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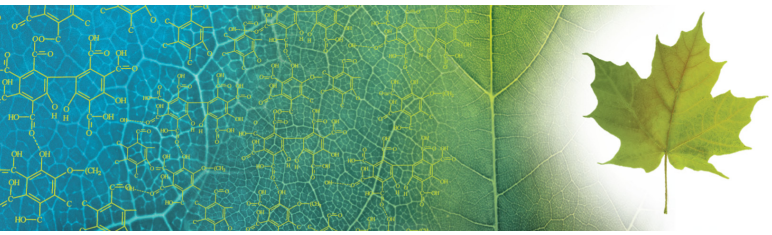

CHEMICALS MANAGEMENT PLAN

PROGRESS REPORT SPECIAL EDITION

Issue 6, Summer 2016

ABOUT THIS SPECIAL EDITION

This sixth issue of the Chemicals Management Plan (CMP) Progress Report is a special edition. In addition to covering activities between December 2015 and June 2016, it looks back at highlights of the program since its inception. It also provides information about future events, dates of interest and future engagement opportunities.

The report is produced jointly by Environment and Climate Change Canada and Health Canada.

For information about the CMP, or to find previous issues of the CMP Progress Report, visit the <Chemical Substances> website.

Feedback and suggestions can be sent to <ec.substances.ec@canada.ca>. ◆

In this issue

CMP HIGHLIGHTS

NEXT PHASE OF THE CHEMICALS MANAGEMENT PLAN

CMP moves into next phase

The success of the first two phases of Canada's Chemicals Management Plan paved the way for the recent launch of the next phase.

The announcement of the next phase, made in late May by Minister of Health Jane Philpott and Minister of Environment and Climate Change Catherine McKenna, was framed against an array of household and consumer products that contain common chemicals. "Canadians expect to be able to trust that the chemicals in the products they use are safe and won't harm them or the environment," said Minister Philpott.

The CMP has played an important role in helping to deliver on this objective. Specifically, the program has:

- Enabled timely and science-based review of substances to assess potential risks to human health and/or the environment;
- Taken action on harmful substances in foods, consumer products, pesticides, drugs or related to the natural environment; and
- Supported research and monitoring initiatives to keep up to date with new technologies and better understand exposures and effects.

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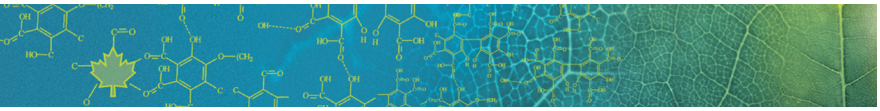

Highlights, continued from page 1

A major goal of the next phase of the program will be to complete the comprehensive review of Canada's legacy of unassessed substances by 2020 – a process that began in the 1990s with the creation of the first-ever inventory of chemicals used in Canada. This inventory provided the basis for many pollution prevention measures, as well as a science-based process that identified 4,300 substances of priority.

To date, approximately 64% of these chemical substances have been reviewed and assessed. A total of 78 risk management actions have been developed to manage the risks in a range of substances and applications

These include regulations, pollution prevention planning notices, and codes of practice.

A list of risk management actions that have been put in place since the beginning of the CMP can be found <online>.

Another important goal for the program will be the evaluation of substances identified for further consideration during prioritization of the approximately 3,500 substances on the revised In Commerce List – a list of substances in Canadian commerce used in products regulated by the *Food and Drugs Act* between January 1987 and September 2001.

Since 2006, federal scientists have conducted over 5,000 reviews of new substances proposed to be used in Canada and applied over 190 actions with the aim of preventing these substances from ever posing a risk.

In addition to continuing with this systematic approach to assess and/or manage hundreds of chemical substances each year, vital work is also underway to:

- Test the safety of consumer products for priority substances being assessed under the CMP;
- Evaluate older pesticides and pesticide ingredients;
- Invest in research and monitoring;
- Develop new environmental rules for pharmaceutical products; and
- Assess a wide range of substances found mainly in food and drugs.

As the government moves into the next phase of the program, it will also continue to invest in new science and work with partners in order to broaden Canada's understanding of chemical risks, remain up to date on the latest tools, and better understand the long-term effects of pollution on people, communities, and the environment across Canada.

Said Minister McKenna: "In this phase of the Chemicals Management Plan, our scientists will continue their important work. It is an investment in the health of our economy – but more importantly in the health and environment of future generations of Canadians." ◆

Get informed

Do you want to know more about the CMP and its initiatives? The <Chemical Substances> website contains a wealth of information and links to topics of interest. You can have the latest news emailed to you by <subscribing> through the website. This feature will also let you know about opportunities to be involved in information sessions and consultations.

