

codex alimentarius commission



FOOD AND AGRICULTURE
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Agenda Item 8

**CX/FH 00/8 - Add.1
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JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON FOOD HYGIENE

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PROPOSED DRAFT GUIDELINES FOR THE HYGIENIC REUSE OF PROCESSING WATER IN FOOD PLANTS (At Step 3 of the Procedure)

In response to CX/FH 00/8, the following Governments submitted comments: Denmark, Mexico and the United States of America, and an INGO International Dairy Federation.

General Comments

Canada

Canada supports the proposal that the draft guidelines be incorporated into the Recommended International Code of Practice: General Principles of Food Hygiene as an Annex. Canada also agrees that additional commodity specific provisions for water reuse, if needed, should be developed separately and incorporated into individual commodity codes of hygienic practice. However, the work on the "general" guidelines for water reuse should be advanced before additional work could be initiated on commodity specific provisions.

Denmark

In general, in Denmark all water used in food industry should be potable water.

Mexico

Mexico requests that the translation of the document be carefully reviewed.

United States of America

The United States supports the development of the *Proposed Draft Guidelines for the Hygienic Reuse of Processing Water in Food Plants*. The United States believes that the Guidelines will provide helpful general guidance to countries on the hygienic reuse of processing water. The United States supports the incorporation of these Proposed Draft Guidelines as an Annex to the *International Recommended Code of Practice: General Principles of Food Hygiene* (CAC/RCP 1-1999, Rev. 3 (1997)). Additionally, the U.S. supports the incorporation of commodity specific water reuse provisions into the various commodity codes of hygienic practice and notes, in this regard, that the examples given in Annex B of CX/FH 00/8 are to be deleted in the document as it progresses through the Codex Step Procedure. The United States recommends that these Guidelines be advanced to Step 5.

International Dairy Federation

The IDF generally supports the approach suggested, that is to develop general guidelines to be incorporated into the General Principles of Food Hygiene as an Annex.

However, as such general guidelines can only provide principles with little practical guidance, we recommend that commodity specific guidelines are developed for those commodities where reuse of water is practiced. Where commodity specific Codes of Hygienic Practices exist, these constitute the natural location for such practical guidelines.

The examples associated with the processing of dairy products need to be reviewed, partly to become fully aligned with the general guidelines and partly to take into account the approach and way of addressing good hygienic practices in the Proposed Draft Code of Hygienic Practice for Milk and Milk Products (CX/FH 00/7).

Therefore, we suggest that section 3 of Annex B be removed and that the drafting group established for the drafting of the Code of Hygienic Practice for Milk and Milk Products be requested to prepare an annex to that Code, taking into account the general guidelines. The dairy examples that are provided in CX/FH 00/8 constitute a good starting point.

The IDF agrees with the content. However, the terms “sanitized”, “sanitizer” and “sanitizing “ are not a Codex concept and should be replaced throughout the document with “disinfected”, “disinfectant” and “disinfecting”, respectively, as these terms are used in the General Principles of Food Hygiene.

ANNEX A

3. DEFINITIONS

Denmark

The definitions on recirculated water and recycled water are very much the same. For simplicity we suggest that the definition for recycled water be deleted, as the definition for recirculated water is the most logic one.

Mexico

Reconditioning: We believe it is necessary to substitute the term “rehabilitation” for “reconditioning”, defining this as follows: The treatment of water intended for reuse which permits the reduction or elimination of microbiological, chemical and physical contaminants, according to its intended use.

Recirculated water: “El agua reutilizada dentro de un circuito cerrado para la misma operación de fabricación. Se puede requerir el reacondicionamiento si el período de recirculación continua es prolongado” //“Water used inside a closed circuit for the same manufacturing operation. Reconditioning may be required if the continuous recirculation period is prolonged.”//

Recycled water: “First use or recovered water that has been obtained from a food manufacturing operation and has been reconditioned when necessary such that it may be reused in the same or another food manufacturing operation.

Composition water: Water that was originally a constituent of a food, has been removed from the food at any step in the process.

We suggest removing the definition for ‘**Food manufacturing operation,**’ since it was not used in the document.

