



REMOVING ECONOMIC BENEFITS OF ENVIRONMENTAL VIOLATIONS IN AZERBAIJAN: Case Study Report



EAP Task Force

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OF ENVIRONMENTAL VIOLATIONS
IN AZERBAIJAN:**

Case Study Report



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***Изъятие экономической выгоды от природоохранных нарушений в Азербайджане:
отчет о пилотном исследовании***

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EXECUTIVE SUMMARY

The objective of this report is to help countries of Eastern Europe, Caucasus and Central Asia (EECCA) to improve the system of monetary penalties for environmental offences by increasing their deterrence effect. Based on the results of a pilot study in Azerbaijan, it demonstrates the benefits of an improved methodology for the assessment of administrative environmental fines. It builds on the 2009 guidance document for EECCA countries “Determination and Application of Administrative Fines for Environmental Offences” and focuses in particular on how to calculate the economic benefit of non-compliance and remove it through an appropriate monetary penalty.

The study illustrates a key principle that in order to deter future non-compliance, a fine should at a minimum eliminate any financial gain or benefit the operator has obtained as a result of his non-compliance. The “benefit component” of a fine corresponds to the delayed or avoided compliance costs or the illegal competitive advantage and puts the violator in a less favourable situation compared to those who comply with the requirements in a timely manner. The additional penalty amount, or the “gravity component”, should reflect the seriousness of the offence and the operator’s behaviour.

While administrative environmental fines in Azerbaijan are the highest in EECCA, the country has no analytical instruments and legal mechanisms to reflect financial benefit of non-compliance or the seriousness of offences. This, coupled with the very low collection rate of such fines, undermines the implementation of this instrument in Azerbaijan.

The study followed the approach of a computer model used by the United States Environmental Protection Agency (US EPA) since the 1980s, which calculates the economic benefit of delayed capital investment and avoided operational expenditures related to a violation. This is done based on cost data on relevant pollution abatement technologies, the period of non-compliance, and a set of standard values (tax rates, discount rate, etc.). Due to the fact that in Azerbaijan the available case-specific information was highly imprecise and many of the standard values could not be obtained, the case study used a simplified benefit calculation method that followed the same logic as the model used by the US EPA but did not require the same degree of data precision.

The study considered three recent enforcement cases in Azerbaijan where high administrative fines were imposed on legal entities. In each case, the operators’ financial benefit from the violation, even if estimated under very conservative assumptions, exceeded multi-fold the actual fine. This means that it pays for the offender not to comply with the requirements and the fines do not create an incentive to return to compliance. In addition, as long as the payment of monetary penalties is not properly enforced, they will not be effective whatever their size.

Based on these conclusions, the following recommendations were made to the government of Azerbaijan in order to strengthen the design and implementation of environmental fines: (i) take urgent measures to improve the collection of administrative fines for environmental offences; (ii) adopt a legal requirement and a methodology to account for economic benefits of non-compliance; (iii) introduce in the Code of Administrative Offences give a range of monetary values for the gravity component for each category of environmental non-compliance; (iv) establish a national enforcement policy to ensure transparency and consistency of enforcement decisions; and (v) upgrade the system of information management related to the application of environmental fines.

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ACRONYMS

AZN	Azerbaijan (new) manat, 1 EUR = 1.05 AZN as of 1 May 2010
BEN	<u>B</u> enefits Calculation Computer Model (to calculate the economic benefit a violator derives from delaying and/or avoiding compliance with environmental legislation)
CAO	Code of Administrative Offences
EECCA	Eastern Europe, Caucasus and Central Asia
MENR	Ministry of Ecology and Natural Resources
OECD	Organisation for Economic Co-operation and Development
US EPA	United States Environmental Protection Agency

1. INTRODUCTION

1.1 Background

Monetary penalties (fines) are the most widespread instrument of administrative enforcement used to tackle environmental offences in countries of Eastern Europe, Caucasus, and Central Asia (EECCA). At the same time, they are widely considered too small to act as a deterrent against future offences, do not recover financial gains from non-compliance and do not account for the gravity of violations. This compromises the proportionality and fairness of a penalty and makes its determination non-transparent.

