Air pollution in the Republic of Belarus, including the provisions of

Convention on Long Range Transboundary Air Pollution

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Is a party to the three protocols

The 1984 Protocol on Long-term Financing of the Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP)

The 1985 Protocol on the Reduction of Sulphur Emissions or their Transboundary Fluxes by at least 30 per cent

The 1988 Protocol concerning the Control of Nitrogen Oxides or their Transboundary Fluxes

Obligations

In Article 3, “Obligations" protocol to reduce emissions of nitrogen oxides and sulfur dioxide, amended Protocol on POPs, stated to be bound by each Party within the geographical scope to develop and maintain emission inventories for the substances listed in annexes to the protocol (for the Republic of Belarus - oxides nitrogen in terms of nitrogen dioxide, sulfur dioxide, dioxins, furans, polychlorinated biphenyls, hexachlorobenzene, polycyclic aromatic hydrocarbons), and use the format for reporting emissions in accordance with the Convention on Long-range Transboundary Air Pollution, including methodologies, spatial and temporal resolution approved by the Steering Body of EMEP and approved by the Parties involved in the work of the Executive Body. All parties must provide this information in accordance with reporting requirements.

Article 35 of the Law 2008 "On air protection" establishes the provisions relating to State Cadastre of air

Government establishes the procedure for keeping the state inventory of air and use its data

Maintain state statistics to monitor emissions of pollutants and carbon dioxide into the air from stationary sources

All it allows Belarus to carry out part obligations adoption of international treaties

Emissions of sulfur dioxide in Belarus for the period from 1980 to 1993 decreased by 48,4% (from 740 tons to 382 tons) exceeded the required reduction of the Protocol on sulfur reduction in emissions by 30%. In subsequent years, reducing emissions of sulfur compounds continued. In 2008, emissions of sulfur compounds was 81.3 thousand tons, the total reduction in emissions of sulfur relative to 1980 was 89% (or almost 10 times). Thus, the requirements of the Protocol to reduce emissions of sulfur satisfied.

Nitrogen Oxides Protocol set a ceiling on emissions of nitrogen oxides level in 1987, which is to be achieved by December 31, 1994 analysis of data on emissions of nitrogen oxides showed that the commitment of Belarus to the Protocol are satisfied: for the period from 1987 to 1994. emissions decreased from 263 to 203 thousand tons, ie by 22,8%. Reducing emissions continued until 2000, when they reached the minimum values and amounted to 134.2 thousand tons in recent years has been a tendency to some increase in emissions, although in relation to the base year, they remain significantly below: Emissions of nitrogen oxides in 2008 were below 1987 at 37%.

Heavy metals

Main sources of emissions of heavy metals in Republic of Belarus

The list of sources of emissions of heavy metals on the territory of Belarus is rather small:

Manufacturing industry and building (first of all cement and glass industry) – main source of mercury (86 %), lead (53 %), cadmium and arsenic (52 %);

Stationary oil firing is the main source of nickel emission (63 %) (scientific statistics);

The production of metals is the main source of copper emission (69 %), chromium (72 %) and zinc (83 %)

The total emission of TM of the year 2006 constitutes (tonn):

Pb 56,78 Cd 2,49 Hg 0,716

As 1,19 Cr 8,6 Cu 11,91 Ni 67,9 Zn 318,1

List of categories in Belarus, that need to be regulated in accordance with the Appendix II of the Protocol on Heavy Metals

Category 1: Combustion installations with a net rated thermal input exceeding 50 MW

Category 3: Installations for the production of pig-iron or steel (primary or secondary fusion, including electric arc furnaces) including continuous casting, with a capacity exceeding 2.5 tonnes per hour

Category 7: Installations for the production of cement clinker in rotary kilns with a production capacity exceeding 500 tonnes per day or in other furnaces with a production capacity exceeding 50 tonnes per day

Category 8: Installations for the manufacture of glass using lead in the process with a melting capacity exceeding 20 tonnes per day

In order to meet the requirements of the Protocol, the following was done:

The government provides tax remissions and financial support for the introduction of the modern technologies and cleaning systems;

The manufacture of fuel with the concentration of lead that exceeds 0.013 gram/square decimeter has been forbidden since the year of 1995. (EN 228:1993);

MPC of particles PM10, PM2.5 in the air was introduced in the year of 2005, the degree of the concentration of the total amount of the suspended matter was reduced from 500 to 300 microgram/square meter. The European standard on the concentration of PM10 in the air was adapted.

The recommendations for the inventorization of the heavy metals were given.

