* of the violation and is referred to as *the fine's "gravity component"*.

The enforcement agency should seek to recover a penalty which includes a benefit component plus a gravity component. This is important because otherwise regulated parties would have a general economic incentive to delay compliance until the competent authority launched an enforcement action. This incentive would directly undermine the goal of deterrence.

2.3 Role of Detection Probability of an Offence

Economic theory indicates that to obtain a given degree of deterrence, the penalty should vary inversely with the probability of detection: given two possible violations with the same economic benefit to the polluter but where one is much less likely to be detected than the other, the first requires a larger penalty in order to provide the same degree of deterrence. Factors that may influence the probability of detection and punishment are:

- The size of the harm: less harmful violations have a smaller likelihood of detection;
- Whether a violator is subject to mandatory self-reporting;
- The ratio of facilities to inspectors in a jurisdiction;
- The violator's compliance history, possibly making him subject to increased scrutiny.

Although not widely used, numerous techniques are available to estimate the probability of detection. However, this consideration appears to be entirely missing from most existing penalty assessment policies.

2.4 Fairness, Consistency and Flexibility of Fines

Besides providing deterrence against non-compliance, monetary penalties must ensure fair and equitable treatment of the regulated community. This requires both consistency and flexibility in the assessment of penalties by the enforcement agency. The consistent application of a penalty policy is important because otherwise the fines may be seen as arbitrary by the regulated entities. Appeals against those penalties would consume agency resources and slow down the resolution of environmental problems caused by the violations.

A fair system for calculating penalties must also have enough flexibility to make adjustments to reflect legitimate differences between similar violations. Although quantifying the benefit and gravity components of

a fine in accordance with a defined methodology contributes significantly to the equitable treatment of violators, it does not account for many possibly relevant differences between enforcement cases, including:

- Degree of wilfulness and/or negligence of the offender;
- History of non-compliance;
- Ability to pay;
- Degree of cooperation/non-cooperation with the enforcement agency; and
- Other unique factors specific to the violator or the case.

Flexibility based on these factors is appropriate to the extent the violator clearly demonstrates that it is entitled to mitigation of the size of the fine.

3. EVALUATING ECONOMIC BENEFITS OF NON-COMPLIANCE

Violators obtain an economic benefit from violating the law by delaying compliance, avoiding compliance or achieving an illegal competitive advantage. In delaying compliance, the violators eventually comply, but they have the use of the money that should have been spent on compliance. The polluters then use that money for profit-making investments. In a very simple sense, the violators "gain" the interest on the amount of money that should have been invested in pollution prevention and control measures. When an offender avoids compliance, it essentially does not incur the costs that would have been necessary to come into compliance. The third type of economic benefit is derived from an illegal competitive advantage.

In order to ensure that a penalty removes any significant economic benefit of non-compliance, it is necessary to have reliable methods to calculate that benefit. The existence of a well defined and substantiated methodology strengthens the enforcement agency's position in case of eventual appeal of the penalty. It is important to note that while an economic benefit of non-compliance can be accrued by a physical as well as a legal entity, this approach pertains primarily to enforcement against legal entities.

This chapter sets out guidelines for assessing the benefit component. It first addresses costs which are delayed or avoided completely by non-compliance. It also identifies issues to be considered when calculating the benefit component for those violations where the benefit of non-compliance results from factors other than cost savings. The chapter concludes with a discussion of the proper use of the benefit component in assessing the size of a fine.

3.1 Benefit from Delayed and Avoided Costs

In many instances, the economic advantage to be derived from non-compliance is the ability to delay making the expenditures necessary to achieve compliance. For example, a facility which fails to construct required wastewater pre-treatment equipment will eventually have to spend the money needed to buy and install this equipment in order to achieve compliance. But, by deferring these one-time nonrecurring costs until the competent authority takes an enforcement action, that facility has achieved an economic benefit.

Among the types of violations which result in savings from ***deferred costs*** are the following:

- Failure to install equipment needed to meet emission or effluent limits;
- Failure to make process changes needed to eliminate pollutants from products or waste streams;
- Failure to conduct necessary testing, where the testing must be done to demonstrate compliance;
- Improper storage of waste; and
- Failure to obtain necessary environmental permits (or licences), where such permits would probably be granted (as the permitting process can be expensive).

The following are examples of the kinds of violations that enable an offender to ***permanently avoid*** certain compliance-related costs:

- Cost savings for operation and maintenance of existing pollution control equipment;
- Failure to employ sufficient number of adequately trained staff;
- Failure to establish or follow management practices (including self-monitoring) required by regulations or permits; and
- Improper treatment or disposal of waste.

The experience of the US Environmental Protection Agency (EPA) indicates that it is possible to estimate the economic benefit of delayed or avoided compliance through the use of a simple formula. For example, the economic benefit of delayed compliance may be estimated at: *5% per year of the delayed one-time capital and non-capital costs for the period from the date the violation began until the date compliance was or is expected to be achieved*. This rough method assumes a 5% annual discount rate which can be adjusted to the local circumstances (for example, by using the average interest rate of the country's Central Bank).

