Summary of Public Comments received on the Challenge substance Acrylamide (CAS 79-06-1) Draft Screening Assessment Report and Risk Management Scope document for Batch 5

Comments on the draft screening assessment report and risk management scope document for Acrylamide a substance that is being addressed as part of the Chemicals Management Plan "Challenge" were provided by Dow Chemical Canada Inc., Exponent, Canadian Vehicle Manufacturer's Association, Grocery Manufacturers Association, Food and Consumer Products of Canada, North American Polyelectrolyte Producers Association, McCain Foods (Canada), Canadian Council of Grocery Distributors, and Chemical Sensitivities Manitoba and Canadian Environmental Law Association.

A summary of comments and responses is included below, organized by topic:

- Risk Assessment
- Risk Management
- Monitoring
- Language and Key Messages
- Processing Options

TOPIC	COMMENT	RESPONSE
Risk Assessment	The risk assessment for acrylamide was overly conservative in its estimates of intake.	The estimates of exposure, though conservative in nature (consistent with screening level assessments), are considered realistic, as they have been based on extensive monitoring data.
	The risk assessment did not take into account recent epidemiology studies which questioned the link between cancer and acrylamide	The results of this study were reviewed and it was determined that it would not impact the conclusions of the assessment.
	It was suggested that an expanded presentation that included more types of fried foods instead of just French fries would be helpful and there should be a comparison to other international estimates of intake.	Although levels of urinary acrylamide metabolites were compared following the consumption of various fried foods, only the consumption of french fries resulted in a statistically significant increase in the urinary levels of acrylamide metabolites. In the final paragraph of the exposure assessment section, a comparison is noted between concentrations of acrylamide in foods in Canada and in the United States.
	The potential negative health impacts from the consumption of food borne acrylamide are not known nor are the levels at which these potential impacts occur.	Dietary exposure to acrylamide has been identified as a potential concern by the Joint FAO/WHO Expert Committee on Food Additives (JECFA). While further research on the human health effects of dietary exposure to acrylamide will further refine the

		characteristics of risk, the Government of Canada is acting on JECFA's recommendation to reduce exposure to food borne acrylamide. The Government is taking a precautionary approach to help reduce, as much as possible, Canadians' exposure to acrylamide from food through a variety of risk management strategies.
	Brand names of products sampled as part of the Food Directorate's Acrylamide Monitoring Program should not be published.	The Food Directorate of Health Canada has been publishing brand names of products sampled in its food surveys for several years, as part of its commitment to improve the Government of Canada's openness and transparency, as well as providing proactive communications on its science-based decision making.
	Acrylamide is formed from naturally occurring constituents in food.	The Government of Canada has acknowledged that acrylamide is not intentionally added to food and that it forms from naturally occurring components in certain foods when cooked at sufficiently high temperatures.
Risk Management	The risk management scope documents should include potential instruments, instrument selection rationale and potential implementation plans for instruments. The proposed risk management actions in the scope documents are broad in nature and activities that pose no risk may be inadvertently captured in the process depending on the results of the final screening assessments. Stakeholder views and input are essential in the further development of risk management approaches.	The risk management scope documents are intended to provide the Government of Canada's initial thinking of the areas where options for risk management are being investigated and to begin consultations with the implicated sectors. As such these documents are intended to be as informative as possible at this early stage. The details on the proposed risk management actions contained in these documents are dependent on the quantity and quality of the information which is available at the early stage of the process.
	A number of uses and potential sources were identified for acrylamide which included products and facilities in Canada. Yet no products or facilities were determined to present an unacceptable risk or identified for risk management.	The Government of Canada will not require risk management activities from industrial facilities using acrylamide at this point in time as they were not identified in the screening assessment as posing a significant risk to human health or the environment.
	Due to its carcinogenicity and reproductive toxicity, acrylamide should be eliminated from industrial and	Based on the information received from domestic industries and international peer-reviewed studies, the Government of Canada

