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**PUBLIC DIALOGUE IN THE FIELD OF BEST AVAILABLE TECHNIQUES
AND INTEGRATED PERMITS: LESSONS FROM RUSSIAN
CONSTRUCTION MATERIALS INDUSTRY**

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ABSTRACT

Since 2014 Russia has been developing and implementing a new environmental policy based on the concept Integrated Pollution Prevention and Control and Best Available Techniques. Transition to Integrated Environmental Permits is gradual: first 300 industries characterized as ‘key polluters’ have to obtain permits in the period of 2019-2022. They will be followed by at least 5-6 thousand industries of nearly 30 economic sectors. Within the construction materials industry sector, several older cement plants are listed among ‘key polluters’ while glass and ceramic industries are not.

Russian Information and Technical Reference Books (ITRBs) were issued for construction materials industries (production of cement, ceramics and glass) in 2015. Particular BAT Associated Emission Limits must be calculated for each installation based on sector BAT technological parameters (mostly specific emissions) set by sector ITPB.

Key differences between current environmental permitting system and Integrated Environmental Permitting are the comprehensive character of new permitting and its transparency. Conditions of Integrated Environmental Permits should be logical, realistic, and enforceable.

To form the necessary regulatory basis for the Integrated Environmental Permitting, Russian Government decided to encourage interested parties to participate in the development of draft documents and discuss them during business role-playing games.

Experts of Russian BAT Bureau, industry specialists and local stakeholders played roles of representatives of permitting authorities, and other relevant federal and regional authorities. Business games allowed simulating permitting procedures for cement and glass industries. Each game provided for several recommendations of both general and sector specific nature. General comments helped improving the overall logic of the proposed permitting procedure. Sector specific recommendations addressed problems of continuous self-monitoring, shortcomings of Russian Information and Technical Reference Books and opportunities for preparing national sector oriented BAT standards.

Keywords: Best Available Techniques, Integrated Environmental Permits, Integrated Permitting Procedure, business role-playing games, construction materials industries.

INTRODUCTION

In the Russian Federation, Integrated Environmental Permits and Best Available Techniques gradually become instruments of environmental and industrial policies aimed at the environmental modernisation of the national economy [1, 2].

The cornerstone of the new environmental policy is the concept of Best Available Techniques (BAT) and Integrated Environmental Permits (IEP). Each stationary pollution source with significant environmental impact is required by law to obtain an Integrated Environmental Permit as a precondition to its operation. A clear, straight forward and transparent permitting procedure is needed to facilitate the transition to Integrated Pollution Prevention and Control (IPPC) and thereby to improve the effectiveness of environmental regulation in Russia.

To form the necessary IEP regulatory basis, Russian Government decided to encourage interested parties to participate in the development of draft documents and discuss them during business role-playing games [3]. Construction materials industries were the first who showed their interest to host these business role-playing games and to provide environmental performance data for the participatory assessment.

MODEL INTEGRATED ENVIRONMENTAL PERMITTING PROCEDURE

In 2015, a model Integrated Permitting Procedure (IPP) was prepared in Russia based on recommendations of “Integrated Environmental Permitting Guidelines for EECCA Countries” document issued by the Organisation for Economic Cooperation and Development back in 2005 [4] and taking into consideration results of several international projects implemented in 2004-2014 (see for instance [5]).

The following stages of the procedure were envisaged:

- preparation and submission of application by the operator, following standard form, requirements of ITRBs and, in particular, ensuring that installation environmental performance complies with BAT technological parameters;
- initial check of application by the regional unit of the Federal Service for Natural Resource Management Surveillance (Rosprirodnadzor, the regulatory authority) to ensure that the application conforms to the legal requirements;
- consideration of commercial confidentiality request with respect to making public (putting on-line) some parts of the application;
- consultation of Rosprirodnadzor with other authorities (such as public health, water management, protection of fisheries, industrial safety, hydrometeorology, etc.) and the public in order to gather opinions that could contribute towards the assessment of the application;
- assessment of the application and determination of permit conditions, using ITRBs data and requirements of relevant environmental legislation;
- issuance or refusal of a permit, subject to administrative and judicial appeal.

The first draft of IPP document was produced in May 2016 by BAT Bureau and submitted to the Ministry for Natural Resources and Environment. It was decided that

the draft has to be tested via business role-games, wider discussed with key stakeholders, improved, finalized and officially issued by December 2016.

INTEGRATED PERMITTING BUSINESS ROLE-GAMES IN 2016-2017

Public dialogue is a powerful instrument of sustainable development which needs permanent attention and professional support. Business role-games opened opportunities to business, academia, non-governmental organisations and general public to express their concerns dealing with new environmental regulation [3].