The "discount rate" method only provides a first-cut estimate of the benefit of non-compliance. For this reason, its use is probably inappropriate in situations where a detailed analysis of the economic effect of non-compliance is needed to assess a fine. Therefore, it should generally not be used if the enforcement agency has reason to believe it will produce a substantially inaccurate estimate: for example, where the delayed compliance has complex financial repercussions for the offender, or where non-compliance has continued for an unusually long period. In these cases, the benefit of non-compliance should be estimated with the help of a model (see below) or expert assessment.

3.2 Model for Computing the Economic Benefit of Non-compliance

The US EPA developed a computer model called BEN, first used in 1984, to calculate economic benefits that result from cost savings during the time when a facility is not in compliance. It can estimate savings from deferred capital investments in pollution control equipment, deferred one-time expenditures (such as establishing self-monitoring systems), and reduced operation and maintenance costs of environmental equipment[4]. Since BEN became a central tool in the penalty assessment process, aggregate annual penalty assessments in the US have risen dramatically (the data on how this affected the level of compliance are not available).

In its standard mode, BEN requires the following inputs:

a) *Initial capital investment:* The capital investment is the cost of designing, purchasing, and installing the pollution control equipment necessary to comply with the regulatory requirements. These are expenditures the violator generally delayed making (although they could sometimes be avoided altogether).

b) *One-time, non-depreciable expenditures:* This category includes delayed expenditures the violator should have made earlier (to prevent the violations) that need to be made only once and are non-depreciable (i.e., do not wear out). Such an expenditure could be setting up a record-keeping system, removing illegal waste dumps , disposing of soil from a hazardous-waste site, or initial training of employees. (If training or record keeping must occur over time and regularly, however, these costs should be considered as annually recurring costs).

[4] BEN can be downloaded from http://www.epa.gov/compliance/civil/econmodels/index.html. Once downloaded, the model offers an extensive help system. The model can be easily adapted for use in another country.

c) *Annual operating and maintenance expenditure:* Annually recurring costs are those costs associated with operating and maintaining the required pollution control equipment that the violator avoided during the period of violations. These expenditures should include any changes (both decreases and increases) in the cost of labour, power, water, raw materials and supplies, and recurring training of employees related to the required environmental measures.

d) *Non-compliance date:* The non-compliance date is generally when the first violation of the environmental requirement occurred. The model uses this as the proxy for when the offender should have actually incurred the expenditures necessary for compliance, although compliance expenditures must often occur far in advance of actual legal compliance.

e) *Compliance date:* The compliance date is when the violator came into compliance with the environmental requirements or the date when the enforcement agency expects the violator to achieve compliance. (This date is used as the proxy for when the violator actually did, or will, incur the expenditures necessary for compliance.)

f) *Penalty payment date (estimated):* BEN calculates the final economic benefit as of the penalty payment date. However, a considerable time lag often occurs between when the fine is imposed and when the offender actually pays it. If the penalty payment date is actually later than the deadline stated in the respective order, additional penalties should be envisaged.

Technical experts inside or outside the competent environmental authority should be consulted for an estimate of reasonable costs of pollution control technologies or remediation measures. Another potential source of information is the violator, who may provide the required data voluntarily or be compelled to do so via an official request from the enforcement agency. If the violator installs a more expensive technology than the enforcement officials believe is necessary to achieve compliance (because it is more reliable or fits better the existing system or expansion plans), the cost estimate should generally be based on the actual (more expensive) system installed.

The BEN model also relies on a set of standard values, such as tax rates, discount rate, the cost of capital, and equipment life. Each country should use its own standard values. Table 3 illustrates a BEN-generated penalty calculation by a simple fictional case.

Table 3.Illustration of a Penalty Calculation Using the BEN Model

Inputs	
Initial capital investment	$100,000
One-time, non-depreciable expenditure	$80,000
Annual operating and maintenance expenditure	$10,000
Non-compliance date	01/06/2005
Compliance date	01/12/2008
Estimated penalty payment date	30/01/2009
Discount rate	9.1%
Outputs	
Present values as of non-compliance date	
Capital and one-time costs in the absence of non-compliance (A)	$102,091
Capital and one-time costs with delayed compliance (B)	$88,199
Avoided annually recurring costs (C)	$16,453
Economic benefit as of non-compliance date (A-B+C)	$30,345
Final economic benefit as of the estimated penalty payment date	***$41,769***

Source: USEPA, example by EAP TF Secretariat

Despite the fact that the BEN model is user-friendly, it is essential to train enforcement officials how to use the model. Any training courses need to cover the basic theory behind the model, discuss the types of data the model needs and where to find it, and explain how to use the model's outputs.

There are, however, several reservations about using BEN or a similar model in EECCA countries:

- It is possible that the offender will contest the estimated benefit of non-compliance in an administrative or judicial appeal. In the latter case, the enforcement agency would need to engage an (expensive) expert in financial economics to explain the calculations, whose testimony may or may not be accepted by the court.

- There may be difficulty in finding reliable cost data to run the model. This is particularly so when the polluter is unsophisticated and does not know what measures it needs to take to comply. It can also be a problem with violators that refuse to furnish the data to the enforcement agency (and there are no legal provisions to force the violator to do it), and the agency does not have the needed technical expertise in-house. In these cases, the agency should seek an external expert opinion (e.g., one option is to contact similar companies that comply and are eager to share their data).

