

COMMENTARY AND PROPOSALS BY LEONARD DOBROVOLSKY, UKRAIN

First of all it must be noted, that the document proposed by Secretariat of ECE Aarhus convention is well balanced and well formulated.

Structure of the document is corresponded to separated legal binding protocol with concrete obligations of the parties including terms of reporting etc., that is reasonable.

In the same time this document is framed document and is opened broad possibility for expansion either article. Especially is valuable that document is the most corresponded to the letter and spirit of the future PRTR.

As regards to commentaries and proposals on 4 questions, which were proposed to the technical group, we would like to consider only the first question.

(a) Substances (criteria, thresholds etc.).

Criteria of selection substances, which must be controlled, have to be traditional criteria that were approved at the international level and were published in EHC monograph № 210 (1999). Just criteria are: "existence of scientific evidence that substance presents a hazard to human health and/or the environment; the possible use, persistence, accumulation or degradation of the substance shows that there may be significant human or environmental exposure; the size and nature of populations at risk (both human and other species) and risk for environment; international concern, i.e. the substance is of major interest to several countries; adequate data on the hazard are available". From our side we would like to add, that the important criteria are the ability of substance to cause remote effects (cancerogenesis etc).

In accordance with above-mentioned criteria International programme on chemical safety under the aegis UNEP, ELO and WHO together later with inter-organization programme for the sound management of chemicals (IOMC) is published the series of monographs «Environmental Health Criteria». Until now was published more than 200 monographs on the most actual chemical substances. Some monographs contain information about several substances. In monographs are also indicating quantity of chemicals produced in the world.

In the series there are monographs on such wide spreading pollutants as sulphur oxides and suspended particulate matter, carbon monoxide, nitrogen oxides, lead and other heavy metals, formaldehyde, volatile organic compounds, polycyclic aromatic hydrocarbons, substantial part of monographs is dedicated to pesticides (near 40). The peculiarity of this series is, that part of monographs is dedicate to hygienic criteria of environment pollution by physical and biological agents: noise, ionizing and non-ionizing radiation, mycotoxins, aquatic biotoxins etc.

We are proposed following lists of substances for compulsory and facultative reporting in annex IV.

Part 1. Substances for compulsory reporting.

Sulphur dioxide	(monograph № 8)
Carbon monoxide	(monograph № 13)
Nitrogen oxides	(monograph № 188)
Lead	(monographs №3, №85, №165)
Formaldehyde	(monograph № 89)
Suspended particulate matter	(monograph № 8)

Part 2. Substances for facultative reporting.

Ammonia	(monograph № 54)
Aluminium	(monograph № 194)
Arsenic	(monograph № 18)
Cadmium	(monograph № 135)
Chromium	(monograph № 61)
Mercury	(monographs № 1, № 86)

Nickel	(monograph № 108)
1,2-Dichloroethane	(monograph № 62, № 176)
Hexachlorobenzene	(monograph № 195)
Pentachlorophenol	(monograph № 71)
Tetrachloroethylene	(monograph № 31)
1,1,1-Trichloroethane	(monograph № 136)
Trichloroethylene	(monograph № 50)
Benzene	(monograph № 150)
Phenol	(monograph № 161)
Xylenes	(monograph № 190)
Chlorine	(monograph № 21)
Fluorine and fluorides	(monograph № 36)
Asbestos	(monograph № 53)
Carbon tetrachloride	(monograph № 208)
Vinyl chloride	(monograph № 100)
Chloroform	(monograph № 163)
Acrylonitrile	(monograph № 28)
Hydrazine	(monograph № 68)

Last 6 substances as also some above-mentioned known or highly suspect carcinogens.

As to release threshold into air and water of above-stated substances, than to majority of them can be taken values which were proposed by the Commissions of the European Communities, but they must be added in the future by threshold values for soil.

Maybe at the technical group meeting it is necessary to consider not only threshold values but also maximal permissible release a year by point sources. Maybe it is reasonable to discuss possibility of introduction maximal permissible load of chemicals on the soil.

For calculation of maximal permissible release of chemicals into air and water there are definite approaches [1, 2, 3, 4]. In the same time for maximal permissible load for soil there are approaches most for pesticides [5, 6, 7, 8, 9].

REFERENCES

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8. Methodical guide on hygienic basing of maximal permissible concentration of chemical substances in the soil. Sidorenko G. I. Moscow. 1982. Ministry of Health.
9. List of maximal permissible concentrations and tentative permissible quantities chemical substances in the soil. Moscow. 1991. Ministry of Health. (181 chemicals, mostly pesticides). 6 p.