

INTEGRATED ENVIRONMENTAL PERMITTING IN RUSSIA: FIRST RESULTS AND LESSONS

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ABSTRACT

In Russia, Best Available Techniques (BAT) are considered to be Environmental Industrial Policy instruments, used both by environmental and industrial authorities. The Ministry for Natural Resources and Environment (Minprirody) and the Federal Supervisory Natural Resources Management Service (Rosprirodnadzor) are responsible for the development of environmental legislation and its enforcement. The Ministry for Industry and Trade (Minpromtorg) works out industry-related acts, sectoral and regional programmes, and uses financial instruments stimulating implementation of BATs.

In 2019, first Integrated Environmental Permits (IEP) based on BATs and BAT-Associated Emission Levels (BAT-AELs) were granted to Russian Category I installations (similar to the European Integrated Pollution Prevention and Control, IPPC) installations. Procedure used in 2019 was worked out as the result of the five-year collaboration of environmental, industrial authorities, business, and civil society.

In Russia, Environmental Performance Enhancement Programmes (EPEPs) have to be worked out by installations not fully meeting BAT-AEL requirements. Of 17 Category I installations granted IEPs in 2019, seven prepared EPEPs to be implemented for 7 years. Draft EPEPs were assessed by the Inter-Departmental Commission (IDC). BAT experts (leading professionals who participated in the development of BAT Reference Documents, BREFs and national BAT standards) supported the assessment processes, reviewed draft EPEPs and provided conclusions used by IDC.

Though most Category I installations, which obtained IEPs are existing industrial installations, they had to run Environmental Impact Assessment Procedures (EIA), public hearings and undergo State Environmental Reviews (SER). This resulted in long “preparatory” periods (more than 5 months), and the actual assessment of IEP applications appeared to be extremely short (less than 2 weeks). Industrial managers focused on EIA procedures paid less attention to the preparation of IEP applications and hoped that consulting companies experienced in EIA procedures would manage preparing applications for them. BAT experts supported Rosprirodnadzor both at the stage of the State Environmental Review and during the assessment of IEP applications.

In 2020, the IEP granting procedure will be changed to exclude the SER and to add IEP assessment by public health, water resources, fishery management, and other authorities.

Keywords: Integrated Environmental Permit, Best Available Techniques, Environmental Performance Enhancement Programme, Expert Society.

INTRODUCTION

In the European Union (EU), the BAT concept has been a key policy tool to prevent and control industrial emissions since 1996, while in some countries authorities experimented with BAT-based environmental permits as early as in the 1960s [1]. Since 2010, emission limit values and other permit conditions have been set at the levels not exceeding BAT-AELs. In Russia, the concept is seen wider, as an instrument of the Environmental Industrial Policy aiming at promoting industrial development while providing for the enhancement of resource efficiency and reduction of negative environmental impacts [2]. BAT-related legislation has been gradually developed since the 2000s, while the first most principle act was passed only in 2014. In 2014-2019, numerous Federal Laws, Government Decrees and Orders were worked out and passed to form conditions for granting IEPs to over 7,300 Category I installations (being similar to the EU Integrated Pollution Prevention and Control (IPPC) installations but including also such sectors and mining, hydrocarbons exploration and municipal wastewater treatment).

In 2016-2019, business (role) games modelling IEP granting procedure were organised in Russia with the support of international experts. Recommendations formulated by the participants were considered by Minprirody, and in general approaches forming the basis for granting permits in Russia reflect both the international experience and peculiarities of the national legislation.

In February 2019, the RF Government Decree on Granting Integrated Environmental Permits [3] was published, and in summer 2019, the first pilot installations officially started preparatory procedures. By the end of 2019, 17 installations had been granted IEPs; in January 2020, the review of the Permit Granting Procedure began. Half a year is undeniably a very short period, but results obtained and lessons learnt attract interest of both Russian stakeholders and the international BAT community [4].