NEXT PHASE WORK PLANS AND APPROACHES ANNOUNCED

The next phase of the CMP runs to 2021. Over five years, approximately <1,550 priority substances will be addressed>. The government has announced measures for **risk assessment, risk management** and **information-gathering** for those substances.

Risk assessment

The approximately 1,550 priority substances to be addressed include those identified during categorization of the *Domestic Substances List* and the <2015 Review Identifying Risk Assessment Priorities>. The results of this review were published in May 2016. This review primarily focused on identifying significant new hazard and/or exposure information for substances that are on Canada's *Domestic Substances List*. It identified substances requiring risk assessment and further information through information-gathering activities.

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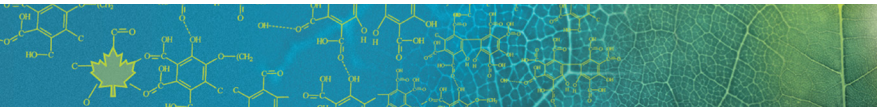


Next phase, continued from page 2

There will continue to be an emphasis in future assessments on selection of "fit-for-purpose" approaches, so that efforts are focused on the substances of highest concern, and engagement of stakeholders is efficient, strategic and targeted. The various approaches to be used are outlined in the <Risk Assessment Toolbox>.

A <two-year rolling risk assessment publication plan> has also been released. It will be updated regularly to provide advance notice of timelines for each assessment. The publication timelines also include assessments that will be completed from previous phases of the CMP.

As the program continues to evolve, strong science remains a priority. Science approach documents will be published for substances that are expected to be of low concern for either human health or the environment. These documents will describe the assessment approach and results for substances identified as of low concern. Together with any other relevant information that becomes available after the publication of the science approach documents, these will form the basis for the conclusion in the screening assessment report that will be published later. More information on science approach documents and other types of assessment documents is provided in a fact sheet on <types of risk assessment documents>.

As part of the CMP, Health Canada has prioritized substances on the revised In Commerce List to identify those substances that are not expected to pose a risk to human health or the environment, and thus need not be considered further in the context of the revised list. Substances identified for further evaluation to determine whether they may pose a significant risk will be subject to a more rigorous assessment, which could involve further information gathering during the next phase of CMP.

Risk management

Management of risks from toxic chemicals will continue to involve the selection and application of tools appropriate to the level of risk identified, with the aim of achieving environmental and human health objectives on a sustained basis.

A <list of the risk management actions developed or under> development for the substances found to be harmful to the environment and/or human health under the CMP has been published.

For the 1,550 substances to be assessed during the next phase of the CMP, consultation on risk management actions will be initiated for those substances that are found harmful to human health or the environment.

In addition, Canada will continue to participate in the international chemicals agenda to contribute to further protection of the health of Canadians and their environment, to ensure that issues and risks that are global in nature can be addressed effectively, and to influence the

continued on page 4

Implementation table

Read about Canada's <Chemicals Management Plan> and its <Implementation Table for 2016 to 2021>.

New and existing micro-organisms

Risk assessment summaries were published for seven new living organisms:

- Bacillus species 01 and 02
- Bacillus species 06 and 03
- PROSTVAC-V, PROSTVAC-F; and
- TBC-FPV

New substances, chemicals and polymers

Under the New Substances Program:

- Two summaries for new chemicals and polymer substances were published
- Three summaries for new products of biotechnology were published
- 211 new substances notifications were assessed:
  - 173 chemicals and polymers;
  - seven products of biotechnology;
  - 28 chemicals and polymers solely used in a food and drug application;
  - three products of biotechnology solely used in a food and drug application.
- 21 pre-notification consultations were completed
- 88 substances were added to the *Domestic Substances List*

Next phase, continued from page 4

global agenda. (This has the benefit of reinforcing domestic efforts.)

The government will continue to assess the effectiveness of selected risk management actions that have been put in place, including whether they have met the environmental and human health objectives. Results of these assessments will be communicated to stakeholders and the public.

A table identifying risk management activities scheduled to occur during the next two years for toxic substances managed under the CMP, including opportunities for stakeholder engagement, has been published and will be updated periodically. Information can be found in the <Two Year Rolling Risk Management Activities and Consultations Schedule>.