- The model that often produces estimated benefits of non-compliance that may seem "too high" to enforcement officials. There are cases where the eventual fine will be less than the estimated benefit from non-compliance (see Section 3.4 and Chapter 5). If the estimated benefits systematically exceed the current maximum rates specified in the country's CAO, the competent authority should initiate a revision of the legal upper limits of monetary penalties for the respective categories of environmental offences.

3.3 Benefit of Competitive Advantage

There are several categories of cases in which the economic gain from non-compliance with environmental requirements goes beyond the benefit of delaying or avoiding compliance costs:

- Violator gains additional market share by using its lower production costs to keep its prices below its complying competitors;

- Violator sells products or services prohibited by law, obtaining illegal revenue;

- Violator initiates construction or operation prior to government approval and derives the benefit from entering the market earlier than it should have;

- Violator operates at higher capacity than it should have and makes an illegal profit from the "extra" output; and

- Violator uses natural resources before obtaining necessary licences or in volumes exceeding the permitted limits.

However, increases of market share are difficult to attribute exclusively to non-compliance. Because of this difficulty, enforcement agencies have been focusing primarily on the benefits derived from delayed and avoided costs.

The fundamental question for the determination of the economic benefit component of a fine is how much the profits of the firm increased (or losses decreased) as a result of its non-compliance. Profits can be increased either by an increase in revenue or a decrease in the total cost of production (including pollution abatement costs), or some combination of both.

When firms gain profits from increased sales, it is necessary to estimate the changes in streams of revenue and/or production costs.

For most violations, removing the savings which accrue from non-compliance will usually be sufficient to remove the competitive advantage the violator clearly has gained from non-compliance. But there are some situations in which non-compliance allows the offender to provide goods or services which are not available elsewhere or are more attractive to the consumer. Examples of such violations include:

- Selling banned products;
- Selling products for banned uses;
- Selling products without required labelling or warnings;
- Removing or altering pollution control equipment for a fee (e.g., tampering with automobile emission controls); or
- Selling products without required regulatory clearance (e.g., pesticide registration).

To adequately remove the economic incentive for such violations, it is necessary to estimate the net profits made from the illegal transactions . This calculation may be substantially different depending on the type of violation. In addressing specific categories of offences, the following principles should be adhered to:

- The amount of the profit should be based on the best information available concerning the volume of transactions resulting from non-compliance.
- Where available, information about the average profit per transaction may be used.
- The benefit derived should be adjusted to reflect the present value of net profits derived in the past.

The methods developed for estimating the profit from those transactions often rely substantially on expert judgement rather than verifiable data. Nevertheless, the competent authority should make all reasonable efforts to ensure that the estimates developed are defensible in court.

3.4 Conditions for Imposing a Fine Lower than the Economic Benefit

Overall, imposing a penalty that does not remove the economic benefit of non-compliance may encourage people to wait until the competent authority takes more stringent enforcement action before complying. Therefore, it should be general policy not to impose a fine lower than the economic benefit. However, there are two categories of cases where doing so may be appropriate: if the benefit of non-compliance involves an insignificant amount, or if there are justified public concerns over a full-blown penalty. In any individual case where the competent authority decides to impose a penalty less than the economic benefit, it should detail the reasons for it in a formal memorandum.

- ***Benefit of non-compliance is insignificant:*** Assessing the benefit of non-compliance often requires a substantial amount of an enforcement agency's resources. Such a commitment of resources may not be warranted in cases where the magnitude of the economic benefit is unlikely to be significant (e.g., unlikely to have a substantial impact on the violator's competitiveness or overall profits, such as in paperwork violations). For this reason, an enforcement agency should have the discretion not to include the benefit component into a penalty where it appears likely to be less than a certain amount to be defined in the law or the agency's enforcement policy.

  At the same time, if the economic benefit is quite well defined, it is not likely to require as much effort to seek to include it in the penalty assessment. Such circumstances also increase the likelihood that the economic benefit was a substantial motivation for the non-compliance. This would make the inclusion of the benefit component more necessary to achieve deterrence.

It may be appropriate not to seek the benefit component in an entire class of violations. In that situation, the rationale for doing so should be clearly stated in the appropriate enforcement policy. For example, the most appropriate way to handle a small non-recurring operation and maintenance violation may be a small penalty. It makes little sense to assess in detail the economic benefit for each individual violation because the benefit is likely to be so small.

- ***Compelling public concerns against a high penalty:*** If the removal of the economic benefit would result in plant closings, bankruptcy, or other extreme financial burden, and there is an important public interest in allowing the firm to continue in business, the enforcement agency may impose a smaller fine. However, alternative payment plans should be fully explored before resorting to this option. Otherwise, the competent authority's actions would give a perception that environmental non-compliance is a way to keep a failing enterprise afloat. This exemption should not apply to cases where the plant was likely to close anyway, or where continued non-compliance is likely.

4. ACCOUNTING FOR THE SERIOUSNESS OF ENVIRONMENTAL OFFENCES

A penalty, to achieve deterrence, should not only remove any economic benefit of non-compliance, but also include an amount reflecting the seriousness of the violation (the “gravity component”). If all the competent authority did was recapture the economic benefit, the polluter would still be no worse off than the firm that complied on time. Therefore, it is essential that the penalty be bigger than the economic benefit component. In a sense, the real penalty is its gravity component.