Key differences between current environmental permitting system and new integrated permitting are the comprehensive character of IEPs and permitting transparency. IEP conditions have to be logical, realistic, and enforceable. Therefore, both operators (industrialists) authorities and general public are interested to develop reliable Integrated Permitting Procedure.

Glass industries were the first who expressed their interest to take part in IPP discussion and improvement by means of business role-playing games. Back in 2015, Russian Union of Glass Producers was actively involved in drafting sector ITRB and now continues being involved in BAT Bureau activities aimed at producing reference books on environmental self-monitoring and energy efficiency improvement.

Each game was arranged as an open IPP during which stakeholders evaluate a model application and discuss BAT associated Emission Limit Values (BAT-AELs) for the hosting installation. Cement industries followed glass ones while ceramic producers preferred 'playing' but not inviting experts to their sites. It is important that in 2004-2008 construction materials industries participated in a number of international projects aimed at assessing opportunities for BAT based environmental regulation in Russia [5-8] and pioneered in developing ITRBs on Best Available Techniques [9]. Moreover, majority of flat glass and ceramic tiles and many cement and brick manufacturing installations have been either fundamentally reconstructed or erected quite recently (in 2002-2015).

Interestingly, though industries of over 30 sectors become subjects of new IPPC regulation, four of eight business role-games played in 2016-2017 were hosted by cement and glass industries. In addition, back in 2014-2015 site visits were paid to ceramic tile and brick installations where preliminary assessment of environmental performance and opportunities for obtaining IEPs were discussed. During all games, Russian BAT Bureau experts, industry specialists and local stakeholders played roles of representatives of permitting authorities, other relevant federal and regional authorities. In several cases leaders of regional units of Rosprodnadzor and members of regional governments expressed their willingness to play roles of environmental authorities of neighbouring regions. Employees of the Ministry for Natural Resources and Environment participated in most games, thoroughly considering requests and recommendations of stakeholders and answering numerous questions asked by attendees. Business games allowed simulating IPP and provided for several recommendations of both general and sector specific nature. General comments helped improving the overall IPP logic, as well as introducing a special expert commission for applications assessment, setting better conditions for public participation, and excluding the Environmental Impact Assessment (EIA) and State Environmental Expertise (the examination by the competent authority of the information presented in the environmental impact assessment report) stages for operating industries (fig.1).