Information-gathering

The government is encouraging stakeholders to submit information needed for the 1,550 substances to be addressed in the next phase of the CMP.

Earlier this year, the government published a <Notice of intent in the *Canada Gazette*, Part I>, listing the 1,550 substances, as well as the information that would inform assessment and shape future data-gathering approaches for these substances.

Assessments of substances in this phase will be built on existing basic information, such as material collected through the <*Domestic Substances List* inventory updates>, which helped Environment and Climate Change Canada and Health Canada identify stakeholders and commercial activity involving these substances. The government is seeking any additional information companies have available about these substances.

Information can be submitted via Environment and Climate Change Canada's <Single Window>. Any information previously provided does not need to be resubmitted.

If clarification is required for information submitted under the <*Domestic Substances List*> inventory updates, the government is following up directly with stakeholders and associations known to be engaged with specific substances.

In addition to the existing information obtained from *Domestic Substances List* inventory updates, the government will use a variety of sources and mechanisms to engage with stakeholders. These include:

- Domestic sources of information, such as other federal programs and other Canadian jurisdictions;
- Coordinated voluntary information-gathering;
- Consultations with key stakeholders;
- International sources of information such as the United States Environmental Protection Agency, industry consortia and the Organisation for Economic Cooperation and Development;
- Research, monitoring and surveillance activities;
- Published studies in scientific journals; and
- Mandatory information gathering under provisions of the *Canadian Environmental Protection Act, 1999*, such as Section 71 notices and Section 70 submissions.

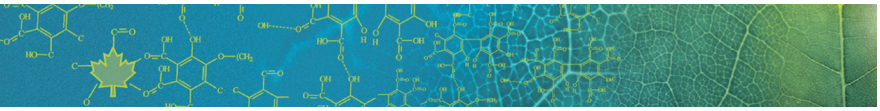
Section 71 notices will be issued when required to complement other information gathering approaches, such as to

continued on page 5

Section 71 Notices

Under the first phase of the CMP, 16 Section 71 notices were published addressing a total of 962 substances. Under the second phase, 11 such notices were published addressing a total of 3,072 substances. So far, four Section 71 notices (microbeads, polymers, petroleum and nanomaterials) have been published in support of this phase of the CMP, addressing a total of 579 substances.

In January 2016, a Section 71 notice was published on activities involving hydrofluorocarbons in bulk for 2013-2014. A similar notice is anticipated to be published in June 2016 to gather data for 2015. The notice will gather data to help understand the use of these substances and assess the need for domestic control strategies, taking into account potential international actions under the Montreal Protocol on Substances that Deplete the Ozone Layer and the United Nations Framework Convention on Climate Change.



Next phase, continued from page 4

support risk management actions and decision-making. This will include the publication of a notice under Section 71 of the *Canadian Environmental Protection Act, 1999*, for a subset of toxic substances that will help inform the development of risk management instruments and evaluate the performance of existing risk management actions. ◆

SUBSTANCES OF INTEREST

Snapshot: Bisphenol A

Bisphenol A is an industrial chemical frequently used to make the hard, clear plastics often found in plastic bottles, medical supplies, sports equipment, electronic devices and many other products. It is also in linings for metal-based food and beverage containers to prevent food contamination. Some companies have recently indicated an intention to voluntarily remove bisphenol A from selected products in response to consumer preferences.

Bisphenol A was first created in the 1890s and has been used in very high volumes across the industrialized world up to the present day. Although not currently manufactured in Canada, it is often imported for industrial applications or as a product ingredient.

Bisphenol A was assessed under the CMP, with a <final screening assessment> published in 2008. The assessment examined all the ways that bisphenol A could enter the environment as well as the effects of human exposure, focusing particularly on the impacts for newborns and children up to 18 months. The assessment found that infants' exposure to bisphenol A was below levels that might result in harm; however, due to uncertainties raised in some studies relating to the potential effects of low levels of the substance, extra precautions were put in place to increase protection for those most vulnerable: newborns and infants. It also concluded that bisphenol A was capable of entering the environment in a manner that could be harmful to wildlife. For this reason, the substance was added to Schedule 1 of the *Canadian Environmental Protection Act*, setting the stage for a range of measures to protect human health and the environment.