4. GUIDELINES

4.1

Denmark

Prior to the first use at the processing plant, water must meet the quality of the WHO-guideline for drinking water.

Mexico

We suggest modifying the text to the following: “Prior to first use at the processing plant, water must meet the applicable sanitary regulations of each country.”

4.2

Mexico

For point 4.2, we suggest modifying the text to the following: “Reuse water shall be safe for its intended use and shall not jeopardize the sanitary quality of the product through the presence of chemical, microbiological or physical contaminants in amounts that represent a health risk to the consumer.”

4.3

Mexico

For point 4.3, the following text is suggested: “Los principios del HACCP se aplican a la reutilización del agua. El empleo de los principios de HACCP para la identificación, evaluación y gestión de los riesgos potenciales resultantes del uso de agua es un método recomendado para la gestión de la utilización de este recurso.” //“The HACCP principles apply to water reuse. The use of HACCP principles for the

identification, evaluation and control of potential risks resulting from water use, is one recommended method for the management of the use of this resource.”//

4.4

Denmark

“Reuse water should not adversely affect the quality (flavour, colour, texture)”. The word “composition” should be added and the word “adversely” deleted.

Mexico

We recommend removing point 4.4.

4.5

Mexico

For point 4.5, the following text is suggested: “Both the previous use and the intended use of water dictate the degree of rehabilitation of the same and the frequency of its testing.”

4.6

Denmark

Water intended for incorporation into a food product shall be potable water and meet the quality of the WHO drinking water guideline.

Mexico

For point 4.6, we suggest the following text: “El agua de rehuso prevista para su incorporación en un producto alimenticio, debe cumplir con las especificaciones microbiológicas y, cuando sea necesario con las especificaciones químicas para el agua potable; en ciertos casos debe considerarse si es apropiado también cubrir las especificaciones físicas.” //“Reuse water intended for incorporation into a food product shall at least meet the microbiological and, as deemed necessary, chemical specifications for potable water. In certain cases physical specifications may be appropriate.”//

4.7

Canada

First sentence - Suggest to replace "...on-going monitoring..." with "... appropriate level of monitoring..." Also "...analytes..." to be replaced by "...analyses...."

Second sentence - Suggest to redraft as follows: "The frequency of monitoring and testing may be dictated by factors such as: the source of the water or its prior condition, the intended reuse of the water; more critical..."

Third sentence -It is stated that "Use of rigorous monitoring and control system should be used to determine the frequency and type of monitoring and testing...". We question how the use of rigorous monitoring could be used to determine frequency and type of monitoring?

Mexico

For point 4.7, the following text is suggested: La reutilización del agua estará sujeta a muestreo y análisis continuos, para asegurar su calidad sanitaria, la frecuencia de los análisis es determinada por la etapa del proceso de donde se obtiene y el uso previsto de la misma; las aplicaciones más críticas usualmente

requieren niveles más estrictos de reacondicionamiento. Debería emplearse un sistema riguroso de control de calidad para determinar la frecuencia y tipo de muestreo y análisis. //Reuse water shall be subjected to on-going monitoring and testing to ensure its sanitary quality. The frequency of monitoring and testing are dictated by process step from which it was taken and the intended reuse of the water; more critical applications normally require greater levels of reconditioning. A rigorous monitoring and quality control system should be used to determine the frequency and type of monitoring and testing//

United States of America

In the third sentence, delete the words "Use of" and begin the sentence with "A rigorous onitoring...".

4.8

Denmark

The sentence "Unless reconditioned to potable water quality" should be deleted. Reuse water should be distributed in systems separate from the distribution lines for potable water even if it has the same quality of potable water to ensure safety in case of accidental quality problems with the water.

Mexico

For point 4.8, we suggest the following text: A menos que se reacondicione el agua para obtener calidad de potable, la conducción del agua de reuso, debe realizarse en líneas de distribución separadas de las del agua potable y las tuberías y tomas deben diferenciarse por medio de código de colores; es necesario prevenir la contaminación cruzada causada por reflujos, sifoneo o conecciones cruzadas en ambos sistemas. //Unless reconditioned to potable water quality, distribution of reuse water should be in systems separate from the distribution lines for potable water and distinguished by differently colored piping and outlets; cross contamination by backflow, back-siphonage, or cross-connections from reuse water systems should be prevented.//

United States of America

The specific provision for the use of colored piping may be too prescriptive. Additionally, the need to clearly distinguish potable from non-potable reuse water needs to be more clearly stated. The United States recommends a rewording to provide for alternative means of indicating different water types. The rewording would be as follows.

