

## Summary of Public Comments received on the Batch 10 Challenge substance hydrazine (CAS RN 302-01-2) Proposed Risk Management Approach

Comments on the proposed risk management approach for hydrazine, being addressed as part of the Chemicals Management Plan Challenge, were provided by, Bruce Power, Dow Chemical Canada ULC, Inuit Tapiriit Kanatami, and Ontario Power Generation. A summary of comments and responses is included below, organized by topic:

- Alternatives
- Occupational exposure
- Risk Management
- Significant New Activity Provisions
- Pollution Prevention Planning
- National Pollutant Release Inventory (NPRI)
- Environmental Emergencies

Topic	Comment	Response
Alternatives	The safety and efficacy of potential alternatives needs to be determined. There are some concerns that the alternatives being used are not as effective as hydrazine which may cause an increase in the concentration of harmful substances. More research on safer alternatives is needed.	The availability of substitutes and the socio-economic impact and benefits of substitutes are considered during the development of risk management regulations or instruments. The power generating industry has identified several potential alternative chemicals for hydrazine. None of these chemicals were considered adequate replacements for in this sector. New information on hydrazine and its potential substitutes is reviewed and further evaluation activities, if warranted, are considered in keeping with other assessment priorities.
Occupational exposure	The proposed risk management approach is not sufficiently protective of those who are chronically exposed to hydrazine, such as workers.	Exposure of the general population to chemicals through environmental media (e.g., food, ambient air, soil) and consumer products is taken into account in developing both the assessment and risk management approach documents. Hazard information obtained from occupational settings, in particular epidemiological information, is considered in the risk assessment. The information developed through the CMP process may be used to inform decisions concerning additional actions to minimize exposure to workers by the relevant jurisdictions.

Risk Management	Hydrazine releases from electricity generating facilities are regulated under several jurisdictions. Harmonization of controls imposed on the use of hydrazine among the various federal and provincial regulators is encouraged in order to ensure regulatory consistency.	The Government recognizes that other jurisdictions have controls on hydrazine and these controls were considered in the process of determining the risk management needs for hydrazine. The Pollution Prevention planning notice is being developed to provide consistency with the requirements across Canada and will take into consideration the requirements of other jurisdictions. It is expected that sampling and reporting for this instrument will be consistent with existing federal and provincial requirements.
Significant New Activity Provisions	Hydrazine is found in many products. Exposure to hydrazine from these products is considered negligible. Therefore, any application where hydrazine is present (intentionally or not) should be allowed under the SNAc provisions.	A risk assessment is a function of the hazard of a substance coupled with exposure to the substance. Based on considerations of the available data, current exposure to Canadians from hydrazine is considered negligible. However, Hydrazine is considered to be highly hazardous to human health and should exposure increase from targeted new uses, a further assessment may be warranted to determine the risks to Canadians.
	Trace amounts of Hydrazine can be found in some plastic resins. These uses were not identified as unacceptable risks to Canadians. It is therefore recommended that specific exemptions be provided for trace impurities of Hydrazine in plastic resins and products made from these resins (intentionally present or not).	The SNAc, as stated under CEPA 1999, section 81 (6) (c), does not apply to impurities, contaminants and partially unreacted materials.
	Will the proposed Significant New Activity (SNAc) provisions under the <i>Canadian Environmental Protection Act, 1999</i> , apply to the use of hydrazine at any new power generation facilities?	The SNAc provisions have been developed such that activities that are controlled by other risk management instruments are not subject to the SNAc provisions. As such, there is an exemption for the use of hydrazine in the production of electricity as this activity is intended to be addressed by the proposed Pollution Prevention planning notice.
Pollution Prevention planning	In order to ensure that the concentration of hydrazine is measured as it enters the natural environment, there would need to be an application of the pollution planning notice at the discharge of the facility in order to provide the most accurate data to demonstrate the true effluent	The proposed Pollution Prevention planning notice may include general objectives and performance standards. The pending Canadian Federal Water Quality Guidelines (FWQG) for Fresh Water and for Marine Water will serve as the threshold concentrations. These

	<p>characteristics.</p> <p>Which generic water quality benchmarks will be used to derive the new release limits?</p>	<p>benchmarks are intended for the protection of aquatic life from the adverse effects of hydrazine.</p>
	<p>There exists an Environmental Monitoring program for nuclear facilities to monitor nuclear substances as well as hazardous substances. This monitoring program should be considered and integrated in the development of hydrazine limits and Pollution Prevention (P2) plans.</p>	<p>Environment Canada will consider all relevant information in the development of risk management instruments. Implicated stakeholders will be invited to participate in the development of the Pollution Prevention planning notice. Comment periods occur during the development process for the Pollution Prevention (P2) Planning Notice, to permit input from all stakeholders.</p>
<p>National Pollutant Release Inventory (NPRI)</p>	<p>The NPRI reporting requirements should be revised to capture releases of hydrazine from facilities that may not trigger the current reporting threshold.</p>	<p>Environment Canada considers changes to the NPRI's substances list based on criteria set out in the following guidance document found at the following website (<a href="http://www.ec.gc.ca/inrp-npri/default.asp?lang=En&amp;n=EF5F32DD-1">http://www.ec.gc.ca/inrp-npri/default.asp?lang=En&amp;n=EF5F32DD-1</a>). Substances that meet the criteria under section 64 of CEPA 1999, in particular, are given high priority in NPRI consultations. Changes to the substance list result from the NPRI consultations process and may include the addition, modification or removal of substances as well as changes in the thresholds at which they must be reported.</p>
<p>Environmental Emergencies</p>	<p>It is suggested the outcomes of the CMP Challenge not override the Environmental Emergency (E2) Regulations (E2 Regulations). The E2 Regulations have their own process and should be respected.</p>	<p>Hydrazine is already included in the E2 Regulations at a threshold of 6.8 tonnes. The emergency assessment process used to determine substance thresholds for the E2 Regulations has been updated to include the consideration of aquatic toxicity. Further information on the Environmental Emergencies Regulations can be found at the following website: <a href="http://www.ec.gc.ca/ee-ue/default.asp?lang=En&amp;n=9605FFBD-1">http://www.ec.gc.ca/ee-ue/default.asp?lang=En&amp;n=9605FFBD-1</a></p> <p>Upon examination it has been determined that changes to the regulated threshold for hydrazine are not considered necessary at this time. From time-to-time, all E2 substances may be re-evaluated to confirm or revise thresholds given new or updated data. As such, the threshold for</p>

		hydrazine in the E2 Regulations may be revised in the future should new information become available.
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