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Action Plan for the Assessment and Management of Perfluorinated Carboxylic Acids and their Precursors: Summary of and Response to Comments on the Action Plan

November 2006

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In February 2006, an Action Plan for the assessment and management of perfluorinated carboxylic acids (PFCAs) and their precursors was proposed by Environment Canada (EC) and Health Canada (HC). This Action Plan was discussed at a consultation meeting held on February 5 and 6, 2006 in Ottawa, Ontario. Following that meeting, stakeholders (both meeting participants and corresponding participants) were invited to submit further comments to EC in writing.

This document summarizes and responds to the comments obtained both at the consultation meeting and through written submissions. All comments have been noted and considered but only those that require answers or clarification have been included in this document.

The comments included in the document may not be the comments received *verbatim* as similar comments have been combined to reduce repetition, and some have been paraphrased to ensure brevity. Comments have been grouped according to which aspect of the action plan they pertain.

Proposed actions for new substances

Comment #1: Risk management should focus on residuals and use of a Significant New Activity (SNAc) Notice rather than regulation

The risk management objective for the four new fluorotelomer-based substances could be met by focusing on residuals in products and either imposing a condition on the substances or by using the SNAc provision.

Response

A Significant New Activity Notice (SNAc Notice) is a legal document issued by the Minister of the Environment that lists the activities for a given substance in Canada for which there has been no finding of toxicity under the *Canadian Environmental Protection Act, 1999 (CEPA 1999)*. The requirements prescribed in the Notice indicate the appropriate information to be sent to the Minister for assessment prior to the commencement of a new activity as described in the Notice. The proposed short-term risk management objective for the four fluorotelomer-based substances is to prohibit their importation and manufacture in order to eliminate a potential new source of long chain PFCAs to the environment. This objective requires that no activity involving the substances be allowed in Canada. Environment Canada has determined that the best way to meet the risk management objective for these new substances is by prohibiting their import and manufacture through regulation.

Comment #2: There are many existing fluorotelomer based substances not being addressed

Although the proposed regulations address the four new fluorotelomer-based substances, there are many remaining substances on the Domestic Substances List (DSL) that have similar properties.

Response

The proposed regulations will prevent the introduction of a new source of long chain PFCAs in Canada. Even though the four new fluorotelomer-based substances represent a small portion of the environmental sources of long chain PFCAs, the proposed regulations are part of a comprehensive risk management plan for long chain PFCAs and their precursor substances.

Comment #3: Prohibition does not extend to manufactured items

The proposal does not include a prohibition on manufactured items containing the four fluorotelomers. The regulations could be circumvented if countries with lower standards than Canada are allowed to export items to Canada. Furthermore, manufactured items containing PFCA precursors could contribute significantly to global loading.

Response

At the present time, controlling the import of manufactured items containing the four new fluorotelomer-based substances is not practical. Issues with sampling and testing would make it difficult to identify the substances in manufactured items. These articles will be considered in the next steps of the management of PFCAs and their precursors.

Comment #4: Differences in use patterns of four new fluorotelomers should be considered

The difference in use pattern between the four new fluorotelomers should be considered since the potential for release is not the same for all substances.

Response

The intent of adding the four new fluorotelomer-based substances to the *Prohibition of Certain Toxic Substances Regulations, 2005* (Prohibition Regulations) is to prevent any new sources of long chain PFCAs from being released in Canada. The difference in use patterns is not a significant issue, since the goal is a total ban on new releases.

Comment #5: Action on new fluorotelomers is not compatible with rest of Action Plan

The total ban of the four new fluorotelomers is not compatible with the intent of the Action Plan, which focuses only on residuals in products.

Response

The proposed Regulations will prevent new sources of PFCA precursors from entering the environment. This is consistent with the first item of the Action Plan which aims to prevent the introduction into Canada of new substances capable of contributing to the load of longer chain PFCAs. The focus on PFCA precursors in fluoropolymer and fluorotelomer-based products is part of early action by industry and government to address a significant source of precursor emissions. Other sources of PFCAs and their precursors are the focus of on-going research described in the Action Plan.

Comment #6: Fluorotelomers do not contribute significantly to PFCAs in the environment

There are indications that fluorotelomers contribute only 1% of the total environmental load of PFCAs. Direct sources account for 90%. The most significant reduction in PFCAs from fluorotelomers would result from elimination of PFCA precursor residuals.

