Red de Acción sobre Plaguicidas y Alternativas en México

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Dear Mr. Wright

Bellow are our comments on the **Draft Phase One North American Regional Action Plan on Dioxins and Furans, and Hexachlorobenzene,** we will appreciate if this comments will be posted in the web page from the CEC, as its mentioned in the public invitation.

I also attached the letter I sent to the Dioxin Task Force Members on April 11, 2003 as a member of this group on and request to be included as annex in my comments as well as the Citizen demands we presented in the Public Presentation meeting from the Dioxin Task Force in Mexico City in October 2001. Most of this demands were ignored in this NARAP.

I again respectfully demand that this NARAP will be reelaborated to be consistent with the commitments of the Stockholm Convention to include the ultimate elimination of dioxin anthropogenic sources and all the article 5 provisions annex C and article 10 on Public information awareness and education provisions that are almost completely ignored in this NARAP

Sincerely yours

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Comments

Draft Phase One

North American Regional Action Plan on Dioxins and Furans, and Hexachlorobenzene,

2. Introduction

2.1 Objective

The objective of the NARAP does not reflect the fully commitment to implement the Stockholm Convention for the ultimate elimination of dioxin, furans and HCB

Even do the NARAP states in section 2.1 in the first paragraph that this regional action plan "will cooperate in implementing their obligations and commitments established in CEC Council Resolutions 95-05 and 99'01, the Stockholm Convention…", and declares that support the Stockholm Convention, this NARAP exclude from the objective any mention to the ultimate elimination of dioxin and furans as the Stockholm Convention prescribes. (2.3)

The exclusion of any commitment to dioxin elimination is unacceptable and contradictory with the fact that the three countries signed the Stockholm Convention, Mexico and Canada had ratified and the USA has promised to ratify it. Why then is excluded the commitment of ultimate elimination of dioxin anthropogenic sources?

The Stockholm Convention in Article 5 "Each Party shall at minimun take the following measures to reduce the total releases derived from anthropogenic sources of each of the chemicals listen in Annex C, with the *goal of their continuing minimization and, where feasible, ultimate elimination*:" (emphasized added) Annex C includes dioxin, furans, hexaclorobenzene and PCB. Instead the NARAP declare that one of the objectives is to "promote the continuous reduction of releases where feasible."

The NARAP should include a general objective that is consistent with the Stockholm Convention, with the clear commitment of dioxin, furans and HCB elimination as ultimate goal. The NARAP later then be subdivided in specific objectives in phase 1 and phase two.

2.3 Guiding Principles

We agree with the principles invoked in the NARAP but as we mention in the previous point the content of the plan is not fully consisted with them and also are missing important ones, especially with the precautionary principle.

This section it's a mixture of principles with conventions.

We suggest add in the statement that NARAP supports elements and obligations to the NARAP the Convention on long range transboundary air pollution protocol on POPS

(LRTAP). The US signed this protocol in 1998; Canada signed and ratified in 1998, and it's the one of the origin of the Stockholm Convention.

We also suggest to include the principles of transparency and accountability of environmental policy in the three countries

2.4 Rationale

Again the risk management of dioxins appears as the main objective of the NARAP, and is not mention of any commitment of elimination.

2.4.1 Dioxin and dioxin like compounds

The effect of endocrine disruption from dioxin exposure is missing

Last paragraph before 2.4.2 add last two lines
"Based on human studies, prenatal exposure may affect the gender ratio among newborns, and based on studies in both humans and animals, perinatal exposure may damage the developing fetus." ADD <u>resulting in suppression of the immune system, diminished psychomotor skills, and deficits in cognitive function</u>.*

*References:

- Alteration sex ratio: Bertazzi et. al. 1998 The Seveso Studies on Early and Long Term Effects of Dioxin Exposure: a Review. Environmental Health Perspectives 106: 625-633.
- Developing fetus resulting in suppression of the immune system, diminished psychomotor skills, and deficits in cognitive function: Bouwer, A. Feeley, M, 1998. Draft working paper fopr the WHO-ECEH/IPCS Consultation on Assessment to Infants from Exposure to PCBs, PCDDs and PCDFs. ICP EHH 019 VD98.2/12, Geneva, 12 may 1998; koopman-Eseboom C, Weisglas-Kuperus N, de Ridder MAJ, van der Paaw CG, Tunistra LGM, Sauer PJJ., 1996
- Effects of PCB-dioxin exposure and feeding type of infants´s mental and psychomotor development. Pedisatrics 97:700-706; Weisglas-Kuperus, N., 1998.
- Neuro developmental, inmunological and endocrinological indices of perinatal exposure to PCBs and dioxins. Chemosphere 37: 1845-1853.