Unless reconditioned to potable water quality, distribution of reuse water should be in systems separate from the distribution lines for potable water and be clearly identified by various means, such as the use of differently colored piping and outlets; cross contamination by backflow, back-siphonage, or cross-connections from reuse water systems shall be prevented.

4.9

Canada

Suggest to replace "burden" with "contamination".

Mexico

We suggest removing point 4.9, since it repeats the idea given in point 4.6.

4.10

Mexico

For point 4.10, we suggest the following text: El agua proveniente de fuentes que tuvieron contacto con, o contengan desechos humanos o agrícolas, no debe ser reacondicionada para reutilizarse. //Water from sources that are in contact with or include human or agricultural sewage should not be upgraded for reuse.//

United States of America

The United States notes that this provision may be too restrictive in some cases. The United States would suggest the provision be reworded as follows.

To the extent possible, water from sources that are in contact with or include human or agricultural sewage should not be upgraded for reuse. In all cases, however, water should be safe for its intended use (see Guideline 4.2 above). Additionally water from treatment systems for human and agricultural sources that are in contact with or include human or agricultural sewage should not be upgraded for use.

4.11

Canada

Suggest to delete the sentence beginning with "For example..."

Mexico

For point 4.11, we suggest the following text: The water treatment systems chosen shall provide the level of reconditioning appropriate for the intended water reuse.

4.12

Mexico

For point 4.12, we suggest the following text: Proper maintenance of water reconditioning systems is critical to avoid having them become sources of contamination.

4.13

Mexico

We recommend removing point 4.13, since its purpose is covered in point 4.11, independent of volume.

4.14

Canada

First sentence - "Treatment of water must..." Is the intent here to cover the reconditioning issue? If so, treatment of water should be replaced with reconditioning.

Mexico

For point 4.14, we suggest the following text: Reconditioning of water should be defined, with knowledge of the types of contaminants the water may contain from its previous use. For example, the use of UV irradiation on water may be ineffective for killing or inactivating protozoa and similar organisms, helminthes

or virus pathogens. Similarly, the use of chlorine or ozone on organically enriched water may result in the formation of hazardous organic compounds.

In addition, we suggest that this point be moved, relocating it to just before point 4.11.

4.15

Canada

Suggest to add the underline A...and should allow for periodic cleaning and sanitizing where appropriate.

Mexico

For point 4.15, we suggest the following text: If reuse water storage deposits are required, they should be constructed of materials which will not contaminate the water and their design should allow for periodic cleaning and, if necessary, disinfection.

4.16

Mexico

For point 4.16, we suggest the following text: El agua utilizada para el enfriamiento, debe desinfectarse (p. ej. con cloro) ya que siempre existe la posibilidad de que una fuga pueda contaminar el producto. Los niveles residuales del desinfectante en el agua de enfriamiento, se debería detectar y controlar. Los túneles de enfriamiento deberían limpiarse y desinfectarse con regularidad y adicionar una provisión de agua potable, cuando se considere necesario. //Cooling water should be sanitized (e.g. with chlorine) because there is always the possibility that leakage could contaminate product. Levels of residual sanitizer should be controlled and monitored. canals should be cleaned and sanitized regularly and an adequate supply of fresh potable water added as necessary.//

Denmark

Food contact materials should under normal and foreseeable conditions not transfer their constituents to foodstuffs in quantities, which could endanger human health or bring about unacceptable change in the composition of the foodstuffs or deterioration in the organoleptic characteristics thereof.

United States of America

For clarification, the United States recommends that this guideline be reworded as follows.

"Finished product container cooling water (e.g., retort processes) should be sanitized (e.g., chlorine) because there is always the possibility that inadequate container seals could lead to contamination of the product. Levels of residual sanitizer should be controlled and monitored. Cooling canals should be cleaned and sanitized regularly and an adequate supply of fresh potable water and sanitizer added as necessary."