INTEGRATED ENVIRONMENTAL PERMITS: INTERNATIONAL EXPERIENCE AND RECOMMENDATIONS OF THE ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

Basic IEP principles were laid out in the OECD Council Recommendation back in 1991 [5]; in 2007, OECD published Guiding Principles of Effective Environmental Permitting Systems [6]:

1. Permitting of all stationary sources of significant pollution
2. Differentiation of regulatory regimes for major and minor pollution sources
3. Appropriate permitting authority
4. Public participation and access to information
5. Extensive involvement of institutional stakeholders

6. Outreach to the regulated community
7. Close interaction with Environmental Assessment
8. Clear and enforceable permit requirements
9. Comprehensive scope of an IEP
10. Combined approach to setting Emission Limit Values (ELV) in IEPs
11. Availability of technical guidance (such as Reference Documents on Best Available Techniques, BREFs)
12. Discretion of the Permitting Authority (informed judgement by experienced regulators is a crucial element of the permitting process)
13. General Binding Rules for small and medium enterprises (SMEs) with significant environmental impact
14. Registration of installations with low environmental impact

These 14 principles are applied in practice in many countries; most installations regulated on the basis of IPPC/IEP are located in the European Union (over 51,000 installations). While developing national requirements to granting IEPs, European governments considered national peculiarities but followed the above formulated principles. Since the 2000s, these principles have been promoted via several international projects implemented in New Independent States. The Swedish Environmental Protection Agency (EPA) contributes significantly to a number of projects, providing expertise and supporting pilot projects.

INTEGRATED ENVIRONMENTAL PERMITTING IN RUSSIA: KEY STAGES AND RESULTS (2019)

In Russia, IEP granting procedure has been gradually developed since 2015. Over 700 people took part in the role games during which IEP granting procedure was modelled and recommendations on its further development were worked out [7]. Many games were organised within the framework of international projects which helped to consider experience gained by Sweden, Germany, Latvia, Check Republic and other countries.

In February 2019, the IEP granting procedure was officially approved by the Government Decree [3] (Fig. 1). The procedure as well as the IPPC/BAT legislation in general followed most OECD recommendations:

- all stationary installations were divided into four categories, and only Category I installations were obliged to obtain BAT-based IEPs;
- 51 Reference Documents on Best Available Techniques and over 60 national standards were worked out to provide for technical guidance;
- Rosprirodnadzor was delegated “one stop shop” function, while the BAT Expert Society helped to assess compliance with Category I installations with BAT requirements.

In order to provide for the interaction with environmental assessment, it was decided to oblige operators of existing Category I installations to run full-scale EIA procedures and to submit EA reports to the State Environmental Review. In spring 2019, the Ministry for Industry and Trade formed a list of pilot companies which volunteered to become “pilots” testing the new IEP granting procedure. Of over 25 installations 17 were granted IEPs; others (such as Municipal Wastewater Treatment Plants) could not submit their applications since BAT-AELs had not been officially issued (approved by the documents similar to the EU BAT Conclusions) or failed running EIA procedures.