In order to help environmental authorities in EECCA to address these problems, the OECD/EAP Task Force Secretariat¹ prepared in 2009 a guidance document “Determination and Application of Administrative Fines for Environmental Offences”. The guidance was based on best practices in several OECD countries² and had a clear focus on economic aspects of administrative enforcement. It summarised the fundamental principles of the design of effective environmental fines, described a methodology to assess economic benefits of non-compliance or unlawfully delayed compliance, and explained how to account for the seriousness of an environmental offence and operator-specific factors (such as history of non-compliance and ability to pay). The adoption by EECCA countries of legal requirements to account for economic benefits of non-compliance and seriousness of an offence was one of the principal recommendations of this document. This recommendation reflects the first priority in reforming administrative fines in EECCA.

In order to pave the way toward region-wide reforms of environmental fines, the present case study aims to demonstrate the benefits of an economically sound approach for assessing administrative fines based on the analysis of current practices in Azerbaijan. The two key reasons for the choice of Azerbaijan as a case study country were the fact that it has administrative fines for legal entities (some EECCA countries apply this enforcement instrument only to physical persons and officials) and the relatively high levels of fines stipulated by the country’s laws. The focus is put on non-compliance by legal entities with pollution prevention and control regulations.

The report was prepared at the EAP Task Force Secretariat by Eugene Mazur and reviewed by Angela Bularga, with Shukhrat Ziyaviddinov providing logistical support for the work. Yashar Kerimov of the Ministry of Ecology and Natural Resources of Azerbaijan contributed to the data collection and stakeholder participation in the study.

The pilot study was financially supported by the governments of Finland and Switzerland. The report was presented and discussed at a stakeholder workshop in Baku, Azerbaijan on 24 June 2010. It was also endorsed at an annual meeting of the EECCA regional Regulatory Environmental Programme Implementation Network (REPIN) in Riga, Latvia on 8-9 November 2010.

¹ The Task Force for the Implementation of the Environmental Action Programme for Central and Eastern Europe (EAP Task Force) supports environmental policy reforms and institutional strengthening in EECCA countries. Its Secretariat is located at the OECD Environment Directorate in Paris. More information about Task Force activities can be found at www.oecd.org/env/eap.

² <http://www.oecd.org/dataoecd/32/44/42356640.pdf>

1.2 Methodological Basis: Key Principles Derived from International Best Practices

The EAP Task Force guidance for EECCA enforcement authorities on using administrative fines for environmental violations contains the analysis of best OECD country practices in this area. According to this analysis, among the key principles of the design of effective fines that would deter future non-compliance are (a) the elimination of any financial gain or benefit from the violation and (b) the proportionality of the fine to the nature of the offence and the harm caused.

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.

A fair system for calculating penalties must also have enough flexibility to make adjustments to reflect legitimate differences between similar violations. This can be done by adjusting the gravity component of a fine to account for the degree of wilfulness and/or negligence of the offender; its history of non-compliance; prompt correction of the violation; and ability to pay the fine (if the violator demonstrates that the fine is clearly beyond its financial means). However, the adjustment factors should never apply to the economic benefit component of the fine.

1.3 Structure of the Report

The report includes the following elements:

- A brief review of Azerbaijan’s current practices of the use of administrative fines for environmental violations (Chapter 2);
- The analysis of selected recent cases of serious offences handled by Azerbaijan’s environmental enforcement authorities in order to compare the size of actual fines and that of minimum “theoretical” fines calculated, using actual case data, according to the methodological guidance developed by the EAP Task Force Secretariat. The analysis is presented in Chapter 3; and
- The development, based on the results of this analysis, of recommendations to improve the effectiveness of administrative fines in Azerbaijan (Chapter 4).

2. CURRENT USE OF ENVIRONMENTAL ADMINISTRATIVE FINES IN AZERBAIJAN

2.1 Institutional and Legal Framework of Environmental Enforcement

The Ministry of Ecology and Natural Resources (MENR) is responsible for monitoring and enforcing compliance with environmental requirements. Its Department of Environmental Protection contains an Inspection Division which has its own enforcement staff and coordinates compliance monitoring and enforcement activities of the 13 regional departments of the MENR. The realm of responsibilities of the central and regional departments are very similar, but the central inspectorate generally targets larger facilities and handles bigger enforcement cases. The regional departments submit annual activity reports to the Ministry.

All the compliance inspections are planned in advance, as they have to be coordinated and conducted jointly with the Ministry of Economic Development. There are also periodic inspection campaigns targeting key segments of the regulated community: oil drilling, municipal wastewater treatment plants, car repair shops, etc.