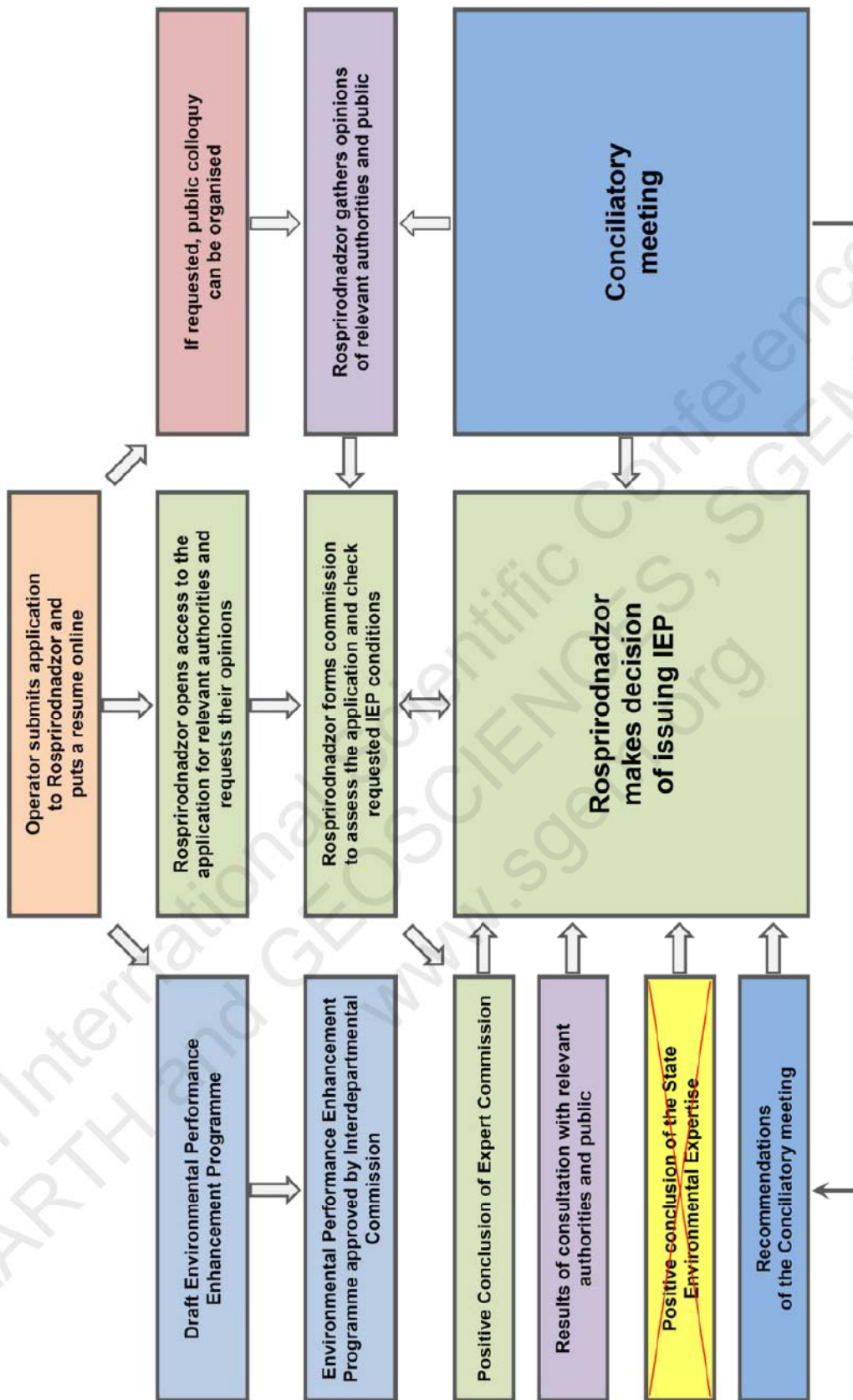


Fig. 1. Key stages of the Integrated Environmental Permitting Procedure

It was emphasised that the interaction between permitting and EIA is essential since both EIA and environmental permitting are environmental regulatory tools that aim at preventing damage to the environment before it has occurred. They follow structured

systematic procedures of identifying and analysing significant environmental impacts and using the results of this analysis in making decisions related to the economic activity in question.

At the same time, EIA is the instrument used for assessing planned projects, while in Russia most installations regulated by the national IPPC legislation [1] are existing, operating ones. This is why it was suggested to omit Environmental Expertise stage for operating installations while suggesting running full-scale assessment for newly planned industries and reconstruction projects. For Environmental Impact Assessment purposes, ITRBs can be applied to evaluate alternative technologies and technical solutions, and draft IEP conditions can be included in EIA reports.

Another important suggestion dealt with pre-application activities, focusing on the necessity to help the applicant understand the nature of his obligations and general contents of an application. It was recommended developing both a general guidance document (applicable in all sectors) and sector specific guidance documents using international examples [10, 11]. At the same time, role-game participants asked Rosprirodnadzor representatives to consider opportunities for running pre-application consultations since Russian industries have no experience in preparing IPPC applications. Such consultations are typical for many EU countries and reflected in OECD recommendations for Integrated Environmental Permitting [4].

The need for expert support at the stage of the application assessment and determination of permit conditions became another finding of business role-games. At the moment, most regional units of Rozprirodnadzor are enabled to consider air protection and water conservation issues, as well as waste management aspects. Assessing conformity with BAT requirements and setting BAT-AEL are fundamentally new tasks, and to appropriately fulfil them authorities need capacity building and expert support. This is why it is suggested to include independent experts who participated in the development of Russian ITRBs into commissions assessing conformity of IEP applications.

INTEGRATED PERMITTING: RECOMMENDATIONS OF CONSTRUCTION MATERIALS INDUSTRY

Though it is difficult to differentiate lessons learnt by various industries, certain recommendations developed during business role-games played at glass and cement sites can be considered as sector specific.

As it is already mentioned, in Russia flat glass is manufactured mostly at new installations commissioned several years ago. These industries are located in many regions, and none of them is considered to be a major polluter [7]. The rationale for IPPC regulation lay in the field of high energy intensity and significant emissions of carbon and nitrogen oxides, and this logic is identical to the logic of Directive 2010/75/EU (Industrial Emissions Directive) [12].

While developing Glass ITRB [9], Russian experts and industrialists realised that self-monitoring data were too contradictive to substantiate BAT technological parameters (specific emissions, kg per tonne of product, or concentrations, mg/m³) for emissions of such typical pollutants as nitrogen oxides, carbon monoxide and especially sulphur dioxide. During the game, it was assumed that by 2020-2022 flat glass producers would have completed another comparative study of environmental performance (first of all, air emissions) of key installations, while Russian BAT Bureau would have issued

national BAT standards specifying self-monitoring requirements for glass industries. It is expected that results obtained should be used to amend Glass ITRB. At the same time, sector specific guidance documents need to be developed to help both regulators and industrialists. Since many flat glass producers operating Russian sites are international by their nature, examples and lessons of European sister sites can easily be used and learnt.