Using a whole-of-government approach, a comprehensive suite of regulations and other control measures were implemented to address potential exposures from a wide range of sources, including:

- <Banning> polycarbonate baby bottles containing bisphenol A under the *Canadian Consumer Product Safety Act*.
- Adding bisphenol A to the <Cosmetic Ingredient Hotlist> under the *Food and Drugs Act*.
- Evaluating of pre-market submissions for infant formula under the *Food and Drugs Act*.
- Developing and implementing a <pollution prevention plan> respecting bisphenol A in industrial effluents.

continued on page 6

CONSULTATIONS & ENGAGEMENT

Public comment sought on proposed approach for prioritizing nanomaterials

Health Canada and Environment and Climate Change Canada have released a proposed approach for prioritizing nanomaterials for public comment. The move is part of a suite of measures the government will undertake in the next phase of the CMP.

Nanomaterials are increasingly being used in the marketplace in a wide range of products and substances. As part of its ongoing efforts to mitigate their potential health risks or risks to the environment, the government has undertaken several initiatives, both at home and abroad.

Internationally, the government continues to work with the Organisation for Economic Cooperation and Development to align and improve the scientific knowledge of nanomaterials and to use that knowledge to develop consistent risk assessment approaches.

As part of its efforts domestically, the government is prioritizing certain nanomaterials in commerce in Canada for further action. Substances under consideration are those on the *Domestic Substances List* whose nanoscale forms have not been evaluated as a part of previous CMP phases.

In 2015, the government initiated consultations on the <*Proposed Approach to Address Nanoscale Forms of Substances on the* Domestic

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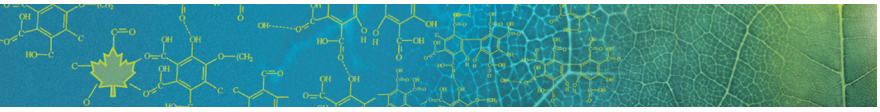


Substances of interest, continued from page 5

- Negotiating and implementing an <environmental performance agreement respecting bisphenol A in paper recycling mill effluents> with 13 paper recycling companies.

To date, industry compliance with these measures has been high. Compliance monitoring indicates that baby bottles containing bisphenol A are no longer being imported into Canada, and all four facilities required to develop pollution prevention plans are anticipated to meet the <risk management objectives>. An evaluation of emission reductions from recyclers will be conducted in 2017. Also, despite having no formal requirement to do so, manufacturers of infant formula have phased out the use of packaging materials containing bisphenol A in favour of alternatives free of the substance.

The government continues to conduct <research on the risks posed by bisphenol A>, and a range of monitoring activities is being conducted to determine the levels of Canadian exposure under the <Canadian Total Diet Study>, the <Maternal-Infant Research on Environmental Chemicals> and the <Canadian Health Measures Survey>. Findings from these and other studies will serve to guide further decisions on measures to protect Canadians and the environment.

For more information on bisphenol A and government actions to date, visit the <Chemicals Substances website>.

Organic flame retardants

The government plans to release draft risk assessments, draft State of the Science reports and risk management scopes, if required, for a grouping of 10 organic flame retardants during the summer of 2016.

Flame retardants are commonly used to prevent fires from starting and spreading. There are many kinds of flame retardants used in many products and applications, including fabrics, electrical components, vehicles, roofing materials, adhesives and lubricants.

Once published, the draft risk assessments, draft State of the Science reports and risk management scopes, if required, will be available for public comment for 60 days, after which final assessments and risk management approaches, if required, will be prepared.

These substances were selected for attention because of their potential to persist in the environment for long periods of time and because of potential exposure to consumers and children. Also, these substances are potential alternatives for other flame retardants which are now subject to controls in Canada and/or globally.

For more information, including assessments and risk management information as it becomes available, please consult the government's <approach on organic flame retardants> on the Chemical Substances website. ◆

Consultations, continued from p. 5

Substances List> to gain feedback from stakeholders on the overall approach. Also in 2015, information on existing nanomaterials was collected through a mandatory information-gathering survey published under section 71 of the *Canadian Environmental Protection Act, 1999*.

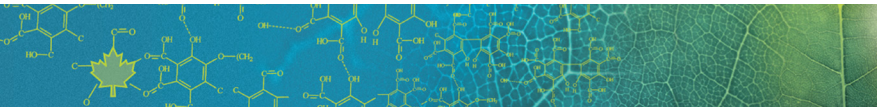
A stakeholder workshop was also held in June to seek input on the draft approach.

Stakeholders interested in further information can contact <ec.substances.ec@canada.ca>.

Stakeholder engagement opportunities in the new phase

Stakeholder engagement will continue to be an important feature of the CMP. This past spring, the Stakeholder Advisory Council was renewed for a five-year mandate. New membership reflects priorities under this phase of the CMP. A new communications sub-group was created to focus on improving communications around the CMP. It will report to the Council at the November 2016 meeting. Furthermore, a variety of stakeholder meetings and consultations will be pursued.

