# SUMMARY OF COMMENTS RECEIVED DURING THE PRELIMINARY CONSULTATIONS ON THE POTENTIAL AMENDMENTS TO THE ENVIRONMENTAL EMERGENCY REGULATIONS AND RESPONSES

#### **OVERVIEW OF THE PRELIMINARY CONSULTATIONS**

In early 2014, Environment Canada conducted preliminary consultations (the "Preliminary Consultations") on potential amendments to the *Environmental Emergency Regulations* (the "E2 Regulations") under the *Canadian Environmental Protection Act, 1999* ("CEPA 1999") that are currently being developed. These Preliminary Consultations were completed in advance of prepublication (the "Prepublication") of proposed amendments in the *Canada Gazette*, Part I, as required under CEPA 1999. As part of the preliminary consultations, Environment Canada had prepared a Consultation Document (<a href="https://www.ec.gc.ca/ee-ue/B2B4A2B2-D46D-460F-BCD9-C742A0F79191/Consultation%20Document%20for%20E2%20Amendments\_20140305\_v12%20Final2.pdf">https://www.ec.gc.ca/ee-ue/B2B4A2B2-D46D-460F-BCD9-C742A0F79191/Consultation%20Document%20for%20E2%20Amendments\_20140305\_v12%20Final2.pdf</a>) to inform stakeholders and solicit feedback on the key elements of the modifications being considered for the E2 Regulations. This document provides a summary of the comments received for the potential amendments as presented in the Consultation Document. For each section, a response is provided to explain how Environment Canada is proposing to address the concerns raised during the Preliminary Consultations.

At the end of the 30-day consultation period, Environment Canada received 700 individual comments through the online feedback form as well as 40 written submissions. Several parties participated in the consultation process, including current regulatees; potential regulatees; representatives from other federal departments; provincial, territorial and municipal governments; industry and their associations; Aboriginal communities; and citizens.

The comments received helped to identify areas needing more clarification and areas of concern for interested and affected parties. In light of some of the comments received, Environment Canada has made some changes to the initial proposal, as explained in the table below. These changes will not compromise the environmental or human health objectives of the E2 Regulations. Also note that some of the comments received suggest that some respondents were not aware that the regulatory initiative is an amendment to existing regulations, and that most requirements already appear in the E2 Regulations, the amendment's objective being to clarify them. The current E2 Regulations are accessible here: <a href="https://www.ec.gc.ca/ee-ue/default.asp?lang=En&n=9605FFBD-1">https://www.ec.gc.ca/ee-ue/default.asp?lang=En&n=9605FFBD-1</a>.

After the preliminary consultations were completed, a departmental decision was made to repeal and replace the current E2 Regulations with new proposed E2 Regulations. Environment Canada will aim to pre-publish the proposed new E2 Regulations in the *Canada Gazette*, Part I, in 2016 for formal public comment. The new proposed E2 Regulations would come into force after their registration and publication in the *Canada Gazette*, Part II.

### **COMMENTS RECEIVED AND RESPONSES**

The following table provides a summary of the comments received for each section of the Consultation Document. A response is also provided to explain how Environment Canada is proposing to address the concerns expressed through the received comments.

Potential Amendment	Summary of Comments	Response		
SECTION A				
These potential amendments aim at increasing protection from a larger number of substances that are currently in use in large quantities in				
Canada.				
A1 Addition of substances	Strong Acids and Bases	Strong Acids and Bases		
A1.1 Add 20 substances from the Chemicals Management Plan (CMP) Challenge to Schedule 1 of the E2 Regulations.  A1.2 Add 16 substances from the Chemicals Management Plan (CMP) Petroleum Sector Stream to Schedule 1 of the E2 Regulations.  A1.3 Add 4 strong acids to Schedule 1 of the E2 Regulations.  A1.4 Add 8 strong bases to Schedule 1 of the E2 Regulations.  A1.5 Add ammonium hydroxide to Schedule 1 of the E2 Regulations.	The main concern related to the addition of strong acids and bases is that the potential minimum quantity threshold of 0.22 tonnes is too low. Other comments indicate: a possible increase in regulatory burden, that these substances are already regulated under other legislation, that these substances to do not pose a significant risk, and that concentration should be used rather than the pH to determine if the substance is subject to the E2 Regulations.  Comments also included that Environment Canada should regulate all acids/bases that meet the pH thresholds and not just the Chemical Abstract Services (CAS) registry number-specific acids/bases identified in the amendments.	In light of the comments received, the proposed minimum quantity threshold for the strong acids and bases has been revised to 3 tonnes with a concentration set at 0.1% (*see note below for rubidium hydroxide, solution). The new proposed minimum quantity threshold is set to 3 tonnes considering the following reasons:  • The concentration at 0.1% will result in a substance with a pH ≤ 2 or pH ≥ 11.5.  • The new minimum quantity threshold has been harmonized with the <i>Transportation of Dangerous Goods Regulations</i> (TDGR) for their Emergency Response Assistance Plan (ERAP) index of 3,000 liters or approximately 3 tonnes.  • According to the National Enforcement and Emergencies Management Information System and Intelligence System (NEMISIS), hydrochloric acid and sulphuric acid both were recorded as having a "moderate" impact on air, land and fresh water after a spill of 3 tonnes. One spill of sulphuric acid was identified as having a "major" impact for a spill of 4.5 tonnes.  • A "moderate" classification in NEMISIS has some of the following characteristics: there is a risk to endangered or threatened species or their habitat, or a significant life threatening risk to other wildlife; the incident causes significant disruption of public services or property damage and community health is or will be threatened; impacts of the incident on the environment are significant (e.g. fish kill) or not easily identifiable (e.g. requires further investigation).  • This minimum quantity threshold for releases of 3 tonnes in NEMISIS is also the same as the minimum quantity threshold recommended by the TDGR for their ERAP plans for sulphuric acid, nitric acid, hydrobromic acid and perchloric acid.  • The TDGR does not specify an ERAP index for any strong bases (e.g. sodium hydroxide, solution), but since the pH is considered		