In some violations, there are virtually no delayed or avoided costs. Neither is there any benefit from an illegal competitive advantage. These are typically paperwork types of violations. While the potential consequences for such a violation could be devastating, there really is no benefit of non-compliance to the offender. In such cases, the fines are based solely on the gravity component.

The national environmental authority should develop a system for quantifying the seriousness of violations of the laws and regulations it administers, within the limits of the penalty amounts authorised in the CAO. Although assigning a monetary value to represent the seriousness of a violation is an essentially subjective process, the system must be based, whenever possible, on objective indicators and the facts of each particular violation. This would ensure that violations of approximately equal seriousness are treated the same way.

In quantifying the seriousness of the violation in a penalty, the following main considerations should be addressed:

a) Actual or possible harm; and

b) Regulatory importance of the violated requirement.

These factors are not meant to be exhaustive. The competent authority may identify other factors relevant to assessing the seriousness of a violation and should then systematically assign a monetary value to them.

4.1 Actual or Possible Harm

This factor focuses on whether (and to what extent) the activity of the offender actually resulted or was likely to result in an unauthorised environmental impact. *The adjustment of a fine for the actual or possible harm arising from an offence is different from the assessment of real environmental damage for civil liability purposes.* In assessing the gravity component of a fine, the competent authority should use proxy indicators applied to the range of fines allowed under administrative law.

The following harm factors should be taken into account:

- ***Amount and toxicity of the pollutant:*** The fine should be adjusted as a function of the degree to which the emission/effluent limit value in the offender’s permit was exceeded. One option is to assign an incremental monetary value to each 10% of the exceedance of the limit. However, the adjustment may not be linear, especially if the pollutant can be harmful at low concentrations. Violations involving highly toxic pollutants are more serious and should result in larger penalties.

  The experience in EECCA countries in making pollution charges an inverse function of an ambient environmental quality standard for a pollutant (the lower the maximum allowable concentration of a pollutant, the higher the penalty) may be useful in this regard. This approach would also account for

the sensitivity of the environment in the location where the violation was committed. In fact, the pollution charge system currently in place in most EECCA countries where a set of pollutant-specific basic rates apply to discharges within established limits, whereas a much higher rate applies to discharges exceeding the limits, serves as a surrogate of a gravity-based non-compliance penalty. Transferring this approach to the calculation of administrative fines while reforming the pollution charge system would increase the transparency and efficiency of environmental compliance assurance in EECCA.

- ***The duration of a violation:*** In most circumstances, the longer an offence continues uncorrected, the greater is the risk of harm. Violations should be assumed to be continuous from the first provable day of violation until the operator demonstrates compliance, unless the operator has evidence (e.g., continuous emission monitoring data) that the violation was not continuous. The length of violation should be assessed separately for each violation, including procedural violations (e.g., in self-monitoring and reporting). One way to account for the duration of an offence is to assign a monetary value to each month (or fraction thereof) or even each day (a daily fine) for which the violation continues, as it is done in the US (Table 4), the Netherlands, and several other OECD countries.

Table 4.U.S. Example of Assigning Monetary Value to the Duration of an Offence

Duration of an offence, months or fraction thereof	Amount of additional penalty, USD
0-1	5,000
2-3	8,000
4-6	12,000
7-12	15,000
13-18	20,000
19-24	25,000

Source: United States Clean Air Act Stationary Source Civil Penalty Policy (1991)

4.2 Regulatory Importance of the Violated Requirement

This factor addresses the significance of the requirement in achieving the goal of the law or regulation. It is crucial in accounting for so-called “paperwork” offences that are not associated with environmental harm. Offences should be categorised, based on their regulatory importance, in the agency’s enforcement policy for a particular regulation. Each category of offences should correspond either to a coefficient (multiplier) to be applied to the penalty’s gravity component or to an additional penalty amount (see an example in Table 5). Providing false information or obstruction of enforcement agency’s actions should be assigned the highest regulatory importance and may lead to criminal prosecution.

Table 5.Fines for “Paperwork” Offences: U.S. Example

Type of Offence	Amount of additional penalty, USD
Reporting and notification violations:	
▪ Failure to report or notify	15,000
▪ Late report or notice	5,000
▪ Incomplete report or notice	5,000-15,000
Recordkeeping violations:	
▪ Failure to keep required records	15,000
▪ Incomplete records	5,000-15,000
Permitting violations:	
▪ Failure to obtain a permit	15,000
Violations of permit schedules of compliance:	
▪ Failure to meet interim deadlines	5,000
▪ Failure to submit progress reports	15,000
▪ Incomplete progress reports	5,000-15,000
▪ Late progress reports	5,000

Source: United States Clean Air Act Stationary Source Civil Penalty Policy (1991)

5. ADDRESSING OPERATOR-SPECIFIC FACTORS IN THE ASSESSMENT OF FINES

In order to promote equitable treatment of the regulated community, the system for penalty assessment must have enough flexibility to account for unique facts of each case. On the other hand, it must ensure consistent treatment of similar offences. The purpose of this chapter is to provide guidance on evaluating operator-specific penalty adjustment factors to promote flexibility while safeguarding consistency.