We suggest also to include all the toxic health effects associated with dioxin, that were including in the Power Point presentation of William H. Farland, Ph.D from EPA Office and Research and Development, in the CEC Dioxin Government to Government Experts Workshop in Washington D.C. June 19-20, 2001 and in México City Dioxin Conference on October 2001. Were toxic effects of dioxin exposure according to that presentation include: lethality; wasting; gonodal/ lymphoid atrophy; hyperplasia; metaplasia; endocrine disruption; carcinogenicity; reproductive/developmental toxicity; dermal toxicity; inmunotoxicity; neurotoxicity; hepatic toxicity; cardiovascular toxicity: Ands the effects from dioxin exposure in the human population manifests in: cardiovascular disease; diabetes: cancer; porphyria; endometriosis; decreased tetosterone; and developmental

effects including changes in thyroid and immune system status; neurobehavior; cognition, dentition and altered sex ratio.

There is also a discussion that has to be recognized by this NARAP and that is that according to recent review there is no evidence of dioxin cancer threshold, questioning the assumption from the approach presented to the US EPA Science Advisory Board's Dioxin Review Panel in November 2000 that dioxin is a threshold carcinogen and that the threshold is and order of magnitude above the exposure levels of the general population. See " No evidence of Dioxin Cancer Threshold" by David Mackie, Junfeng Liu, Yeong-Shang Loh, Valerie Thomas. Princenton University NJ. Environmental Health Perspectives, november 2002. available on line at http://dx.doi.org/) doi:10.1289/ehp.5730

ADD AN ANNEX WITH DIOXIN LIST SOURCES

We suggest to include a Annex with all the list of sources of dioxin like compounds, as it is recognized by the Stockholm Convention Annex C. Part II and III.

3.3 MEXICO

Is missing the fact that Mexico has also ratified the Stockholm Convention

Even is recognized that Mexico does not have the capacity for dioxin analyses allows the expansion of dioxin incinerations sources in the Federal Law of residues and in the new standard on incineration (Proy-NOM-098-ECOL-2002 Protección ambiental- Incineración de residuos, especificaciones de operación y límites de emisión de contaminantes) and in the agreement with the cement industry. This actions will just increase the number of dioxin sources instead of promoting alternatives and phasing out the incinerators authorized in Mexico as many environmental groups like RAPAM had been demand.

The new standard of incineration NOM-098 is weak and is missing controls in bottom ash and discharge of residual water from the gas cleaning systems. The dioxin limits on air emissions of 0.2 TEQ ng/m^3 for new incinerators, and 0.5 TEQ ng/ m^3 for the old incinerator, are lower then the European Union, municipal incinerators in the USA and Canada. Also it is excluded the cement kiln sector in this standard.

The Mexico dioxin inventory is very preliminary and the statement that the main sources are in order of importance are agricultural fuel combustion and backyard trash burning are just a hypothesis based in the underestimation of industrial incineration sources. Other picture and priorities would result if will be used other factors from continuous dioxin monitoring system by long term sampling like AMESA method (see point 4.2.2.2.)

The challenge made by cement industry in preliminary version of the dioxin inventory presenting data of lower emissions still has to be confirmed by independent analyses and using also continuous sampling method.

4.0 Phase 1 NARAP activities

4.1 Monitoring and Assessment

Is not clear the difference and coordination with the other CEC NARAP on monitoring and assessment, the NARAP should explain the differences.

4.1.2.3 Human Serum Sampling

This step is important, I suggest to add a paragraph to ensure the coordination and collaboration with the Health Authorities in Mexico.

We proposed to include also a dioxin, furan study of breast milk, specially in the case of Mexico, as reflect express commitment to attend women's concerns and protect their reproductive rights.

4.1.2.4 Food Pathways Analyses

The NARAP has to mention specifically what studies will be initiated for dioxin furans and HCB analyses in food specially meat and dairy products (the mention of food in general ids vague) and in the case of Mexico.

Consider also a food tracking system specially for meat and dairy products to respond to dioxin crisis of food contamination.

4.2 Laboratory Testing

4.2.1 Objective

We propose to add in the objective the phrase " With the aim to provide continuous dioxin monitoring system by long term sampling"

4.2.2.2. Analytical Protocols

I proposed to add the phrase "with a review of the analytical methods that can provide continuous dioxin monitoring system by long term sampling".

Both the objective and this point is based in the argument that exist modern methods of testing that reflects more accurate dioxin emissions and made clear the underestimation of those actually used. For example, the AMESA method for continuous dioxin monitoring system by long term sampling is superior of EPA method because the later underestimate dioxin emissions specially those in incinerators. AMESA method is able to monitor from 6 hours to 30 days continuously and is used commercially in Europe. So, if Mexico wants to increase the capability and build infrastructure to monitor dioxins is better to use the best analytical methods that exist in the global market for a better estimation of dioxin emissions.