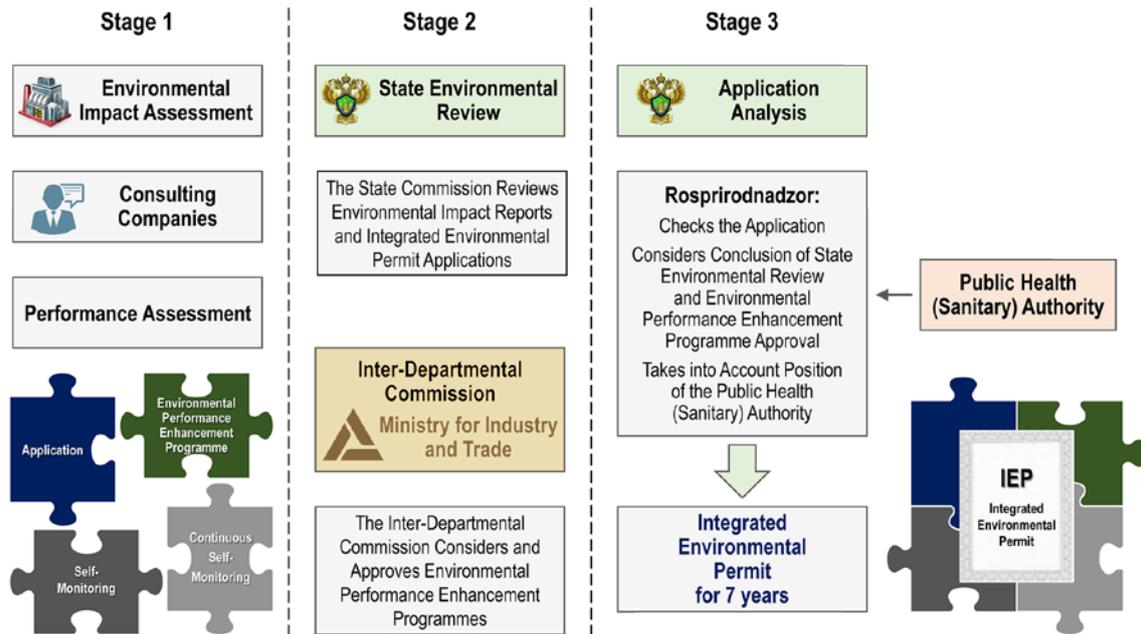


Figure 1. Granting Integrated Environmental Procedures in Russia: 2019 requirements

Operators of Category I installations not fully complying with BAT requirements, have to develop Environmental Performance Enhancement Programmes (EPEPs) aimed at achieving applicable BAT-AELs [8]. Draft EPEPs are assessed by the IDC (Fig. 2):

- Ministry for Natural Resources;
- Ministry for Energy;
- Ministry for Economic Development;
- Ministry for Construction and Municipal Services;
- State Corporation for Nuclear Power;
- Governments of the RF subjects (regions).

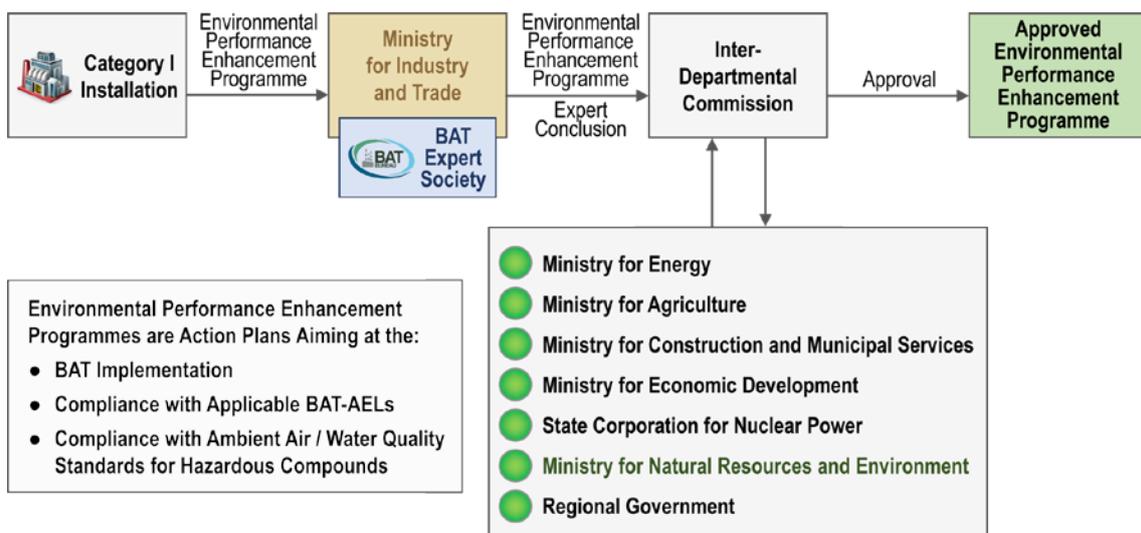


Figure 2. Considering draft Environmental Performance Enhancement Programmes: functions of the Inter-Departmental Commission

IDC is supported by BAT experts who prepare unbiased reviews to help IDC members to make decisions on the support of EPEPs. EPEPs are instruments of Environmental and Industrial Policies and are supported to promote the technological modernisation of the national economy [9]. Of 12 draft EPEPs submitted to IDC in 2019, 7 EPEPs were approved for the sake of IEPs (EPEPs of metallurgical and construction companies), and 2 – to run the international procedure of excluding Russian industries from the list of environmental Hot Spots of the Barents Euro-Arctic region [10, 11].