To increase predictability and communications with stakeholders, a risk assessment work plan will be published. It provides the start date for each assessment, and identifies the timeframe within which information should be provided, as well as the expected publication date. A risk management work plan will also be published to provide information on coming stakeholder opportunities for engaging in risk management process activities. ◆



CMP UPDATES

Evaluation of CMP now publicly available

The <Evaluation of Phase II of the Chemical Management Plan 2011-2012 to 2015-2016> was completed by Heath Canada and Environment and Climate Change Canada in June 2015. The purpose of the evaluation was to access the relevance and performance of the program between 2011 and 2014 in order to support the renewal of the program and its ongoing development and management.

The evaluation demonstrated an ongoing need for the CMP to manage the risks to human health and the environment of some chemical substances, and to meet the government's commitment to assess the 4,300 priority existing substances by 2020. The program has made substantial progress in all of its functional activity areas, including risk assessment and risk management.

CMP Science Committee: Mandate being reviewed

A review of the mandate of the CMP Science Committee will be completed by the fall of 2016 to ensure its continued relevance for the next phase of the CMP.

The review, initiated by the committee's secretariat, will examine its effectiveness, efficiency and operations. It will also identify opportunities for administrative and management improvements.

Committee members will be engaged throughout the review process, and a final report is expected before the end of the year.

The Science Committee's mandate is to provide external input to Health Canada and Environment and Climate Change Canada on important scientific considerations in the delivery of the CMP.

Visit the <CMP Science Committee> website for committee reports and meeting records. A mid-term progress report was also recently published summarizing the first three committee meetings, including information on how the departments have used the committee's input.

Free workshops target chemical awareness

Interested in learning what you can do to minimize potential health risks associated with chemical substances? CMP staff across the country provide free workshops, in both English and French, on how to maintain a healthy living environment. The workshops focus on protecting vulnerable populations and are delivered to people who interact directly with them, such as nurses, personal care workers, daycare workers and parents.

The workshops are centred on various learning modules, called the *Chemicals Awareness and Learning Modules*, which are based on best practices linked to the CMP.

The modules build awareness about where Canadians may be exposed to chemical substances in their home environment, and offer practical information about actions they can take to minimize potential health risks associated with those substances.

In addition to learning about the government's efforts to protect Canadians, participants learn to use Health Canada tools and resources to continue to educate and protect vulnerable populations.

Each session uses hands-on activities and adult learning approaches suited to the participants' needs.

If you are aware of a group that may be interested in attending a workshop, please contact:

- Atlantic region: 506-851-2059
- British Columbia region: 604-666-3641
- Ontario region: 416-952-5082
- Manitoba/Saskatchewan office: 204-227-8384 or 204-594-8067
- Alberta office: 780-495-4543
- Quebec region: 450-928-4495

New 'Risk Assessment Series' fact sheets on the Chemical Substances website

New fact sheets covering topics in risk assessment are being published on the Chemical Substances website as part of the CMP.

The goal of the Risk Assessment Series is to provide engaged stakeholders with information describing how the government addresses specific risk assessment issues and to explain various aspects of the program. Many of the topics in the series have been raised by stakeholders in recent years.

The <risk assessment> webpage has been updated to provide a more

▸ *continued on page 8*

Updates, continued from page 7

comprehensive overview of risk assessment, with a focus on the existing substances program. This page provides links to the corresponding fact sheets. The first four fact sheets cover:

- The Risk Assessment Toolbox
- Types of risk assessment documents
- Public comments on risk assessment documents
- Information-gathering for risk assessment

More fact sheets are planned for publication over the next 18 months on additional topics related to risk assessment. Watch the Chemical Substances website for updates.

Consultation on non-regulatory initiatives identifies areas for improvement

At the end of February 2016, Health Canada concluded a six-week long online consultation with stakeholders on non-regulatory initiatives aimed at reducing the release into the environment of substances and products regulated by the *Food & Drugs Act*.

The goal of the consultation was to support a dialogue about where improvements could be made to existing non-regulatory initiatives, or where new non-regulatory initiatives could be developed. These include such things as voluntary policies, guidelines, standards of practice, procedures, environmental stewardship programs, extended producer responsibility and good manufacturing processes.