The principal factors that frequently distinguish different environmental enforcement cases include:

- Degree of an operator's wilfulness and/or negligence in committing the offence;
- Degree of an operator's cooperation with the competent enforcement authority;
- History of an offender's non-compliance; and
- Offender's ability to pay.

These adjustment factors should apply only to the gravity component and not to the economic benefit component of the fine. It is the offender who bears the responsibility for soliciting and substantiating adjustments to the fine based on any of these factors. The adjustments (up or down) should generally not exceed 50% of the gravity component of the fine.

There may be other, unanticipated factors which might affect the fine in each case that may be reasonable for the enforcement agency to take into account. It is recommended, however, that the enforcement policy *limit such "unregulated" adjustments to 10% of the gravity component of the fine*. Their rationale should be recorded in detail in writing by the enforcement agency.

5.1 Degree of Wilfulness or Negligence

Knowing or deliberate (wilful) violations can lead to criminal liability, while an inadvertent violation may be punished by a small monetary penalty. Between these two extreme scenarios, the degree of an offender's wilfulness or negligence may be a reason to increase an administrative fine.

In assessing the degree of wilfulness or negligence, all of the following points should be considered in most cases:

- How much control the offender had over the events constituting the violation;
- The predictability of the events constituting the violation;
- Whether the offender took reasonable precautions against the events constituting the violation;
- Whether the offender knew or should have known the hazards associated with the conduct; and
- Whether the offender knew of the legal requirement that was violated.

It should be noted that this last point, *lack of knowledge of the legal requirement, should never be used as a basis to reduce the penalty*. To do so would encourage ignorance of the law. Rather, knowledge of the law should serve only to increase the fine.

The amount of control which the offender had over how quickly the violation was corrected is also relevant in certain circumstances. Specifically, if the correction of the violations was delayed by factors which the offender can clearly show were not reasonably foreseeable and out of its control, the fine may be reduced.

5.2 Degree of Cooperation with Enforcement Authorities

The degree of cooperation or non-cooperation of the offender in correcting the violation is an appropriate factor to consider in adjusting the fine. There are two main areas where this factor is relevant:

- ***Prompt reporting of non-compliance:*** Cooperation can be manifested by the offender promptly reporting its non-compliance. Assuming such self-reporting is not required by law, such behaviour should result in the mitigation of the fine.

- ***Prompt correction of the violation:*** The enforcement agency should provide incentives for the offender to correct the problem promptly. The circumstances under which the fine is reduced depend on the type of violation involved and the offender's response to the problem. A straightforward reduction in the amount of the fine's gravity component is most appropriate in those cases where the violation is corrected either immediately upon discovery of the violation or at least prior to the initiation of enforcement action (issuance of a formal statement of violation) by the agency.

  In general, the earlier the offender started corrective action after discovery of the violation and the more complete that corrective action is, the larger the penalty reduction should be considered. At the discretion of the competent authority, the unadjusted (initially calculated) gravity component may be reduced by up to 50%.

As shown in Sections 3.2 and 4.1, the methods for computing the benefit component and the gravity component of a fine are also structured so that the fine increases the longer the violation remains uncorrected.

5.3 History of Non-compliance

This factor may be used only to raise a fine. Where an operator has violated a similar environmental requirement before, this is usually clear evidence that the operator was not deterred by the competent authority's previous enforcement response. Unless the previous violation was caused by factors entirely out of the control of the violator, this is an indication that the fine should be adjusted upwards. A "previous violation" means any act or omission for which formal enforcement action was taken by the competent authority (e.g., statement of violation, warning letter, compliance order, etc.).

In deciding how much the fine should be raised, the enforcement agency should consider the following points:

- Similarity of the violation in question to prior violations;

- Time elapsed since the prior violation;

- The number of previous violations; and

- The offender's response to previous violation(s) in regard to the promptness and completeness of their correction.

Some facts that indicate a "similar violation" was committed earlier are as follows:

- The same permit or regulatory provision was violated;

- The same polluting substance was involved;

- The same technological process points were the source of the violation;
- A similar act or omission (e.g. the failure to properly store chemicals) was the basis of the violation.

There may be a consistent pattern of non-compliance at many facilities of the same corporation, reflecting a corporate-wide indifference to environmental protection. Therefore, the competent authority should apply an adjustment for history of non-compliance if the same company was involved in the previous violation.

It is suggested that the adjustment of the fine's gravity component should be up to 25% thereof for the first repeated violation and up to 50% for further repeated similar violations.

5.4 Ability to Pay

The enforcement agency should generally not impose fines that are clearly beyond the means of the offender. Therefore, it should consider the ability to pay in determining the final penalty. At the same time, it is important that the regulated community not see aiding a financially troubled business as part of enforcement. The enforcement agency should reserve the option, in appropriate circumstances, of seeking a penalty that might put a company out of business. Importantly, the offender must promptly return to compliance regardless of the enforcement agency's determination of an appropriate fine based on ability to pay considerations.