Thus, in 2019, the procedure for granting IEPs was tested, and 17 IEPs were granted to pilot installations manufacturing aluminium, copper, soda and lime, cement, pulp & paper; mining coal, iron ore; exploring hydrocarbons. Each IEP had a comprehensive scope (air emissions, water discharges and waste covered) and was prepared using combined approach: permit conditions were set based on applicable BAT-AELs as well as on requirements of ambient air or natural water quality (Maximum Permissible Concentrations of hazardous compounds). At the end of 2019, the Federal Law on Environmental Protection was altered to exclude the SER procedure from the overall procedure for granting IEPs [12]. In fact, this alteration reflected recommendations of stakeholders made in 2016-2019, and the decision was expected both by regulators and the regulated community.

LESSONS LEARNT IN 2019 AND 2020 EXPECTATIONS

Authors of this article representing Russian BAT Bureau, BAT Expert Society and international BAT-related programmes implemented in the Russian Federation, formulated the following list of lessons learnt by stakeholders in 2019:

1. Operators of Russian Category I installations volunteered to test IEP granting procedure and 17 installations of over 25 potentially interested were granted IEPs in 2019; 7 installations worked out Environmental Performance Enhancement Programmes that will be implemented in the coming 7 years. Thus, the situation in Russia is similar to that assessed by OCED back in 1996-1999: single-medium permits continue to be possessed by most installations (and even issued), while IEPs were granted to leading installations in the key economic sectors [13].
2. Rosprirodnadzor was forced to consider Environmental Impact reports and IEP applications during extremely short time: SER Commissions worked in December 2019 assessing large sets of documents for just 1-2 weeks. All IEPs of 2019 (IEPs for pilot installations) were granted at the federal level, while regional units have been learning from the federal authority. This decision helped to achieve objectives of the Federal Project “Implementation of Best Available Techniques” [14, 15].
3. BAT experts participated in the activities of SER Commissions and provided also advice to Rosprirodnadzor considering IEP applications taking responsibility for the assessment of BAT compliance. These experts are professionals experienced in the development of national BREFs and BAT-related standards, running international and national BAT-related projects, working out new technological processes and technical solutions aimed at the enhancement of environmental performance and resource efficiency of IPPC sectors.

4. BAT experts supported IDC decision-making process reviewing draft EPEPs, requesting (when necessary) additional information and preparing conclusions on BAT-related issues for the authorities involved in the activities of IDC.
5. Most consulting companies chose “business as usual” model and considered BAT requirements as secondary aspects while running EIA procedures and preparing reports for Category I installations. The importance of the environmental self-assessment and the role of the rationale in which ELVs are substantiated and compliance with BAT-related and other environmental requirements are underestimated.
6. Several municipal governments considered public hearings as opportunities to protest against existing installations and to require their closure or significant reduction of production capacity. Some operators of existing installations preferred not finalising EIA procedures (waiting for changes in the environmental legislation).
7. Both regulators and regulated community faced difficulties setting (substantiating) clear and enforceable permit conditions and exploring the combined approach to setting ELVs. Most stakeholders expected that sector BAT-AELs would cover all environmental aspects and were not prepared to “balance” between BAT-AELs and ELVs based on as on requirements of ambient air or natural water quality (Maximum Permissible Concentrations of hazardous compounds).
8. In 2020, the process of revising IEP granting procedure [3] was started (Fig. 3).