I provide in the past copies and reference documents and request a serious written discussion on this point but that never happened. For more information on AMESA see the

web page www.becker-messtechnik.de/ . For the studies for the underestimation of dioxin in conventional municipal incinerators in Belgium study see, R, De Fre. M Webers "Underestimation of dioxin emissions inventories" VITO Vlamsee Insteling voor Technologisch Onderzoek, Boeretang 200, 2400 Mol, Belgium in Organohalogen Compounds Vol. 36, 1998; and Jurgen Reinman "Results of one year continuous monitoring of the PCDD/PCDF Emissions of waste incinerators in the Walloon region of Belgium using AMESA" paper presented in 22nd International Symposium on Halogenated Environmental Organic Pollutants and Pops, Barcelona, Spain 11-16, 2002.

4.3 Inventories

4.3.2.2 Public Access to Inventory Data

We propose to change in the two objectives expressed instead of "Assess" and " explore" for a stronger commitments to ensure total public access to dioxin and furan inventories, including specific information about the sources and their total releases to air, water, soil, and ensure that this information will be public in the Pollutant Release and Transfer Registry in the three countries.

4.4 Pollution Prevention

4.4.1 Purpose

Add total release and elimination to the purpose

The Parties will identify and promote best environmental practices and best available techniques to prevent the formation and total release of dioxins, furans and hexachlorobenzene .

Best environmental practices and techniques should be defined as in the Stockholm Convention article 5 (f.)

4.4.4.2 Production Processes

Change the paragraph to be consistent with article 5 of the Stockholm Convention

The Parties will identify, promote and where its deems appropriate require the use of substitute or modified materials, products and processes to prevent the formation and release of dioxin, furans and HCB taking into consideration the Best Available Techniques and Best Available Practices from the Stockholm Convention.

I proposed also to conduct a regional workshop on clean production experiences on the substitution on inputs, processes and product that prevent dioxin at the source for 2004

Chlorine substitution in the production processes in specific sector should be addressed in this NARAP

4.5 Pollution control

4.5.2.1 Controls on Combustion Sources

Recognize the underestimation of dioxin emissions using the analytical methods recommended by EPA comparing with AMESA method as I mentioned in point 4.2.2.2.

4.6 Policy/ Management Options

4.6.1 Purpose

Is absent the commitment of dioxin elimination as the ultimate goal of policy options according to the Stockholm Convention and the NARAP limited the objective to reduce exposure.

4.6.2.2 Review and Analysis of Policy Options

Options should be with the goal of not just for reduce dioxin and furan exposure but the continuous reduction and elimination of dioxins.

I suggest to include as policy option the need to develop materials policy options, to implement the precautionary principle and the substitution of products, processes as recommended in the Stockholm Convention article 5, Annex C.

4.6.2.4 Voluntary Release Reduction Trial Initiative

I proposed to add and change in the objective the continuous reduction of total releases and where feasible elimination and their substitution for cleaner production methods.

This change will be more consistent with Stockholm Convention article 5 and Annex C.

We suggest to mention the General prevention measures relating to both best available techniques and best environmental practices as is included in Part V A. Stockholm Convention, that states that priority should be given to the consideration of approaches to prevent the formation and release of dioxin, furans HCB. And include a list of eight useful measures.

5. Implementation

5.3 Public Outreach and Transparency

This small paragraph I suggest to be add all the paragraphs included in the Stockholm Convention and change the title for Public Information, Awareness and Education and develop a set of actions. Its incredible how the specific commitments for specially for women, children and the less educated poor people are ignored by the NARAP

So this point has to explain how will enforce the commitments listed in article 10 of the Stockholm Convention that said:

Public information, awareness and education

1. Each Party shall, within its capabilities, promote and facilitate:

(**a**) Awareness among its policy and decision makers with regard to persistent organic pollutants;

(**b**) Provision to the public of all available information on persistent organic pollutants, taking into account paragraph 5 of Article 9;

(**c**) Development and implementation, especially for women, children and the least educated, of educational and public awareness programmes on persistent organic pollutants, as well as on their health and environmental effects and on their alternatives;

(**d**) Public participation in addressing persistent organic pollutants and their health and environmental effects and in developing adequate responses, including opportunities for providing input at the national level regarding implementation of this Convention;

(**e**) Training of workers, scientists, educators and technical and managerial personnel;

(**f**) Development and exchange of educational and public awareness materials at the national and international levels; and

(**g**) Development and implementation of education and training programs at the national and international levels.

2. Each Party shall, within its capabilities, ensure that the public has access to the public information referred to in paragraph 1 and that the information is kept up-to-date.

3. Each Party shall, within its capabilities, encourage industry and professional users to promote and facilitate the provision of the information referred to in paragraph 1 at the national level and, as appropriate

4. In providing information on persistent organic pollutants and their alternatives, Parties may use safety data sheets, reports, mass media and other means of communication, and may establish information centers at national and regional levels.

5. Each Party shall give sympathetic consideration to developing mechanisms, such as pollutant release and transfer registers, for the collection and dissemination of information on estimates of the annual quantities of the chemicals listed in Annex A, B or C that are released or disposed of., subregional, regional and global levels.