Ceramic industries who had been pioneering in the development of national BAT standards and ITRBs in 2012-2015 [5, 7], suddenly became reluctant to host business role-games. As it was found out later, key associations of brick producers decided to convince the Russian Federation Government to change its decision and to exclude ceramic industries from the list of IPPC installations. Major arguments are based on the assumption that Integrated Permitting Procedure is too complicated, and IEP conditions are too stringent and hard to comply with. In fact, similarly to glass industries, Russian ceramic producers could not provide for reliable self-monitoring data needed to substantiate BAT technological parameters, and Ceramic ITRB contains rather vague figures. Instead of following example of glass producers, ceramic associations preferred waiting for unlikely changes in IPPC legislation and did not come up with reasonable suggestions aimed at the enhancement of draft IPP.

Three business role-games played at cement sites and results obtained by cement experts participating in Russian-German project entitled “Climate Neutral Economic Activities: Implementing Best Available Techniques in the Russian Federation” [14] allowed to develop several sector oriented recommendations.

It was found out that not all cement industries could comply with strict technological parameters set in Cement ITRB for nitrogen dioxide. It is evident now that several operating industrial installations need management strategies for compliance with IEP requirements and time to make the necessary investment. Even for newer installations, permits cannot be made operational immediately because of the need to provide for continuous self-monitoring of marker parameters such as nitrogen oxides, carbon monoxide and dust [8]. Self-monitoring is a stumbling rock for all Russian IPPC installations: even industries equipped with necessary devices use them predominantly for monitoring technological processes but not for collecting environmental performance (emissions level oriented) data. Again, it was recommended to run sector oriented comparative studies and intercalibrating exercises using example of European sister companies and to come up with sector environmental self-monitoring standards.

In 2017, Russia industrialists began negotiating conditions of a staged approach to implementing legislative requirements, namely, they asked to allow 3-4 years to equip installations with continuous self-monitoring devices and to grant integrated permits to operators submitting self-monitoring programmes with clear aims, objectives and budgets needed to implement these programmes. Both self-monitoring programmes and environmental performance improvement programmes (for installations not meeting BAT-AEL requirements immediately) should become integral parts of applications for Integrated Environmental Permits. For cement sector, it was also recommended to produce sector guidance notes needed to support both applicants and regulators.

CONCLUSION

In Russia, environmental business role-games form a useful public dialogue instrument allowing involving major stakeholders in joint development and improvement of draft regulations, especially acts aiming to turn to Integrated Pollution Prevention and Control and Best Available Techniques. Business role-games are organised by BAT Bureau and supported by the Ministry for Natural Resources and Environment of the Russian Federation.

Industrialists, researchers, consultants, representatives of federal and regional authorities and non-governmental organisations model simplified Integrated Permitting Procedure and develop recommendations intended to enhance this procedure, fill legislative gaps, and identify needs for preparation of BAT related national standards. Participants of business role-games played at industrial sites of Russian construction materials industries used real environmental performance data and discussed opportunities of glass and cement producers to be granted Integrated Environmental Permits in 2022-2025. Cement and glass industries and associations have become leaders of 'regulatee-regulator' relationship in Russia and continue being involved in BAT Bureau activities aimed at setting new technological standards. Construction material industries came up with several general and sector specific suggestions that are already being considered by regulators preparing next versions of Integrated Permitting Procedure and formulating necessary (realistic) alterations to national Integrated Pollution Prevention and Control legislation. General comments helped improving the overall logic of permitting procedure, introducing a special expert commission for applications assessment, setting better conditions for public participation, and excluding Environmental Impact Assessment and State Environmental Expertise stages from permitting procedure for existing (operating) industries. It was also suggested running pre-application consultations and preparing guidance notes for regulators and regulated community.

Specific comments of construction materials industries covered the necessity to work out sector oriented guidance materials using examples from European countries and sister companies operating in the European Union. Ideas put forward deal also with continuous self-monitoring requirements and needs to refine develop national standards refining BAT technological parameters for air emissions for nitrogen oxides (cement and glass production) and sulphur dioxide (glass production). It is hoped that ceramic industries will return to active participation in IPPC related public dialogue and learn lessons of business role-games played by leaders of Russian construction materials industry.

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