Four themes identified as potential areas for improvement helped organize the dialogue:

- Take-back programs for products regulated by the *Food and Drugs Act*;
- Education/guidance on how to properly dispose of products regulated by the *Food and Drugs Act* and on non-regulatory initiatives in general;
- Logos/labelling; and
- Uniform definitions as well as monitoring and tracking of data surrounding initiatives.

The consultation benefitted from participation from a wide range of stakeholders across the *Food and Drugs Act* commodity groups. These include pharmaceuticals, cosmetics, veterinary drugs, natural health products, biologics, radiopharmaceuticals, novel foods, food additives and medical devices.

The outcome of the consultation will help Health Canada understand where stakeholder interests and resources lie in finding solutions to help protect the environment and, indirectly, human health, and how the department can best situate itself to participate in a path forward, which may include partnerships with other stakeholder groups.

Once an analysis of the consultation findings has been completed, a report detailing the outcome and possible next steps will be distributed to participants.

For information, contact <nri_consultations@hc-sc.gc.ca>. ◆

INTERNATIONAL ACTIVITIES

Regulatory Cooperation Council Stakeholder Event

The Canada-United States Regulatory Cooperation Council held a stakeholder event May 4-5, 2016 in Washington, D.C., to share information on the next work planning phase of this initiative and to allow stakeholders to meet with senior officials across a number of departments and agencies.

A session on chemicals management was attended by a broad range of stakeholders from both Canada and the United States, and ideas for future work plans in this area were discussed. Using the input received, a chemicals management work plan update will be posted in June outlining details of remaining work to be undertaken on existing work plans (Risk Assessment and Significant New Activity/Significant New Use Rules) and identify new areas of interest for potential future work plans.

Canada-Pan American Health Organization project to share Canadian knowledge and experience

In February 2016, Canada and the Pan American Health Organization

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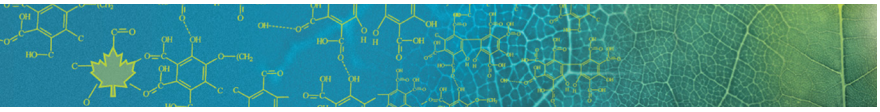

International, continued from page 8

jointly approved a two-year project under their 2016-2017 Biennial Workplan to share Canada's knowledge and experience in chemicals management. Health Canada and the Pan American Health Organization will work together to organize and deliver workshops, webinars and other information products based on Canada's technical knowledge, tools, lessons learned and best practices in chemicals management gained over the last 30 years. The project aims to enhance capacity to address the health risks of chemicals in Central and South America.

Strategic Approach to International Chemicals Management – intersessional process

The Fourth Session of the International Conference on Chemicals Management initiated an intersessional process to discuss the Strategic Approach to International Chemicals Management and the sound management of chemicals and waste beyond 2020. The process will be open to all stakeholders and include three meetings before the Fifth Session of the International Conference on Chemicals Management scheduled for 2020. The first meeting of the intersessional process will be held February 7-9, 2017, at a location yet to be determined. The secretariat will issue a call for participation in the second half of 2016. To support the discussion, there will be an independent evaluation of the Strategic Approach that will take into account the Strategic Approach to International Chemicals Management progress reports, and may also include collecting information from stakeholders on their experiences, including Canadian experiences with the CMP. The first draft of the evaluation report is expected in November 2016.

Canada-led resolution adopted by the 69th World Health Assembly

A Canadian-led resolution on *The role of the health sector in the Strategic Approach to International Chemicals Management towards the 2020 goal and beyond* was adopted at the 69th World Health Assembly in May, 2016. It was co-sponsored by over 30 other countries. The resolution seeks to strengthen engagement of the health sector in chemicals management and accelerate progress towards the 2020 goal for the sound management of chemicals, as well as the United Nations 2030 Sustainable Development Agenda adopted in September 2015. The resolution calls for the development of a roadmap outlining concrete actions for the health sector, with a focus on actions by member states. In addition, the resolution calls for the development of a technical report on the impacts of waste on health, current work in this area, and possible further actions to protect health.

Multilateral Environment Agreement Strategy Workshop

On February 26, 2016, Environment and Climate Change Canada held a multi-stakeholder workshop to explore opportunities for strategic international engagement under chemicals-related multilateral environmental agreements.

The working session was successful in achieving its purpose, which was to:

- Share Environment and Climate Change Canada's objectives for international engagement in the context of the multilateral environment agreements; and
- Raise awareness and generate feedback on mechanisms and activities that can contribute to advancing and delivering Canada's objectives under the multilateral environmental agreements.