If a violation is identified, the following hierarchy of non-compliance responses is available to the environmental enforcement authorities:

- Informal responses, such as warning phone calls and letters with compliance recommendations;
- Formal warning letters and notices of violation;
- Administrative fines set in accordance with the Code of Administrative Offences;
- Suspension or revocation of the permit, facility shutdown, and/or forced corrective actions imposed via an administrative or judicial order; and
- Referral of a case to a prosecutor's office for criminal prosecution, if the case involves criminal behaviour.

There is no requirement to conduct follow-up inspections to verify the implementation of corrective actions and return to compliance, and such inspections are rarely performed. This leads to numerous cases of chronic violations where the operators simply ignore the inspectorate's enforcement actions.

2.2 Determination of Environmental Fines

Administrative fines are most commonly used non-compliance sanction in Azerbaijan. However, if several violations are detected during an inspection (which is most often the case), a fine can be imposed only for one, most serious offence³.

The minimum and maximum rates of the fines are stipulated for specific types of environmental violations in Chapter 9 (Administrative Offences Related to Environmental Protection, Natural Resource Use and Environmental Safety) of the Code of Administrative Offences (CAO). They were substantially increased

³ Article 35.2 of the Code of Administrative Offences of Azerbaijan.

in 2008 and are now the highest across EECCA countries⁴. In addition, the latest amendments to the CAO of 31 May 2009 introduced monetary denomination of the fines (before that, they had been denominated in the multiples of the minimum wage). Box 1 lists the CAO articles most used in the enforcement of violations of pollution prevention and control requirements.

Box 1. Administrative Fines for Legal Entities for Selected Categories of Environmental Offences in Azerbaijan

Article 76.1: Exceedance of maximum allowable emissions, effluents or waste disposal – a fine ranging from 7,500 AZN to 12,000 AZN (this article is predominantly used for air emissions-related offences);

Article 79.2: Violation of operational rules for, or failure to use, facilities, equipment or devices installed for purposes of pollution control – a fine ranging from 20,000 AZN to 40,000 AZN;

Article 81: Failure by the enterprise to conduct environmental self-monitoring and record-keeping – a fine of between 8,000 and 10,000 AZN;

Article 102: Violation of water protection norms (including the lack of wastewater treatment) – a fine ranging from 7,500 AZN to 10,000 AZN;

Article 104.1: Disposal of waste in urban areas, recreational zones, near sources of drinking water supply, etc. – a fine ranging from 8,500 AZN to 10,000 AZN;

Article 104.2: Violation of rules for the design, construction, operation and decommissioning of waste disposal sites – a fine ranging from 10,000 AZN to 15,000 AZN.

Source : Code of Administrative Offences of Azerbaijan of 31.05.2009.

There is no guidance for the calculation of the exact size of an administrative fine. The CAO stipulates a number of aggravating (e.g., repeated violations within one year, non-compliance with an administrative compliance order) and attenuating (e.g., voluntary compensation of the environmental damage caused) circumstances. The economic benefit from a violation or its seriousness are not formally accounted for⁵. However, it is common for environmental inspectors to impose the maximum fine for a given category of offences.

2.3 Collection of Environmental Fines

An administrative fine may be appealed against in an Economic Court which makes (within three months) a decision to uphold or strike down a fine mostly on procedural grounds but cannot modify its size. Since the recent increase of fine rates, most fines have been appealed against, but the courts rule largely in the inspectorate's favour.

As Table 1 clearly demonstrates, Azerbaijan's collection rate of environmental administrative fines is extremely low. While the fines are paid in slightly over half the cases (which is very low in itself), less than 20% of the revenue is collected, which means that very few large fines are ever paid. If a fine is not paid voluntarily by the offender, the case is referred to a court bailiff (bailiffs in Azerbaijan are civil servants working for the Ministry of Justice and are not subject to court oversight).

⁴ For example, the highest environmental administrative fine for legal entities in Russia (for violation waste management rules) is about 6,500 EUR while for an equivalent offence in Azerbaijan the maximum fine for legal entities is about 14,000 EUR.

⁵ A fine is often accompanied by a judicial action to impose compensation for environmental damage, which is calculated as a function of exceedance of emission/effluent limit values but is not linked to the costs of remediating the damage.