	consumer applications.	has concluded that the use of products containing residual acrylamide do not present a significant exposure source of acrylamide to the Canadian public.
	In the case of acrylamide, the information and data presented, the government of Canada has appropriately identified the *Food and Drug Act* as the authority to control acrylamide. As such why should acrylamide be added to Schedule 1 of CEPA, 1999?	As acrylamide has been found to meet the criteria of s.64 of CEPA, 1999 it is being recommended to be added to Schedule 1. It is the Government of Canada's goal to use the most appropriate act for managing the risks of substances that are added to the List of Toxic Substance in Schedule 1 of CEPA 1999. This approach respects the direction provided by the Cabinet Directive on Streamlining Regulation to use the most efficient and effective approach to regulating.
	The Government should consider the time required for packaging/product changes, and provide sufficient notification to the industry to implement changes required. Industry has made significant efforts to reduce acrylamide in pre-packaged food.	The Government of Canada will continue to consult with industry on risk management actions related to acrylamide and the efforts to reduce acrylamide levels in processed food and food-service industry products. The Government of Canada is aware of changes implemented by food processors, which have already resulted in the reduction of acrylamide levels in certain foods.
	The Risk Management Strategy for acrylamide in food could lead to detrimental material changes in Canadians' diet and in the potato industry.	Apart from advice to limit foods high in fat, sugar or salt, consistent with a healthy diet, the Government of Canada does not recommend any changes to dietary habits as it relates to acrylamide from food borne sources. Based on the current scientific evidence, the Government of Canada is not able to recommend maximum exposure levels or to set daily consumption limits for specific foods containing acrylamide. Rather, the Government of Canada has provided simple measures as to how consumers can reduce their exposure to acrylamide from food sources. Based on the available information to date, the reference to French fries and potato chips having the highest concentrations of acrylamide is accurate. As mentioned previously, we have made every effort to provide accurate, balanced information and advice. One of the goals of the Acrylamide Monitoring Program is to better capture what other food commodities might also contribute to exposure among the Canadian population to acrylamide using the most recent Canadian consumption data

		available. Any messaging about which foods might contribute to dietary acrylamide exposure will be updated and revised accordingly as new data becomes available.
Monitoring	The Acrylamide Monitoring Program must be broad in scope in order to capture acrylamide levels in the Canadian food supply. It must be informed by Canadian consumption data. Industry has submitted separate comments to the Government of Canada on the Acrylamide Monitoring Program.	One of the goals of the Acrylamide Monitoring Program is to better capture what other food commodities might also contribute to acrylamide exposure among the Canadian population using the most recent Canadian consumption data, as well as market share data, as available.
	Accurate and comprehensive baseline data and an effective ongoing Monitoring Program are critical to the success of the Government of Canada's Risk Management Strategy.	The Acrylamide Monitoring Program was designed as an iterative process and therefore it is not expected that results from a single sampling would be adequate to meet all of the Program's objectives. It is possible that further sampling may need to be completed in order to obtain a more complete baseline prior to assessing the impacts of reduction strategies for certain food commodities.
	Sampling protocol for food commodities must be valid and conducted in a way that is transparent to key stakeholders.	The Government of Canada agrees that the sampling and analyses of food commodities for acrylamide must be conducted in such a manner as to yield accurate and reproducible results. Government of Canada food research laboratories participate in international proficiency testing programs to ensure the quality of acrylamide survey data in various food commodities prior to any publication of this data or use in exposure assessment. Information provided to the Government of Canada has been shared with analytical scientists for the Acrylamide Monitoring Program
	Duplicate testing of products is needed to validate results from the Acrylamide Monitoring Plan.	The Government of Canada is not in a position to collect and share duplicate samples of all brands that are to be included in the sampling plan. However, a round robin study for acrylamide in selected test products in question has been proposed. This inter-laboratory comparison would serve to disclose any discrepancy in measurements reported by each of the participating laboratories.
	Market share data should inform the Government of Canada's Acrylamide Monitoring Program.	Where available, the sampling plan does incorporate market share data and those brands holding a large share of the market.