Problems that prevent the Republic of Belarus from the ratification of the Protocol on Heavy Metals

Series of technologies and equipments have higher degree of the heavy metals and particles concentration, then it is defined in the Annex III and V of the Protocol;

It is necessary to make changes in the system of inventorization of emissions as annual statistical reports include heavy metals emissions only in case of their usage in the engineering process or in raw materials;

Financial expenses on the introduction of BAT, systems controlling the heavy metals and particles emission, monitoring in the framework of EMEP network

Persistent organics pollutants

Main sources of emissions of POPs in Republic of Belarus

The list of sources of emissions of heavy metals on the territory of Belarus is rather small:

Dioksins/furans and PCB by manufacture of metals (metallurgy), the industry of building materials and at burning of a waste, for PAH and HCB at fuel burning in power sector, especially in low-power boiler installations and at burning of a waste and the chemical and petrochemical industry

The total emission of POPs of the year 2007 constitutes:

Dioksins/furans 102,0 g TE, , including:

in atmospheric air - 26,7 water - 0,5 soil - 1,6 products - 0,1

HCB in atmospheric air 0,61 kg/year

PAH in atmospheric air 34 kg/year

PCB in atmospheric air 10,2 kg/year

In recent years, on persistent organic pollutants done a great job

порядок организации работ при обращении с непригодными пестицидами на территории Беларуси;

обязанности собственников (владельцев) непригодных пестицидов при обращении с ними;

порядок учета, инвентаризации непригодных пестицидов, требования к хранению, перевозке непригодных пестицидов;

порядок переупаковки, порядок и способы идентификации;

требования к технике безопасности, пожарной безопасности и охране труда при работе с непригодными пестицидами;

порядок организации и проведения мониторинга окружающей среды в районе расположения объектов хранения непригодных пестицидов;

природоохранные требования к работам по обезвреживанию непригодных пестицидов

порядок идентификации, маркировки и учета оборудования и отходов, содержащих ПХБ;

порядок контроля состояния оборудования, содержащего ПХБ и действия при выявленных повреждениях и утечках ПХБ;

требования к хранению и перемещению оборудования и отходов, содержащих ПХБ;
требования безопасности при работе с оборудованием, содержащим ПХБ

Подготовлен к введению технический кодекс по расчету выбросов СОЗ в атмосферный воздух и нормативный правовой акт по инвентаризации и учету выбросов стойких органических загрязнителей в результате их непреднамеренного производства

Разработана структура специализированной базы данных СОЗ: определены форматы хранения, ввода и сортировки данных с учетом дифференциации по объектам наблюдения с точной идентификацией мест отбора проб

National Action Plan for 2011 - 2015 years reduction of POPs

Formation and improvement of legislation

Management in the treatment of persistent organic pollutants

Handling of obsolete pesticides, including those relating to persistent organic pollutants

Handling equipment, materials and wastes containing polychlorinated biphenyls

Monitoring of persistent organic pollutants in environment

Public health surveillance in relation to the impact of persistent organic pollutants

Reducing emissions of POPs into the atmosphere as a result of unintentional production

Problems that prevent the Republic of Belarus from the ratification of the Protocol on POPs (1)

Contains requirements for the base year, ie it needs to be selected and then reach that level

Protocol has emission limits (restrictions) for specific sources such as waste incineration

POPs emissions are sufficiently small value in comparison with standard substances, and accordingly, the accuracy of their determination is low

The specific emissions of POPs have a fairly high uncertainty (100%), and, accordingly, their application leads to the fact that one year you will run out in the emission ceiling for the second year does not fit, at this very difficult instrument measurements confirm the calculated (estimated , specific), the quantity of emissions

Problems that prevent the Republic of Belarus from the ratification of the Protocol on POPs (2)

The large uncertainty resulting emissions of POPs have a fairly low accuracy but because of their small value it can lead to a breach of ceilings

POPs tend to "peak", ie strong dependence on the fuel used, for example, the use of tires very seriously increase the emissions of dioxins, and because emissions themselves have little value, the use of tires will do dioxin emissions in a given year is much greater than in the previous year, and is likely to be exceeded the base year emissions.

Planned actions

The improvement of the inventorization of the heavy metals and POPs;

The development of the National plan of actions on the fulfillment of the obligations of the Protocols on Heavy Metals and POPs

For the fulfillment of the defined plans Belarus needs the help and consultation of the experts for the stating of the efficiency of the planned actions.

Conclusions

Monitoring develops very fast rates and covers the largest industrial centers;

Monitoring is spent on priority polluting substances, therefore the stations of EMEP were not created;

A lot is done for the joining to the Protocols on Heavy Metals and POPs;

The National plan of actions on the joining of the Republic of Belarus to the Protocol on Heavy Metals and POPs;

The detailed inventory of the POPs PM and HM emission is carried out; the main sources of pollution are defined;

Conclusions

Scientific researches, evaluation of experts and estimation of critical load are carried out;

The system of monitoring is created and it is always improved, the database is recorded, we can provide you with the necessary information in any convenient for you format;

There is a political will for the further collaboration and joining to the Protocols CLRTAP, but we still lack consultations from the experts

Thank you for your attention!

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