Table 1. Application of Environmental Administrative Fines in Azerbaijan, 2008-2009

	2008		2009	
	Number of cases	Monetary value, AZN	Number of cases	Monetary value, AZN
Fines imposed	865	1,912,043	885	1,546,401
Fines paid	521	380,219	444	268,040
Total collection rate	60.2%	19.9%	50.1%	17.3%
Referred to bailiffs	436	1,649,172	559	1,173,130
Percent referred	50.4%	86.3%	63.2%	75.9%
Collected by bailiffs	43	52,869	79	36,196
Percent of referred cases collected by bailiffs	9.9%	3.2%	14.1%	3.1%

Source: Ministry of Ecology and Natural Resources

The enforcement of fine payments by bailiffs in Azerbaijan is very ineffective: they collect only the meagre 3% of the due amount. This is partly explained by the pervasive corruption among the bailiffs who are not interested in recovering the total payment if they are paid a bribe exceeding the 7% of the fine due from the offender (which constitutes the bailiff's legal "fee"). Another reason is that the revenues from the fines go to an extra-budgetary Environmental Fund administered by the Ministry of Finance and not to the state treasury (the collection of general taxes for the treasury is the responsibility of the Ministry of Taxation, which is much more effective in enforcing the payments through a variety of administrative and even criminal sanctions).

Financial difficulties are often claimed by facility operators as the reason for non-payment of environmental fines. However, the offender's ability to pay is not systematically evaluated by any government authority, which leads to widespread abuse. For example, the review of the recent history of the MENR's enforcement actions has revealed a case of an oil drilling company which precipitously closed down without paying a fine of 10,000 AZN for an oil spill into the Caspian Sea⁶.

Overall, the lack of enforcement of the payment of administrative fines largely undermines the implementation of this instrument in Azerbaijan.

⁶ Azeri Drilling Company, Inspection Protocol No. 01115 of 18.05.2009, Inspection Division, MENR.

3. CALCULATION OF ENVIRONMENTAL FINES: THREE ENFORCEMENT CASES

3.1 Methodology for Calculating Economic Benefits of Non-compliance

As mentioned in Section 1.2, an environmental fine should, at a minimum, eliminate the financial gain from the offence. Offenders obtain an economic benefit from violating the law by delaying or avoiding compliance-related expenditures⁷. In delaying capital investments in pollution control equipment and other relevant one-time expenditures, the violators 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 offenders avoid routine (recurring) compliance-related costs (such as those of running pollution control equipment), they obtain a benefit of those savings minus the tax paid on this additional profit.

While each environmental fine should include a gravity component (the “real” penalty reflecting the seriousness of the offence) on top of an economic benefit component, this case study did not attempt to quantify gravity of an offence. Doing so would have required the introduction of a monetary scale for each general (e.g., degree of harm) and operator-specific (degree of wilfulness, cooperation with enforcement authorities, non-compliance history) factor of gravity, which is quite complex. Instead, the analysis focused on economic benefits of non-compliance as an indicator of *a minimum fine corresponding to best international practices*.

BEN Model and Related Constraints

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 costs as well as reduced operation and maintenance costs of environmental equipment⁸.

In its standard mode, BEN requires the following case-specific inputs:

- a) *Initial capital investment* – the (delayed) cost of designing, purchasing, and installing the pollution control equipment necessary to comply with the regulatory requirements;
- b) *One-time, non-depreciable expenditures* – delayed non-recurring expenditures other than for depreciable equipment (e.g., removing illegal waste dumps, disposing of soil from a hazardous-waste site, setting up a record-keeping system, or initial training of employees);
- c) *Annual operating and maintenance expenditures* – costs of operating and maintaining the required equipment (labour, power, water, raw materials and supplies, etc.) that the violator avoided during the period of non-compliance⁹;

⁷ This study did not consider benefits from an illegal competitive advantage.

⁸ 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.

⁹ Unless the data on costs of pollution control technologies or remediation measures are furnished by the violator, the competent environmental authority should consult inside or outside technical experts for a reasonable estimate.