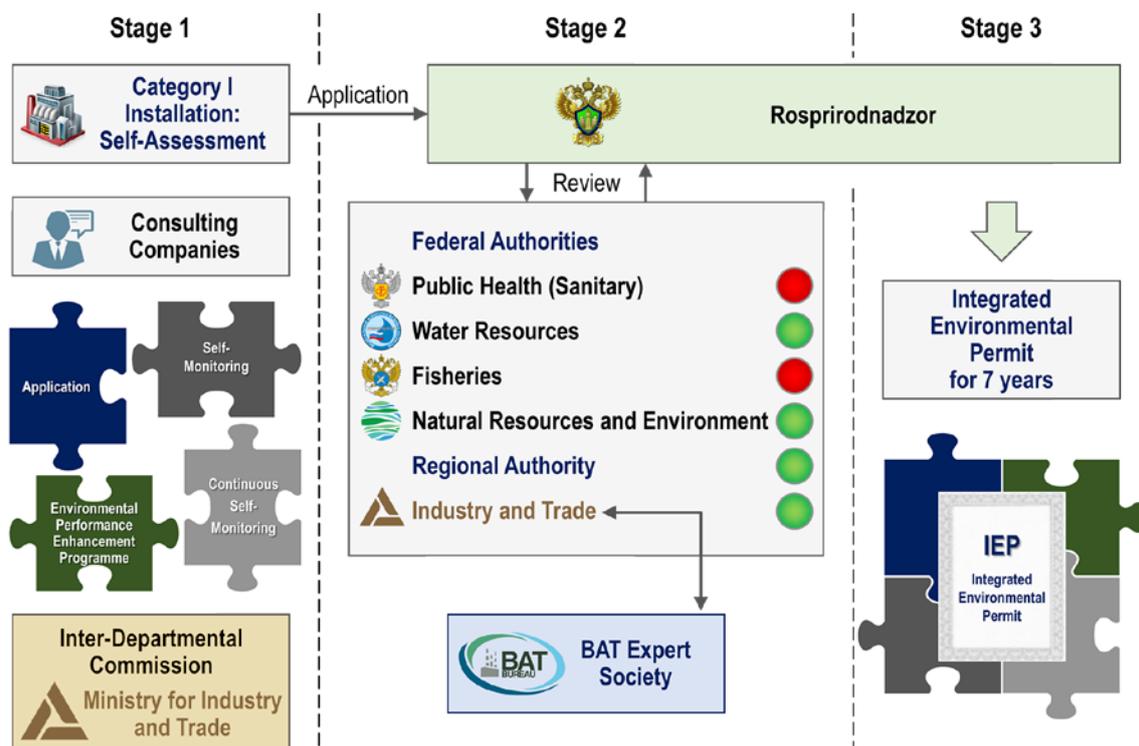


Figure 3. Expected procedure for granting Integrated Environmental Permits

It is expected that:

- Functioning Category I installations will run self-assessments (environmental audits) with the support of consulting companies; no formal EIA procedures and / or public participation is envisaged for them. Developers of new installations continue

running EIA procedures and submitting reports to SER. The role of consulting companies remains important, and there is a need to attract attention of stakeholders to the necessity to produce high quality rationales for IEP applications.

– IEP applications will be reviewed by Rosprirodnadzor, while other institutional stakeholders will take part in IEP granting procedure assessing compliance of Category I installations with the respected legislative acts (public health, water conservation, protection of fisheries, etc.); Minpromtorg supported by BAT Expert Society will remain to be responsible for checking compliance with BAT requirements (Fig. 3). It is difficult to say if most authorities are prepared to participate in the assessment of IEPs focusing attention on the compliance with particular aspects of the environmental legislation.

– IDC continues working considering draft EPEPs and issuing approval documents that have to be included in IEP applications along with actual EPEPs. Again, IDC is supported by BAT experts, and authorities based their positions on the results of professional assessment of EPEPs.

9. The need for training remains high and will be growing along with the number of installations gradually transferring to BAT-related regulation (over 7,300 installations have to obtain IEPs by the beginning of 2025) [7, 15].

CONCLUSION

In 2019, Russia turned to the practical implementation of BAT-related legislation: first Integrated Environmental Permits were granted to pilot installations representing key industrial sectors. IEP granting procedure was worked out using international recommendations (including those formulated by OECD). It continues to be refined to involve institutional stakeholders into discussing IEP applications. Members of BAT Expert Society participate in the assessment of Environmental Performance Enhancement Programmes and IEP applications; thus, “BAT / Not BAT” judgement is made by independent professionals experienced in running technological and technical projects in the respected industrial sectors (IPPC sectors).