A group of knowledgeable individuals from the chemicals management stakeholder community and related fields participated in the workshop. The group of 14 included representatives from environmental non-government organizations, indigenous organizations, provinces and industry, as well as independent experts. Representatives from Environment and Climate Change Canada, as well as Health Canada, the Pest Management Regulatory Agency and Justice Canada, were also present. Feedback at the workshop will advance development of Environment and Climate Change Canada's strategy on this topic. ◆

SPOTLIGHT: SCIENCE

Science provides solid underpinning for the CMP

Reducing the risks of harmful substances requires complex information and decisions on a wide range of questions. What effect might a substance have? How are people or the environment exposed to it? What are the most effective ways to control it?

Science is a critical element of the CMP in that it provides answers to questions such as these, as well as insight into complex questions about chemicals and how to manage them.

Scientific research is a fundamental element of the CMP, and addresses gaps in our knowledge about chemicals and their effects. It also helps develop effective strategies for risk management. Federal scientists also investigate emerging substance issues and develop new tools and methods to ensure that government decisions are based on up-to-date science and technological developments.

Closely integrated with research are monitoring and surveillance activities, which collect information on levels of priority chemicals in the environment and characterize trends. This information is used to set priorities for assessment and management and to identify trends over time. Monitoring activities conducted through the CMP include input to the <Canadian Health Measures Survey>, which collects information on a variety of health indicators, including Canadians' exposure to chemical substances, and the <Northern Contaminants Program>, which looks at contaminants that have been transported to the Arctic, where they remain in the environment and build up in the food chain.

Environmental monitoring and surveillance activities and research conducted from 2015 to 2016 produced 95 peer-reviewed publications and a number of exchange activities informing decision-making.

In addition to supporting program objectives, CMP monitoring also supports a range of ecological programs, including the <Canada-U.S. Great Lakes Water Quality Agreement> and the <Stockholm Convention on Persistent Organic Pollutants>.

Over the last few years, a review of the National Pollutant Release Inventory substances list was conducted to ensure that the data it contains is relevant and meets CMP data needs. Approximately 400 groups or single substances were included in the review, which has resulted to date in one addition of a *Canadian Environmental Protection Act, 1999* toxic substance, the deletion of 26 substances and 10 changes of reporting thresholds to better align with CMP data needs.

Data quality continues to be a priority for the National Pollutant Release Inventory, and to ensure data products are meaningful for users, the government will explore opportunities to expand linkages between Inventory and other information and data sets to provide more context around the data.

In addition to collecting, reviewing and evaluating scientific data from thousands of sources to understand risks and control them, work during the risk assessment and management

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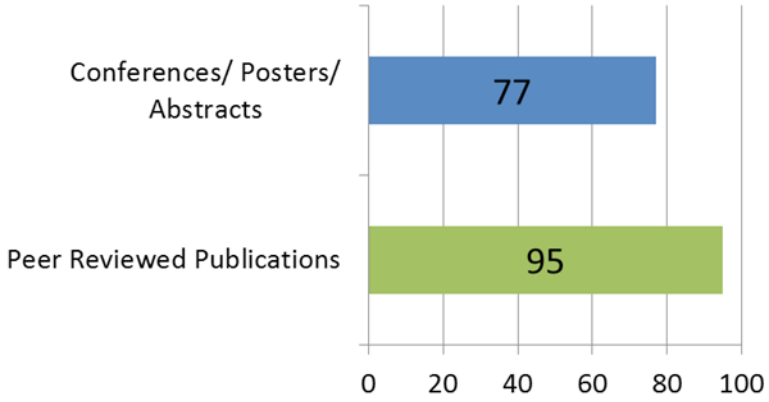
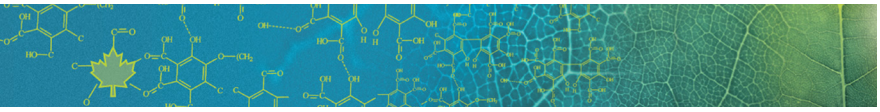


Number of knowledge transfer activities from 2015 to 2016 related to research, monitoring and surveillance conducted on environmental CMP priorities.



Science, continued from page 10

phases also involves developing the scientific approaches and tools needed for decision-making. This includes setting standards for unacceptable types and levels of exposure and using computer models to help predict a wide range of potential effects. It also involves using approaches that enable the government to be better positioned to recognize concerns, track emerging issues and identify and prioritize substances. As such, a total of 28 substances were identified as candidates for risk assessment as part of the <Identifying Risk Assessment Priorities> approach and have been recommended to be addressed in this phase of the CMP.