- d) *Non-compliance date* – the date when the violation of the environmental requirement first occurred (the model uses it 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 date when the violator came into compliance or the date when the enforcement agency expects the violator to achieve compliance (as the proxy for when the violator actually did, or will, incur the expenditures necessary for compliance); and
- f) *Penalty payment date* – since a considerable time lag often occurs between when the fine is imposed and when the offender actually pays it, the final economic benefit is calculated as of the (estimated) penalty payment date.

The BEN model also relies on a set of standard values, such as tax rates, discount rate, the cost of capital, and equipment life. For the model to produce correct results, each country should use its own standard values.

However, there are major constraints of using BEN in Azerbaijan or other EECCA countries:

- It is difficult to find reliable cost data to run the model, for a variety of reasons: the polluter may not know what measures it needs to take to comply, the violator may (and most often will) refuse to furnish the data to the enforcement agency, and the agency does not have the needed technical expertise in-house or money to hire external experts.
- In the likely case that the offender will contest the estimated benefit of non-compliance via an administrative or judicial appeal, the enforcement agency would need to engage an (expensive) expert in financial economics to defend the calculations, which may or may not be accepted by the appellate authority.

Simplified Methodology

Given these general constraints and the fact that in Azerbaijan the available case-specific information was highly imprecise and many of the standard values could not be obtained, it was unfeasible to use the BEN model to estimate the economic benefits of non-compliance. Instead, the case study used a simplified benefit calculation methodology that follows the same logic as BEN but does not require the same degree of data precision.

To assess the benefit from delayed expenditures, the following formula was used:

$B_d = C_1 \times I_{av} \times D$, where

- B_d is the benefit from delayed expenditures;
- C_1 is the one-time capital or non-depreciable costs;
- I_{av} is the average annual inflation¹⁰; and
- D is the duration of non-compliance (in years).

A different formula was used to estimate the benefit from avoided expenditures:

Such estimates can also be drawn from the EU Reference Documents on Best Available Techniques (BREFs) which can be found at <http://eippcb.jrc.es/reference>.

¹⁰ Azerbaijan's average inflation rate for 2007-2009, 15% per year (www.indexmundi.com/azerbaijan/#Economy), was used in the calculations.

$B_a = C_a \times (1 - T_c) \times D$, where

- B_a is the benefit from avoided expenditures;
- C_a is the avoided annual expenditures;
- T_c is the rate of the tax on corporate profits¹¹; and
- D is the duration of non-compliance (in years).

The total economic benefit of non-compliance is the sum of the benefits of delayed and avoided expenditures: $B = B_d + B_a$.

This simplified methodology is likely to underestimate the real economic benefit of a violation, especially in cases of long periods of non-compliance. However, since the purpose of the analysis was to compare the “theoretical” minimum fines and actual fines in selected cases, the use of these simple formulas was appropriate. They can also be easily understood and used by the country’s environmental enforcement authorities to introduce economic benefits into the calculation of environmental fines.

3.2 Selection of Enforcement Cases

Several enforcement cases have been analysed to demonstrate this methodology for assessing a minimum fine based on economic benefits of non-compliance. They were selected from the paper records of the MENR’s Inspection Division (the Ministry does not have an electronic database of its compliance and enforcement activities) for 2008-2010, using the following criteria:

- The imposition of an administrative fine on a legal entity as part of the enforcement case (in many cases, the fines were given to company officials or physical persons);
- The size of the fine was no less than 10,000 AZN, reflecting the significance of the case (the MENR’s regional departments do not usually handle large cases, this is why the focus was on the central Inspection Division’s cases); and
- Information was available on the nature and duration of non-compliance, required compliance actions and their costs, the enforcement response and its impact on the violator’s behaviour.

Out of the five enforcement cases pre-selected according to the first two criteria, only the following three were eventually retained for analysis based on the availability of relevant information:

- Exceedance of air emission limit values by the cement plant Karadag Cement Ltd. (2008-2010);
- Violation of waste treatment regulations by AA Services Co. (2007-2009); and
- Discharge of untreated wastewater by the State Railway Company (2008-2010).

Incidentally, these three enforcement cases represent infringements of air, water and waste-related requirements and have entailed fines provided for by three different articles of Azerbaijan’s CAO. The following sections describe the details of each case and the analysis performed according to the methodology outlined above.

¹¹ The corporate tax rate is 20% in Azerbaijan.