The enforcement agency should generally not reduce the fine for reasons of inability to pay in the following situations:

- The offender refuses to correct the violation and comply with the requirements;
- The offender cannot afford to comply with the requirements;
- The offender has a long history of previous violations; or
- The violation was serious (e.g., willful or leading to severe environmental impact)

The ability-to-pay adjustment normally requires a significant amount of financial information specific to the offender. The responsibility to demonstrate inability to pay, as with the burden of demonstrating the presence of any mitigating circumstances, rests on the offender. If the offender fails to provide sufficient information in a timely manner, then the enforcement agency should disregard this factor in adjusting the penalty.

Given any firm's incentives to avoid large penalties and obligatory investments, many offenders may initially claim inability to pay regardless of their financial health. To evaluate a company's claim regarding its ability to pay a fine and cover the necessary environmental expenditures, the US EPA uses the ABEL model[5] (Box 1) as a screening tool.

[5] ABEL can be downloaded from http://www.epa.gov/compliance/civil/econmodels/index.html. Once downloaded, the model offers an extensive help system.

Box 1. ABEL – the US EPA's Tool to Assess Polluters' Ability to Pay

ABEL, developed in 1986, evaluates regulated entities' claims of inability to afford penalties, clean-up costs and/or compliance costs. Violators raise the issue of inability to pay in most enforcement actions regardless of whether there is any hard evidence supporting those claims. ABEL was designed to enable U.S. enforcement professionals to quickly evaluate the validity of those claims. It takes information right from the violator's tax returns and determines the violator's excess cash flow. It is that excess cash flow that can be used to cover the violator's environmental responsibilities.

If ABEL indicates the firm can afford the full penalty, compliance or clean-up costs, then EPA generally makes no adjustments for inability to pay. The only issue that would suggest ABEL overstated the violator's ability to pay is if the financial condition of the violator changed significantly since the last day covered by the most recent tax return. Thus, even a positive ABEL result requires further checking to make sure nothing has happened that makes its current financial situation very different than what is reflected in the ABEL analysis.

If ABEL indicates that the firm cannot afford the full amount, the enforcement personnel should review other financial issues before making any adjustments. ABEL, as mentioned above, only focuses on excess cash flow. There are many other factors ABEL does not consider in order to keep the analysis as simple as possible for the user. But these factors need to be addressed before reducing the penalty. For example, if the company is a wholly owned subsidiary of a multi-billion dollar parent company, it obviously can afford the fine.

If indeed the firm cannot afford the penalty, clean-up costs and compliance costs, the EPA uses ABEL to determine a penalty amount the violator can afford as long as the violator agrees to correct the problem quickly and the violations were not egregious.

The ABEL model is fully adaptable to the financial and tax system for another country.

Source: US EPA, http://www.epa.gov/compliance/civil/econmodels/index.html

When it is determined that a violator cannot afford the fine calculated in accordance with the agency's enforcement policy, the following options should be considered:

- ***Consider a delayed payment schedule:*** Such a schedule might even be contingent upon an increase in sales or some other indicator of improved business. This approach is a real burden on the competent authority (in terms of tracking the timeliness of the payments) and should only be considered on rare occasions.

- ***Consider non-monetary alternatives:*** For example, company officials may be compelled to participate in environmental awareness campaigns in the media.

- ***Consider actual penalty reduction as a last recourse:*** If this approach is necessary, the reasons for the enforcement agency's conclusion as to the size of the necessary reduction should be justified in detail in a written record.

5.5 Partial Alternative Payments

The enforcement agency may have administrative discretion to replace *part of an assessed monetary penalty* with an environmentally beneficial expenditure by the offender. In several OECD countries such as the US (see Box 2), the regulated community has been very receptive to this practice, as it helps an offender repair its public image tarnished by the violation. This instrument is different from non-monetary alternatives or penalty reductions based on inability to pay, which are described in the previous section. This approach is very close to that of "offsets" of pollution charges practised in many EECCA countries.

Box 2. Supplemental Environmental Projects (SEPs) in the US

Under the US EPA's Supplemental Environmental Projects Policy (1998), an offender may volunteer to undertake an environmentally beneficial project related to the violation in exchange for mitigation of the penalty to be paid (a ratio may be $3 in SEP spending to $1 in penalty reduction). A SEP must generate environmental or public health benefits exceeding legal requirements related to the underlying violation, advance at least one objective of the environmental statute that is the basis of the enforcement action, and fall under one of the EPA-defined categories.

Examples of SEPs include:

- Examining residents in a community to determine if anyone has experienced any health problems because of the company's violations;
- Making changes to the production process to prevent the generation of a particular hazardous pollutant;
- Improving the condition of the land, air or water in the area damaged by the violation;
- Providing training or technical support to other members of the regulated community to achieve, or go beyond, compliance with applicable environmental requirements;
- Funding and delivering an environmental project in the local community, such as a park or a garden.

The type and scope of each project should be defined in the settlement document. The EPA must not play a role in managing or controlling funds used to perform a SEP.

Source: http://www.epa.gov/compliance/civil/seps

Alternative payments for environmentally beneficial expenditures generally engage the offender more than a simple monetary penalty would in ensuring future compliance. However, they should be subject to certain conditions to prevent the abuse of this procedure. All of these conditions must be met before alternative payments may be accepted:

- The project cannot be something which the offender is required to do by law or could reasonably be expected to do as part of sound business practices;
- The majority of the project's environmental benefit should accrue to the general public rather than to the offender or any government agency;
- The competent authority must not lower the amount it decides to accept in penalties by more than the agreed amount the offender would spend on the project[6]; and
- The offender should not be allowed to use the project for its own public relations purposes.