Response

There are no PFCA, fluoropolymer or fluorotelomer manufacturing facilities in Canada. The only sources of PFCAs and PFCA precursors in Canada are those contained in fluorotelomer-based and fluoropolymer products. Given the large reductions expected from PFCA and fluoropolymer manufacturing facilities in the US, the PFCA precursors contained in fluoropolymer and fluorotelomer-based products (including residuals) will become a much more significant source of total emissions in the future. Elimination of PFCA precursors from fluorotelomers will result in a significant reduction in emissions of these substances. Due to the persistent and bioaccumulative nature of PFCAs it is important to minimize any increase in emissions of PFCAs or their precursors to the environment.

Comment #7: Only the four new fluorotelomers are to be included in Schedule 1 and not PFCAs

There is a disconnect with the fact that fluorotelomer-based substances are potentially going to be added to Schedule 1 of CEPA 1999 while PFCAs are not being considered for Schedule 1 inclusion at this time.

Response

The addition of the four fluorotelomer-based substances to Schedule 1 to CEPA 1999 is necessary to enable the making of regulations in respect of these substances to prevent any new sources of PFCA precursors in Canada. Further assessment of other PFCAs and their precursors is outlined as part of the Action Plan. Consideration of adding additional PFCAs or their precursors to Schedule 1 will be given following the conclusion of assessment work.

Comment #8: Banned substances could provide environmental benefits

There was a view that some of the new substances proposed to be banned could provide environmental benefits by resulting in lower levels of PFCA formation than those substances currently in commerce.

Response

As indicated in the Action Plan, the objective is to prevent the introduction into Canada of new substances which contribute to levels of longer chain PFCAs in the environment. Emissions from substances currently in commerce will be addressed through another item in the Action Plan which describes work with industry to voluntarily reduce PFCA precursors from products.

Comment #9: Global commerce of fluorotelomer products may be affected

Adding the substances to Schedule 1 and regulating has the potential to affect global commerce of these substances and customers may shy away.

Comment #10: Proposed regulations will impact competitiveness of Canadian industry

The proposed regulatory framework would have an impact on the competitive position of Canada.

Comment #11: No economic implications for ban

The regulation should indicate that there is no economic implication for upholding the ban on the four new fluorotelomers.

Response

It is expected that the economic impact of the proposed regulation will be negligible due to the small number of companies involved with these substances and the availability of existing alternatives.

Comment #12: Fluorotelomers will still be manufactured elsewhere

Although the four new fluorotelomers will be banned in Canada, they will still be manufactured and used elsewhere in the world.

Response

The four new fluorotelomers were not likely to be manufactured in Canada. Since they may be manufactured and used elsewhere in the world and due to the long range transport of PFCAs, part of the Action Plan includes engaging international partners to address this issue.

Comment #13: Misinterpretation of the ban on PFCA precursors

There is concern that the message of the Notice of the Action Plan could be misinterpreted, especially because the proposal calls for a total ban on the four new fluorotelomer-based substances when, in fact, the ban is only on the import and manufacture of the substances and not the import of manufactured items containing the substances.

Response

Environment Canada and Health Canada recognize the importance of communicating an accurate message to the public. Wording in the proposed Regulations clarifies that the prohibition does not extend to manufactured items at the moment.

Proposed actions for substances already in commerce

Comment #14: EC should consider aligning with US EPA's stewardship program

Would Environment Canada consider aligning the action plan on existing substances with the recently proposed U.S. EPA stewardship program? Some stakeholders felt that this would be a successful way to harmonize global initiatives.

Response

Measures included in the Action Plan to address sources of long chain PFCAs already in Canadian commerce are consistent with U.S. EPA actions. Included is an initiative to engage industry in a voluntary program similar to the U.S. EPA stewardship program. As well, Environment Canada and Health Canada will engage international partners in global action to reduce risk from longer chain PFCAs.

Comment #15: The risk management objective should be clarified

There is a need to clarify the risk management objective of the Action Plan. Some stakeholders indicated support for elimination of PFCAs and their precursors.

Comment #16: Risk management objective should be elimination

Environment Canada should consider elimination as the objective of the Action Plan and support the addition of PFCAs to the Stockholm Convention.