Major lessons learnt during the first IEP year deal with the necessity to train and better inform all stakeholders (including federal and regional authorities) and to improve the quality of preliminary assessments and rationales prepared to substantiate BAT-AELs and other ELVs set in Integrated Environmental Permits. It is expected that both national and international BAT experts will continue working on sector-related and regional projects contributing towards reviewing BREFs and BAT standards, working out legislative acts and procedures (including those dealing with the combined approach to setting IEP conditions) and supporting operators of industrial installations implementing Best Available Techniques.

REFERENCES

[1] Best Available Techniques (BAT) for Preventing and Controlling Industrial Pollution, Activity 2: Approaches to Establishing Best Available Techniques Around the World. Environment, Health and Safety, Environment Directorate, OECD, 2018. URL: <https://www.oecd.org/chemicalsafety/risk-management/best-available-techniques.htm#Activity2>.

- [2] Skobelev D. Environmental Industrial Policy in Russia: Economic, Resource Efficiency and Environmental Aspects. Proc. of the 19th International Multidisciplinary Scientific GeoConference SGEM, Bulgaria, vol. 19, is. 5.3, pp. 291-298, 2019.
- [3] Decree of the Russian Federation Government of 13 February 2019 No 143 “On granting, reissuing, revising Integrated Environmental Permits, introducing changes and withdrawing them” (in Russian).
- [4] Best Available Techniques (BAT) for Preventing and Controlling Industrial Pollution, Activity 3: Measuring the Effectiveness of BAT Policies. URL: <https://www.oecd.org/chemicalsafety/risk-management/best-available-techniques.htm#Activity3>.
- [5] Recommendation of the Council on IPPC. OECD, 1991. URL: <https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0256>.
- [6] Guiding Principles of Effective Environmental Permitting Systems. OECD, 2007. URL: <https://www.oecd.org/env/outreach/37311624.pdf>.
- [7] Guseva T., Potapova E., Tikhonova I., Molchanova Ya., Begak M. Training Russian Practitioners in Best Available Techniques and Integrated Environmental Permits. Proc. of the 18th International Multidisciplinary Scientific GeoConference SGEM, Bulgaria, vol. 18, is. 5.1, pp. 313-320, 2018.
- [8] Decree of the Russian Federation Government of 21 Sept. 2015 No 999 “On the Inter-Departmental Commission on the Consideration of Environmental Performance Enhancement Programmes” (in Russian).
- [9] Almgren R., Skobelev D. Evolution of Technology and Technology Governance. In: Journal of Open Innovation: Technology, Market, and Complexity, 2020, 6(2), 22; URL: <https://doi.org/10.3390/joitmc6020022>.
- [10] Swedish Chairmanship of the Barents Euro-Arctic Council. WGE. Working programme 2018-2019. URL: https://www.barentsinfo.fi/beac/docs/Swedish_Chairmanship_WGE_Working_Program_2018-2019.pdf.
- [11] Hjort M., Skobelev D., Almgren R., Guseva T., Koh T. Best Available techniques and Sustainable Development Goals. Proc. of the 19th International Multidisciplinary Scientific GeoConferences SGEM, Austria, vol. 19, is. 4.2, pp. 185-192, 2019.
- [12] Federal Law of 10 Jan. 2002 No.7 “On Environmental Protection” (in Russian).
- [13] Environmental Requirements for Industrial Permitting, OECD, 1999. V. 1. Approaches and Instruments. URL: <https://dx.doi.org/10.1787/9789264172586-en>.
- [14] Bakunovich P. Spotlight Activity: Russia Introduces Project Ecology – an Ambitious Program to Strengthen Environmental Protection. Climate Scorecard, 2018. URL: <https://www.climatescorecard.org/2018/09/russia-introduces-project-ecology/>.
- [15] The Federal Project “Implementation of Best Available techniques”. Approved by the Presidium of the Council on the Strategic Development and National Projects on 24 December 2018. URL: http://minpromtorg.gov.ru/docs/#!passport_federalnogo_proekta_235468475 (in Russian).