In all cases where alternative payments are allowed, the enforcement agency should establish a written alternative payment agreement showing that each of the above-listed conditions have been met in that particular case.

[6] If the country's tax system allows the offender to deduct project costs as business expenses from the tax base, a penalty offset would amount to a subsidy. One solution could be to limit such offsets to 50% of the project value.

6. IMPLEMENTATION OF ADMINISTRATIVE FINES

While every country has its own legal provisions for the types of offences that can be punished by administrative fines, as well as provisions for administrative or judicial appeal against such penalty decisions, there are common implementation elements which should be addressed by every enforcement agency. A system of administrative monetary penalties, as that of any other policy instrument, requires precise, fair and transparent rules, consistent but flexible application, as well as control over the payment of the fines themselves. For example, according to the doctrine of administrative enforcement incorporated into the UK Regulators' Compliance Code[7], an enforcement agency should:

- Publish an enforcement policy;
- Be transparent in the way administrative penalties are determined and applied;
- Follow up enforcement actions where appropriate; and
- Measure outcomes, not just outputs.

This chapter offers general guidance on how to ensure that these principles, largely recognised in most OECD countries, are adhered to in practice.

6.1 Enforcement Policy

An enforcement policy is a public document describing what action the public and the regulated community can expect from an enforcement agency when a violation has been identified. Enforcement policies help and encourage competent authorities to make enforcement decisions on a fair and consistent basis. They also provide a valuable safeguard for businesses against the misuse of discretionary powers of enforcement agencies and reassure the public that enforcement decision are made in accordance with general public interest.

Every competent enforcement authority should have an enforcement policy which would include a section on the assessment and application of administrative monetary penalties. In line with the approach of a two-component penalty (see Section 2.2), the enforcement policy should contain guidance on the following areas:

a) ***Benefit component*****:** The policy should explain the relevant measure of economic benefit for various types of violations, the information needed, and where to get assistance in computing the benefit value (see Chapter 3).

b) ***Gravity component*****:** The policy should contain a methodology to account for the *actual or possible harm* from the violation (primarily as a function of the amount and toxicity of the pollutant in question and the duration of the violation). It should also rank different types of violations according to the *regulatory importance* of the violated requirement and assign appropriate monetary values or multipliers to each category (see Chapter 4).

[7] *"Regulatory Justice: Making Sanctions Effective"*, Richard B. Macrory, Final Report, November 2006.

c) ***Adjustments:*** The policy should give detailed guidance on applying the appropriate adjustments to the gravity component of the fine (see Chapter 5). It should prescribe appropriate amounts, or multipliers, by which the fine could be adjusted. Adjustments will depend on the extent to which certain factors are pertinent. In order to preserve the penalty's deterrent effect, the policy should also ensure that, except for the specific exceptions described in this document, the adjusted fine will always remove any significant economic benefit of non-compliance and have a non-negligible gravity component.

Enforcement policies should be clearly identified and readily accessible to the public (e.g., on the agency's website). Once published, they should not be subject to constant changed but must be reviewed periodically to account for changes in legal requirements as well as regular assessments of the efficiency of enforcement activities.

6.2 Consistency and Transparency of Penalty Decisions

Treating similar situations in a similar fashion is central to the credibility of enforcement efforts and to the success of achieving the goal of equitable treatment. An enforcement policy facilitates consistency by giving enforcers a reference point for how they should react to different circumstances, while providing a certain degree of flexibility. In doing so, the policy should require the enforcement agency to explain and justify its decisions, particularly when deviating from the provisions of the policy, in an enforcement case-specific file.

For penalty decisions to be transparent, it is essential that each case file contain a complete description of how each penalty was developed, following a number of steps:

- Calculate the benefit component (if applicable), using a model or a simple "discount rate" method;
- Calculate the seriousness (gravity) component, using regulation-specific tables or matrices;
- Apply appropriate adjustment factors (wilfulness, degree of cooperation, compliance history) to the gravity component. The competent authority should describe the facts and reasons which support such adjustments;
- Add up the benefit and gravity components; and
- Apply the ability to pay factor, if appropriate.

To facilitate the use of this information, the competent authority should maintain a record-keeping system on its use of administrative fines. The records should be used for reporting, performance assessment, as well as for public disclosure. Public disclosure of enforcement actions ensures that the public knows that the enforcement agency is responding to non-compliance and demonstrates to the regulated community the agency's commitment to enforcing compliance. For example, the US EPA discloses all enforcement records via its Enforcement and Compliance History Online (ECHO) database, which has a significant compliance promotion effect[8].

The information management system would also make it possible for regional enforcement agencies to compare the handling of their cases with those of other regions. It could potentially allow enforcement officials to learn from each others' experience and to identify problem areas where policy change or further guidance is needed.

[8] http://www.epa-echo.gov/echo/

6.3 Enforcement of Payment of Administrative Fines

In order for any administrative penalty to be effective, businesses and individuals must know that when a fine is imposed, it will be enforced, and the competent authority will pursue the collection of the fine. If an offender refuses to pay the fine without initiating an appeal, the competent authority should be able to pursue the payment through an administrative or judicial procedure.