3.3 Case 1: Exceedance of Emission Limit Values

Karadag Cement Ltd. is one of the two largest cement factories in Azerbaijan. It operates four cement kilns and employs over 800 people. While the operator had installed filters to control dust emissions at each kiln, none of them was operated and maintained properly, which resulted in a significant exceedance of the emission limit values for particulate matter specified in the company's permit. The violation was discovered during a routine inspection on 16 September 2008 but had started much earlier, according to the MENR staff.

The violation was qualified as deliberate by the MENR, which imposed a fine of 40,000 AZN per Article 79.2 of the CAO (failure to use pollution control equipment) – the maximum fine envisaged by this article. The fine was paid in full in October 2008. The follow-up inspections of 6 March 2009 and 16 February 2010 revealed the same facts and no corrective actions taken by the operator. New fines were imposed, of 33,000 AZN and 35,000 AZN, respectively, all of which have been paid by the company. The total amount of fines imposed and paid over three years was 108,000 AZN.

Internal MENR experts estimated that the operation and maintenance of each filter costs 30,000 AZN per year, for a total of 120,000 AZN per year for the entire plant. For simplicity reasons, it was assumed that the violation started at the beginning of 2008 and ended in April 2010, although its duration is probably longer. Table 2 summarises the calculation of the economic benefit to the cement plant from the avoided compliance costs.

Table 2. Economic Benefit of Non-compliance: Karadag Cement Ltd., 2008-2010

Inputs	
Delayed one-time capital or non-depreciable costs (C_1)	0
Avoided annual operating and maintenance expenditures (C_a)	120,000 AZN
Non-compliance date (estimated)	01/01/2008
Compliance date (assumption)	01/04/2010
Duration of non-compliance	2.25 years
Inflation rate (I_{av})	15%
Corporate tax rate (T_c)	20%
Outputs	
Benefit from delayed expenditures ($B_d = C_1 \times I_{av} \times D$)	0
Benefit from avoided expenditures ($B_a = C_a \times (1 - T_c) \times D$)	216,000 AZN
Total economic benefit of non-compliance ($B = B_d + B_a$)	216,000 AZN

Source: Inspection Protocol No. 01016 of 16/09/2008; MENR, 2010.

The conservative estimate of Karadag Cement's economic benefit from the violation from January 2008 through March 2010 is 216,000 AZN, whereas the actual fines paid over the same period amounted to only 108,000 AZN. This clearly shows that the plant's operator had a strong economic incentive to continue the violation. In fact, to be effective, the fine should have been much more than 216,000 AZN to account for the seriousness of the violation: the offence was clearly intentional and chronic, and the operator did not collaborate with the enforcement authority.

3.4 Case 2: Violation of Waste Treatment Requirements

AA Services, a branch of a Netherlands-based company, was established in Azerbaijan in 1996 and after rapid growth has become the country's biggest provider of industrial hazardous waste handling, segregation, recycling, storage, and transportation services. It specialises in petroleum-related waste and operates a number of central waste accumulation areas, landfills, and hazardous waste storage sites. The company currently

employs more than 300 people. It was certified to the ISO 14001 environmental management systems standard in 2005.

The enforcement case in question concerns the violation detected on 14 May 2008. The company was receiving oil sludge for treatment from a client before having built the necessary storage and treatment facility. The oil sludge was deposited in 18 poorly lined open landfills (in other words, simply poured into holes in the ground), causing serious soil pollution. The MENR inspectors established that the violation started in June 2007, prescribed corrective actions and assessed a fine of 16,500 AZN pursuant to Article 104.2 of the CAO (violation of waste disposal rules)¹². The fine was promptly paid. (In addition, AA Services paid 75,000 AZN worth of court-imposed environmental damages for the same offence.)

The company returned into compliance in August 2008 by installing the required waste treatment equipment (cleaning up the inappropriately disposed oil sludge took longer). The follow-up inspection on 6 July 2009 did not find major violations.

MENR technical experts estimated the capital cost of the oil waste treatment facility at roughly 200,000 AZN, with operating and maintenance costs of about 120,000 AZN per year. Based on these figures, the economic gain of AA Services from this offence was calculated as shown in Table 3.

¹² In the 2009 edition of the CAO of Azerbaijan, the maximum stipulated fine under this article is 15,000 AZN. However, in 2008, when the fines were denominated in the multiples of the minimum wage, the maximum was 16,500 AZN.