Response

The short term risk management objective for substances in commerce is the reduction of PFCA precursors from fluoropolymer and fluorotelomer-based substances as this is a recognized and well characterized source of PFCAs. Further assessment of PFCAs and their precursors outlined in the Action Plan will guide the development of a longer term risk management objective for existing sources of PFCAs and future risk management actions. Environment Canada and Health Canada are continuing this assessment work. Should results of future assessments indicate elimination as an appropriate objective, Environment Canada and Health Canada will consider this action. Environment Canada also commits in the Action Plan to engaging international partners in global action to reduce risk from longer chain PFCAs.

Comment #17: No timelines and targets in Action Plan

Timelines and targets for activities outlined in the Action Plan should be included.

Response

Research on PFCAs and their precursors outlined in the Action Plan is ongoing. The proposed regulation maintaining the prohibition on the four new fluorotelomer-based substances was published on June 17th, 2006. Environment Canada and Health Canada will work with stakeholders to establish details for the voluntary reduction of PFCA precursors in fluoropolymer and fluorotelomer-based substances.

Comment #18: Address PFCAs of all chain lengths

PFCAs and their precursors of all chain lengths (not just >9) should be addressed in the Action Plan.

Response

The focus of the Action Plan is on the longer chain PFCAs (C>9). Consideration may be given to the inclusion of other chain lengths if information that justifies it becomes available.

Comment #19: Address PFCAs as a class of substances

PFCAs and their precursors should be addressed as a class of substances and not as individual substances. Their cumulative effect should be researched rather than determining the toxicity of each individual substance.

Response

Ongoing assessment of the environmental and health effects of PFCAs incorporates studies on the cumulative effects of PFCAs and recent research has shown that mixtures of PFCAs are more toxic than PFOA alone. Activities described in the Action Plan (including the voluntary initiative on PFCA precursors) intend to address existing sources of PFCAs and their precursors as a group of substances rather than as individual substances.

Comment #20: Action on consumer products

There is a need for action on consumer products which contain PFCAs and their precursors.

Response

The Action Plan includes further research of the sources, fate and effects of PFCAs and their precursors. Work on PFCAs and their precursors in consumer products will be conducted under this aspect. The voluntary initiative described in the Action Plan to reduce PFCA precursors in existing substances will reduce levels of these substances in consumer products such as paints, waxes and surface protectants. Further research on the degradation of fluorotelomer-based products applied to manufactured items is also described in the Action Plan.

Comment #21: Approach to existing PFCA precursors should be same as that for four new fluorotelomers

Risk management work on existing PFCAs and their precursors should reflect the approach used in addressing the four new fluorotelomers (i.e. addition to the Prohibition Regulation). Some stakeholders indicated support for the use of regulations to address existing residuals of PFCA precursors

Response

Industry has indicated support for a voluntary approach to early action to reduce existing PFCAs and their precursors in products. This approach also aligns with action taken in the US to address these substances on a voluntary basis. Further assessment of PFCAs and their precursors may indicate the need for a different risk management approach in the future.

Comment #22: Action on existing reservoirs

The Action Plan should address existing reservoirs of PFCA precursors (i.e. landfills).

Response

Further research on the fate and transport of PFCAs and their precursors is needed to address this potential source.

Comment #23: Review and revision process for Action Plan

The Action Plan should include a process to review and revise.

Response

As indicated in the published Action Plan, new information may result in amendments to the measures outlined.

Comment #24: Effective public consultation for the Action Plan

The Action Plan should include effective public consultation and annual public reporting on progress.

Response

The development of risk management tools by Environment Canada and Health Canada involves public consultation at all stages. All risk management activities described in the Action Plan will include public consultation.

Research

Comment #25: Research should focus on emissions from manufactured items

Research should focus on indoor air exposure, residuals and degradation products from manufactured items.

Comment #26: More research on shorter/longer chain PFCAs

There should be more research focused on shorter and longer chain perfluorocarbons.

Comment #27: Sensitive ecosystems and populations

Research should consider children's health and be monitoring levels of substances in sensitive ecosystems and populations. Biomonitoring results should be considered in research on PFCAs and their precursors.

Comment #28: Should do research on alternatives

Research on likely alternatives should be completed to ensure suitability.

Comment #29: Concern for knowledge gaps

Stakeholders expressed concern for knowledge gaps with respect to routes of exposure and transport of PFCAs and their precursors.

Response

Comments received on research needs and knowledge gaps will be considered in establishing research priorities.