Assessments are typically reviewed by technical experts outside the program to ensure the conclusions are scientifically sound.

The CMP Science Committee, formed in 2013, contributes expertise to the departments pertaining to scientific considerations in the delivery of the program. In particular, committee discussions on capturing and communicating uncertainty and the use of read-across in risk assessment have led to improved guidance for risk assessors in these two areas.

As chemicals continue to emerge, evolve and increase in complexity, science is more important than ever to federal efforts to provide a clean, safe, and sustainable environment for Canadians. ◆

COMING PUBLICATIONS

The following are expected to be published before the end of the year:

Science Approach Documents

- Integrated Approach to Ecological Risk Classification of Organic Substances
- Human Health Threshold of Toxicological Concern Approach
- Human Health Low Exposure Biomonitoring Approach
- Human Health Early Bioequivalence/Biomonitoring

Draft screening assessments and risk management scopes (when needed) for:

- 2-EHA derivatives
- Alkyl sulfates and olefin sulfonates
- *Bacillus circulans* + *Bacillus megaterium*
- Boron (boric acid and its salts and precursors)
- Chloral hydrate
- Formic acid and formates
- Organic flame retardants
- Propane, ethane and butanes
- Substituted diphenylamines
- *Trichoderma reesei*

Final screening assessments and risk management approaches (when needed) for:

- Azo disperse dyes
- Batch 12 mitotane, BAPP & sclareol
- Cobalt and cobalt-containing substances
- Methylenediphenyl diisocyanates and diamines
- Nineteen substances on the *Domestic Substances List* associated with pesticidal uses
- Petroleum Sector Stream Approach, Stream 4: liquefied petroleum gases
- Petroleum Sector Stream Approach, Stream 4: natural gas condensates
- Rapid screening of chemicals from Phase II of the *Domestic Substances List* inventory update
- Rapid screening of polymers from Phase II of the *Domestic Substances List* inventory update
- Triclosan
- Petroleum Sector Stream Approach, Stream 4: asphalt
- Petroleum Sector Stream Approach, Stream 4: distillate aromatic extracts

continued on page 12

▸ *Coming publications, continued from page 11*

Significant New Activity Publications:

- Publications relating to the review of Significant New Activity Notices and Orders:
  - Notice of intent to amend the *Domestic Substances List* to vary or rescind the significant new activity requirements in relation to 27 substances.
  - Notice of intent to vary the Significant New Activity Notice No. 13712a (variation to Significant New Activity Notice No. 13712).
  - Following the assessments of subgroups from the Aromatic Azo and Benzidine-based Substance Grouping, orders may be published (as appropriate) to indicate that the SNAc provisions no longer apply to certain substances.
- Notice of intent to amend the *Domestic Substances List* to indicate that the Significant New Activity provisions apply to the substance AEEA (CAS RN 111-41-1).
- Order amending the *Domestic Substances List* to indicate that the Significant New Activity provisions apply to the living organism Pseudomonas fluorescens (ATCC 13525).
- Notice of intent to amend the *Domestic Substances List* to indicate that the Significant New Activity provisions apply to substances from the rapid screening of substances identified from Phase I and II of the *Domestic Substances List* inventory update.
- Notice of intent to amend the *Domestic Substances List* to indicate that the Significant New Activity provisions apply to the substances 4,4′-MDA (CAS RN 101-77-9) and pMDA (CAS RN 25214-70-4).
- Notice of intent to amend the *Domestic Substances List* to indicate that the Significant New Activity provisions apply to the substance BAPP (CAS RN 13080-86-9).
- Notice of intent to amend the *Domestic Substances List* to indicate that the Significant New Activity provisions apply to the substance ethylbenzene (CAS RN 100-41-4).

Future risk management instruments

- Regulations Amending the Prohibition of Certain Toxic Substances Regulations, 2012 [HBCD, PBDEs, PFOS, PFOA, LC-PFCAs].
- Regulations Amending the Prohibition of Certain Toxic Substances Regulations, 2012 [BNST].
- Regulations Repealing the Chlor-Alkali Mercury Release Regulations.
- Regulations for Controlling Petroleum and Refinery Gas Emissions from the Petroleum and Petrochemical Sectors.
- Regulations Repealing the Vinyl Chloride Release Regulations, 1992.
- Regulations for Microbeads in Personal Care Products used to Exfoliate or Cleanse. ◆

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