Table 3. Economic Benefit of Non-compliance: AA Services Co., 2007-2009

Inputs	
Delayed one-time capital or non-depreciable costs (C_1)	200,000 AZN
Avoided annual operating and maintenance expenditures (C_a)	120,000 AZN
Non-compliance date (estimated)	01/06/2007
Compliance date (assumption)	01/09/2008
Duration of non-compliance	1.25 years
Inflation rate (I_{av})	15%
Corporate tax rate (T_c)	20%
Outputs	
Benefit from delayed expenditures ($B_d = C_1 \times I_{av} \times D$)	37,500 AZN
Benefit from avoided expenditures ($B_a = C_a \times (1 - T_c) \times D$)	120,000 AZN
Total economic benefit of non-compliance ($B = B_d + B_a$)	157,500 AZN

Source: Inspection Protocol No. 00946 of 14/05/2008; MENR, 2010.

In this case, the economic benefit of non-compliance comprised both delayed and avoided expenditures. Although the company reacted relatively quickly to the enforcement action, it was out of compliance for almost a year waiting for the offence to be discovered by the authorities. Over 15 months of non-compliance, AA Services got a windfall gain of 157,500 AZN, which is almost ten times more than the fine it had to pay and almost double the sum that includes the damage compensation.

As in the cement plant case, the appropriate fine should have exceeded the estimate of financial gain. The gravity component of the fine should have reflected the environmental harm from the offence (in this case, to soil and groundwater)¹³ as well as its intentional nature. However, the actual fine being so small in comparison with even the minimum “alternative” one proves once again the need to at least remove the benefit resulting from failure to comply with the law.

3.5 Case 3: Untreated Wastewater Discharges

This enforcement case was directed against Azerbaijan’s State Railway Company. On 1 May 2009, a routine inspection of its large depot near Baku observed that all the depot’s wastewater is discharged without any treatment into the Caspian Sea, contrary to the permit requirements. It is assumed that the violation started a long time ago, since there is no sewerage system in the area the depot could get connected to, and the company has not constructed its own wastewater treatment plant due to the lack of financial resources. As a result of the inspection, a fine of 10,000 AZN (the maximum rate) was imposed in accordance with Article 102 (violation of water protection norms) of the CAO. The fine has not been paid, and two subsequent inspections (in 2009 and 2010) did not reveal any progress in the company’s compliance status.

It has been estimated that a wastewater treatment plant with biological treatment that the railway company would need to install to comply with the permit requirements would cost over 250,000 AZN worth of capital investment and 60,000 AZN per year in operating and maintenance costs. Table 4 presents a calculation of the economic benefit of non-compliance for the State Railway Company since January 2009 (the assumed compliance date of July 2010 is purely fictitious since the MENR does not expect the company to return to compliance on this particular site any time soon).

¹³ 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.

Table 4. Economic Benefit of Non-compliance: State Railway Co., 2009-2010

Inputs	
Delayed one-time capital or non-depreciable costs (C_1)	250,000 AZN
Avoided annual operating and maintenance expenditures (C_a)	60,000 AZN
Non-compliance date (estimated)	01/01/2009
Compliance date (assumption)	01/07/2010
Duration of non-compliance	1.5 years
Inflation rate (I_{av})	15%
Corporate tax rate (T_c)	20%
Outputs	
Benefit from delayed expenditures ($B_d = C_1 \times I_{av} \times D$)	56,250 AZN
Benefit from avoided expenditures ($B_a = C_a \times (1 - T_c) \times D$)	72,000 AZN
Total economic benefit of non-compliance ($B = B_d + B_a$)	128,250 AZN

Source: Inspection Protocol No. 01090 of 01/05/2009; MENR, 2010.

While claiming not to have enough money to build and operate a wastewater treatment plant, the railway company obtained a financial gain of more than 128,000 AZN over just 18 months. It is clear that a 10,000 AZN fine could not be effective (even if it were paid) in stimulating the company to invest in wastewater treatment. It is likely that had the MENR assessed a fine exceeding the size of the economic benefit of non-compliance (with a gravity component reflecting the violator's recalcitrance), the company would have been financially unable to pay it. However, the enforcement in court of such a big fine (state-owned and private companies should be subject to equally stringent enforcement) would have made the responsible sectoral agency (e.g., the Ministry of Transport) prepare and finance the most efficient solution to the problem (either the construction of a wastewater treatment plant or the relocation of the depot).

