

Summary of Public Comments received on the Challenge substance n-butyl glycidyl ether (CAS 2426-08-6) Draft Screening Assessment Report and Risk Management Scope document for Batch 7

Comments on the draft screening assessment report for n-butyl glycidyl to be addressed as part of the Chemicals Management Plan Challenge were provided by International Institute of Concern for Public Health (IICPH) and Crooked Creek Conservancy Society of Athabasca.

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

- Exposure
- Toxicity
- Research and Monitoring
- Risk Management Scope

TOPIC	COMMENT	RESPONSE
Exposure	There are uncertainties in the concentrations of n-butyl glycidyl ether in environmental media and consumer products, and the lack of information does not preclude the substance from being present in these media.	<p>With respect to uncertainty in the concentrations estimated for environmental media, the moderate importation volumes, small quantity released to the environment from industrial facilities, the lack of persistence and the reactive nature of the substance support the conclusion that the exposure of the general population from environmental media is likely to be low.</p> <p>The information submitted by industry on products containing <i>n</i>-butyl glycidyl ether, combined with an extensive literature search, indicate that the majority of products in which <i>n</i>-butyl glycidyl ether is used are intended for occupational applications. Assessment of the available data indicates that consumer products are not expected to pose a significant contribution to exposure.</p>
	The scope of the assessments should include effects of exposure on vulnerable sub-populations including those occupationally exposed.	The Challenge screening assessments are based on consideration of the available data. The conservative exposure scenarios used are considered to be protective of vulnerable populations in Canada, and do incorporate specific exposure estimates for Canadians of different ages. If information were available suggesting a specific sub-population would be particularly vulnerable, that information

		<p>would be considered in the assessment.</p> <p>Hazard information obtained from occupational settings, in particular data from epidemiological investigations, is considered in the screening assessments. The information developed through the Chemicals Management Plan may be used to inform decisions concerning additional actions to minimize exposure to workers. The Government of Canada is working to communicate results to appropriate occupational health and safety groups.</p>
	<p>Further research should be conducted to investigate concentrations of <i>n</i>-butyl glycidyl ether in consumer products and environmental media resulting from releases or disposal, as such information would be important to ensure that risk management addresses all sources of exposure.</p>	<p>With regard to further research and quantification of <i>n</i>-butyl glycidyl ether in environmental media, the moderate importation volume, small quantity released to the environment, lack of persistence and reactive nature of the substance suggest that this substance would not be a priority for environmental monitoring. Likewise, since most of the products identified are intended for industrial applications and proposed risk management measures will address any new uses, further investigation of concentrations of <i>n</i>-butyl glycidyl ether in consumer products would not be considered a high priority at this time.</p>
Toxicity	<p>In light of its potential carcinogenicity, genotoxicity and various non-cancer effects at relatively low margins of exposure, <i>n</i>-butyl glycidyl ether should be designated as toxic under CEPA 1999 and added to the List of Toxic Substances in Schedule 1.</p>	<p>The available data were considered sufficient to support the proposed conclusion that <i>n</i>-butyl glycidyl ether meets the criteria of section 64 of CEPA 1999. In addition, the Ministers of the Environment and Health recommend the addition of <i>n</i>-butyl glycidyl ether to the List of Toxic Substances in Schedule 1 of CEPA 1999 and risk management actions will be developed.</p>
Research and Monitoring	<p>It is not clear how and when research and monitoring will support verification of assumptions used during the screening assessment.</p>	<p>While there are some uncertainties in the database on the potential carcinogenicity associated with <i>n</i>-butyl glycidyl ether, the currently available data were considered sufficient to support the proposed conclusion that <i>n</i>-butyl glycidyl ether meets the criteria of section 64 of CEPA 1999. With respect to exposure characterization, given the industrial uses of the substance, moderate import quantity, small quantity released to the environment and lack of persistence, <i>n</i>-butyl glycidyl ether would not be a priority for additional monitoring and research.</p>
Risk	<p>Proposed risk management activities were not</p>	<p>The Government's proposed risk management activities focus on</p>

Management Scope	justified in the risk management scope and are considered limited. Additional measures should be taken to broaden the risk management scope to include exposure reduction, especially for vulnerable populations. In addition, a more precautionary approach to the risk management of <i>n</i> -butyl glycidyl ether should have been taken because of its hazardous properties and uncertainties in the assessment.	the risks identified in the screening assessment based on the information available. Proposed risk management includes a requirement for notification of the federal government regarding any potential changes in use pattern for <i>n</i> -butyl glycidyl ether so that the potential for exposure to the Canadian population does not substantially increase. Since exposure to <i>n</i> -butyl glycidyl ether from consumer products and environmental media is expected to be low and given the conservative exposure scenarios used in the screening assessment, these measures are considered to be protective of vulnerable populations in Canada.
	Proposed risk management should address the potential presence of <i>n</i> -butyl glycidyl ether as an impurity in various products.	The screening assessment did not identify evidence to suggest this substance would be present in consumer products other than those characterized in the report. Most of the products identified were intended for industrial applications. Therefore, as proposed risk management activities focus on the risks identified in the screening assessment, use of the requirement for notification of any changes in use pattern was determined to provide the necessary protection to adequately address the risk.