	Any data collected for the Acrylamide Monitoring Program should be shared with the brand owner prior to publication.	The Government of Canada will continue to make every effort to share findings from its food surveys with those stakeholders whose brands were included in the survey in advance of making the results broadly available through publication.
	The high variability of acrylamide in foods is a challenge to any monitoring program.	Because levels can vary significantly both within and across products, resources were directed towards accounting for both the majority of food commodities known to contain acrylamide, and within and between lot variability in major brands of these commodities. The Government of Canada will require industry's assistance in elucidating such variability based on starting ingredients and industry processing practices.
	The sampling and monitoring protocol should be published prior to initiation of the monitoring program.	The food industry was consulted on the details of the Acrylamide Monitoring Program and invited to comment. All input has been considered in finalising its sampling plan.
	Improved monitoring should be undertaken, i.e., presence of acrylamide and metabolites in human tissues.	Health Canada, through the CMP, is undertaking targeted projects that include measurements of acrylamide and its metabolites in human tissues, foods, and drinking water.
	No one tool can effectively control acrylamide formation in all foods.	The Government of Canada agrees that no one tool can reduce acrylamide levels in all processed foods or across all food commodities within which it can form. This is why, in this first phase of sampling as part of the Acrylamide Monitoring Program, many food commodities have been included in the initial sampling plan.
	Industry should be able to share data confidentially	Individual companies and corporations are encouraged to share data with the Government of Canada. Confidential data supplied will be treated as such, according to the required procedures.
	The role of home cooking and food service plays in exposure should be accounted for.	It is import to estimate exposure from both the food service industry and those foods cooked in the home, in addition to the ready-to-eat processed food products available on the market. The initial phase of the sampling plan has included foods available in the food service industry. For sampled products cooked in the home, preparation will be done under conditions resembling those

		found in the home or cafeteria environment. Due to the variability in cooking practices between consumers, it will not be possible to capture the range of exposures that may be experienced based on individual cooking habits. However, information derived from this monitoring program will allow the Government of Canada and industry to make recommendations to consumers about how foods should be prepared in the home.
	Public data, including that posted on Health Canada's acrylamide web pages, must reflect the marketplace and amounts consumed in a typical diet. The current data on the website does not meet both criteria	Health Canada's Food and Nutrition website clearly states that exposure to any chemical in food is affected by (1) the concentration of the chemical in food; and (2) the amount of the food consumed. Therefore, both the chemical concentration and the amount of food consumed by an individual are needed to estimate exposure.
Language and key message	There is concern about negative publicity and consumer reaction as a result of the assessment and communications concerning acrylamide. Clear communications is required.	Public documents can significantly impact consumer understanding of acrylamide and other food safety issues. The Government of Canada will continue to endeavour to ensure that clear messaging is provided in information for the public on this issue.
Processing options	Appropriate regulatory changes should be made to allow for the implementation of processing options for standardized and non-standardized products to assist acrylamide reduction strategies.	The Government of Canada continues to support the development and implementation of additional safe and efficacious tools that will minimize acrylamide formation in foods. This includes the use of the enzyme asparaginase in food processing. The Government of Canada has completed a safety assessment of the food additive submission for asparaginase and determined that there is no public health or safety concerns with its use in certain food products. In addition, efficacy data demonstrated that the use of asparaginase results in less acrylamide in foods. Therefore, the Government is proposing amendments to the Regulations to allow asparaginase to be used in the manufacture of bread and other foods. Given that asparaginase is a rather unique food additive that may be of benefit to the health of Canadians insofar as it can reduce acrylamide formation, the Government of Canada has assigned a high priority to enabling its use.
	There is concern with the possibility that the	While reduction targets may be a regulatory option for

	planned Acrylamide Monitoring Program could eventually be used to set reduction targets.	consideration in the future, it is not a mechanism that the Government of Canada is recommending at this time. Currently, information available does not allow for the determination or proposal of recommended maximum levels for acrylamide in acrylamide-containing foods. The early phases of the Acrylamide Monitoring Program will help to address this issue. If future consideration were given to reduction targets, e.g. through Good Manufacturing Practice, this would involve further consultation with industry as to what targets would be feasible and for which food commodities.
	The Government of Canada should use the Confederation of the food and drink industries of the EU (CIAA) Toolbox and the Codex Code of Practice in efforts to provide guidance on best practices and to encourage industry to develop and implement acrylamide reduction strategies.	The CIAA Toolbox is a valuable resource for helping to identify appropriate and feasible solutions to reduce dietary exposure to acrylamide from food sources. We agree that this document, as well as the Codex Alimentarius Commission's Committee for contaminants in Foods' (CCCF) "Code of Practice for the Reduction of Acrylamide in Foods" (CoP), would be the best-placed documents to provide guidance on best practices and to encourage industry to adopt and implement acrylamide reduction practices. The Government of Canada will continue to work with interested stakeholders to facilitate the use of the CIAA Toolbox and CoP, in order to ensure that the industry is aware of the best practices, as well as uses, for acrylamide reduction in pre-packaged foods and to engage the food industry in the further development and implementation of these evolving documents.