4. CONCLUSIONS AND RECOMMENDATIONS

The review of the current use of administrative fines for environmental offences in Azerbaijan has revealed some essential elements consistent with best international practices, including the application of the fines to legal entities (juridical persons), clear definition of punishable offences and monetary denomination of the fines in the CAO, and their relatively high rates compared to other EECCA countries. The CAO of Azerbaijan also lists the aggravating and attenuating circumstances that reflect the operator-specific factors of the offence and can be used in adjusting the fine.

However, the present system of environmental administrative fines has the following two major shortcomings which make it completely ineffective in deterring violations:

- The fines do not reflect the offender's financial gain from breaking the law. The analysis of selected enforcement cases presented in Chapter 3 showed that the economic benefit of non-compliance exceeds the imposed fine (even at its maximum rate provided by the CAO for the given offence) in every case. This means that it pays for the offender not to comply with the requirements and the fines do not create an incentive to return to compliance.
- The collection rate of environmental fines is appallingly low, primarily due to the practically non-existent enforcement of payments caused in turn by corruption and lack of judicial oversight. As long as the payment of monetary penalties is not properly enforced, they will not be effective whatever their size.

In addition, Azerbaijan's system for determining administrative fines lacks transparency (the penalty decisions are poorly justified) and is not based on any kind of enforcement policy. Finally, a system of record-keeping and reporting on the application of environmental fines is outdated and inefficient, and no case-specific information on monetary penalties is disclosed to the public.

Based on these conclusions, the following recommendations seek to facilitate the improvement of the existing system of administrative environmental enforcement in Azerbaijan by strengthening the design and implementation of environmental fines:

1. The MENR, in collaboration with the ministries of justice and finance, should ***take urgent measures to improve the collection of administrative fines for environmental offences*** in order to make the fines a more credible deterrent against non-compliance. The options include, but are not limited to:
 - transferring the enforcement of fine payments to 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; and
 - 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.

2. The MENR should initiate and promote, through broad stakeholder dialogue (involving, among others, the ministries of justice and finance), ***the adoption of a legal requirement in the CAO and a methodology to account for economic benefits of non-compliance***. The size of financial gain from delayed and avoided compliance-related expenditures should be equal to the minimum fine for it. In the short term, the simplified methodology used in this study could be applied to assess the economic benefit before a more sophisticated approach can be introduced.
3. In addition to the requirement of a benefit component of the fine, ***the CAO should give a range of monetary values for the gravity component for each category of offences*** (similarly to the way it is now done for the entire fine). Regulatory guidance should be developed on how to account for different general (inflicted harm and importance of the violated requirement) and operator-specific (violator's intent, cooperation with the enforcement authority, compliance record, etc.) factors of seriousness of the violation.
4. The MENR should ***establish a national enforcement policy*** to ensure transparency and consistency of enforcement decisions, particularly those that concern the imposition of administrative fines. The enforcement policy should incorporate both the methodology for assessing the economic benefit of non-compliance and the guidance for adjusting the fine based on the gravity of the offence. The policy could also make provisions for taking account of the violator's ability to pay the fine as long as the final penalty exceeds the economic benefit of non-compliance. The policy document should be available to the public (e.g., posted on the MENR website)The enforcement policy will help central and regional environmental inspectors to make enforcement decisions on a fair and consistent basis and provide a safeguard for businesses against the abuse of the Ministry's enforcement powers.
5. The MENR should ***upgrade the system of information management*** related to the application of environmental fines. It should establish an electronic database of enforcement cases and use it for routine reporting, performance assessment as well as public disclosure. Giving the public access to information on enforcement actions, including sanctions, ensures that citizens and businesses know that the environmental authorities are committed to effectively responding to non-compliance.

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REMOVING BENEFITS OF ENVIRONMENTAL VIOLATIONS IN AZERBAIJAN

Case Study Report

This report, based on the results of a pilot study in Azerbaijan, demonstrates the benefits of an improved methodology for the assessment of administrative environmental fines. It builds on the 2009 guidance document for countries of Eastern Europe, Caucasus and Central Asia (EECCA) “Determination and Application of Administrative Fines for Environmental Offences” and focuses in particular on how to calculate the economic benefit of non-compliance and remove it through an appropriate monetary penalty.

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