Depending on the country's legal and institutional framework, the payment enforcement options may include:

- Enforcement by fiscal authorities which may attach the offender's cash assets to the payment of the fine;
- Enforcement of the payment as a civil debt through a court which may attach not only the offender's cash assets but also property; or
- Administrative measures such as permit suspension until the fine is paid.

Every payment enforcement option should involve the imposition of a daily interest on the full amount of the fine until it is paid completely. The interest rate should be sufficient to recapture any gain obtained by the offender in delaying the payment.

6.4 Measuring Outcomes

Most enforcement agencies, when reporting on the application of administrative monetary penalties (and other sanctions), focus on the outputs of this activity, e.g., the number of cases where fines were imposed, the total value of the fines assessed, and sometimes the total value of the fines collected. While this information is important, it provides no evidence of the actual result, or outcome, of the application of the penalty. Enforcement agencies should be encouraged to measure and communicate the outcome indicators in addition to the outputs. The number (or percentage) of repeated violations after administrative fines were imposed is an example of such an outcome indicator.

7. SUMMARY OF RECOMMENDATIONS FOR EECCA COUNTRIES

As described in Chapter 1, all EECCA countries use administrative monetary penalties in environmental enforcement, but they are mostly directed at physical persons and officials, their size does not account for the offender's economic benefit resulting from non-compliance, and the collection rates are generally low. Based on the methodological and management guidance contained in Chapters 3-6, the following recommendations are addressed to competent environmental authorities in EECCA countries:

a) Initiate changes to the Code of Administrative Offences in order to ***introduce administrative fines for legal entities (juridical persons)*** in those EECCA countries that have not yet done so. OECD countries' experience shows that the possibility to impose significant administrative monetary penalties on companies makes enforcement more expedient and efficient[9]. This document's methodological guidance is targeted primarily at legal entities found in violation of environmental requirements. Therefore, the change in the scope of application of administrative fines is the first step in reforming the system.

b) Initiate and promote, through broad stakeholder dialogue (involving, among others, the ministries of justice and finance), the adoption of ***legal requirements*** and respective methodologies ***to account for economic benefits of non-compliance and the seriousness of an offence*** in the calculation of administrative fines. Although there are some general penalty adjustment criteria in the EECCA CAOs referring to the gravity of a violation (interpreted very loosely by the competent authorities), none exists with respect to economic benefits of non-compliance. In developing the latter criteria, it may be useful to consider the experience of sanctions for customs and tax violations. Taking adequate account of economic benefits and gravity of non-compliance would require raising the upper limits of administrative fines for different categories of offenders which are set in the CAO.

   Mandating these two components of an administrative fine, with an appropriate methodological support following this guidance, would contribute in a major way to increasing the deterrence effect of this instrument in EECCA countries. In addition, it is necessary to dissociate the part of a fine reflecting the seriousness of the offence from the assessment of civil liability for environmental damage and the calculation of pollution charges. Furthermore, the time limits for the imposition of the fines by competent authorities should be extended to allow for adequate evaluation of the economic and gravity components of a fine.

c) Establish national-level enforcement policies to ***ensure nationwide consistency and transparency of enforcement decisions***, among others, with respect to the imposition of administrative fines. Those policies should allow adequate, albeit limited, flexibility for competent enforcement authorities to account for unique circumstances of each enforcement case. The adjustment of administrative fines for environmental offences accounting for the violator's intent, degree of cooperation with the enforcement agency, compliance record, and ability to pay should not exceed half of the fine's gravity component (which, unlike the economic benefit component, is the "pure" penalty). Any such adjustment should be properly documented. At the same time, options may be available for partial replacement of monetary payments of fines with alternative environmentally beneficial expenditures.

[9] *Ensuring Environmental Compliance: Trends and Good Practices*, OECD, 2009.

d) Take measures to ***improve the collection*** of administrative fines for environmental offences. Competent authorities in EECCA countries (environmental enforcement agencies or other bodies) should use more actively the payment enforcement means at their disposal and the recourse to courts to increase the collection rates beyond 90% and make the fines a more credible deterrent against non-compliance.

e) Upgrade the system of ***management, reporting, and public disclosure*** of information on the application of non-criminal monetary penalties. EECCA environmental authorities should improve the management of data on offences and respective administrative fines to make it possible to analyse the effectiveness of the enforcement response. In addition, the dissemination of (at least, selected) information about significant penalties to the regulated community and the general would amplify the deterrence against future non-compliance.

DETERMINATION AND APPLICATION OF ADMINISTRATIVE FINES FOR ENVIRONMENTAL OFFENCES

Guidance for Environmental Enforcement Authorities in EECCA Countries

Monetary penalties (fines) are the most widespread administrative environmental enforcement instrument in countries of Eastern Europe, Caucasus and Central Asia (EECCA) as well as internationally, intended both to punish non-compliance and prevent its future re-occurrence. This document provides EECCA environmental authorities with guidance on how to determine and apply administrative fines for environmental offences. It adapts internationally recognised approaches to the legal and institutional realities in the region and provides a number of recommendations to improve the existing practices in EECCA countries.

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