Potential Amendment	Summary of Comments	Response
		to be corrosive, the proposed minimum quantity threshold at 3 tonnes has been extended for bases as well.
		Substance spill information has indicated that several of the proposed acids and bases have a significant history of spills in Canada. If other acids/bases are identified as a significant hazard, they will be considered for addition to this or future amendments.
		*Rubidium hydroxide, solution: In addition to corrosiveness, rubidium hydroxide also poses an inhalation hazard at concentrations equal to or greater than 10%. The concentration of 10% will be identified as a warning hazard for inhalation in the Implementation Guidelines and Substance Summary Report.
A1 Addition of substances	Formic Acid	Formic Acid
A1.1 Add 20 substances from the Chemicals Management Plan (CMP) Challenge to Schedule 1 of the E2 Regulations.  A1.2 Add 16 substances from the	Comments received included the proposed addition of formic acid as a strong acid to the E2 Regulations.	Environment Canada has not completed the risk assessment of formic acid to determine if the substance would be subject to the E2 Regulations. To be considered as a strong acid, the substance must be capable of reaching a pH of 2 at 0.1% concentration. Formic acid does not meet this criterion therefore it would not be considered as a strong acid. However, formic acid may be subject to the E2
Chemicals Management Plan (CMP) Petroleum Sector Stream to Schedule 1 of the E2 Regulations.		Regulations for other criteria pending the risk assessment.
A1.3 Add 4 strong acids to Schedule 1 of the E2 Regulations.		
A1.4 Add 8 strong bases to Schedule 1 of the E2 Regulations.		
A1.5 Add ammonium hydroxide to Schedule 1 of the E2 Regulations.		
A1 Addition of substances	Coment and hydroxides	Coment and hydroxides
A1.1 Add 20 substances from the	Cement and hydroxides	Cement and hydroxides
Chemicals Management Plan (CMP) Challenge to Schedule 1 of the E2 Regulations.	Comments received included a suggestion to exempt cement from the E2 Regulations since it is not considered to have an emergency	Hydroxides mixed with cement have a pH above 12. However, cement mixed with a strong base is not considered to have an emergency pathway because:  • There is no inhalation hazard.
A1.2 Add 16 substances from the Chemicals Management Plan	pathway. Calcium hydroxide, solution, potassium hydroxide,	The hydroxide combined with the cement slowly sets and hardens to bind the material into a stronger aggregate.

Potential Amendment	Summary of Comments	Response
(CMP) Petroleum Sector Stream to Schedule 1 of the E2 Regulations.	solution and sodium hydroxide, solution are strong bases that are used or formed in mixtures	Given the normal usage of cement, and the time it takes to set into a hardened material (about 24 hours), it is highly unlikely that the material will be released to the aquatic environment in its
A1.3 Add 4 strong acids to Schedule	containing cement.	binding state.
1 of the E2 Regulations.	-	The material is not explosive or flammable.
A1.4 Add 8 strong bases to		In light of this information, Environment Canada is proposing that
Schedule 1 of the E2 Regulations.		strong acids and strong bases that are present in mixtures containing Portland cement (CAS 65997-15-1) be exempted from
A1.5 Add ammonium hydroxide to		the E2 Regulations.
Schedule 1 of the E2 Regulations.		
A1 Addition of substances	Petroleum Substances	Petroleum Substances
A1.1 Add 20 substances from the Chemicals Management Plan (CMP) Challenge to Schedule 1 of the E2 Regulations.	Comments received include that Environment Canada should not regulate petroleum substances by CAS registry number but rather by product type and grouping (e.g.	The risk assessments for these substances were conducted on a CAS-specific basis. As such, the amendments would only regulate the substances identified by the specific CAS. However, due to the possible hazardous nature of other substances within the hazard categories, Environment Canada encourages regulated persons to
A1.2 Add 16 substances from the Chemicals Management Plan (CMP) Petroleum Sector Stream to Schedule 1 of the E2 Regulations.	crude oil, liquefied natural gas/compressed natural gas (LNG/CNG), liquefied petroleum gas (LPG), condensate, naphtha, gasoline, diesel, distillate fuels, fuel	voluntarily prepare environmental emergency plans (E2 plans) for all non-regulated substances of concern. For future amendments, Environment Canada intends to consider alternatives to listing regulated substances by CAS registry number when appropriate.
A1.3 Add 4 strong acids to Schedule 1 of the E2 Regulations.	oils, etc.).	
A1.4 Add 8 strong bases to Schedule 1 of the E2 Regulations.		
A1.5 Add ammonium hydroxide to Schedule 1 of the E2 Regulations.		
A1 Addition of substances		
	C.I. Pigment Yellow 34	C.I. Pigment Yellow 34
A1.1 Add 20 substances from the		
Chemicals Management Plan	Comments received included:	
(CMP) Challenge to Schedule 1 of the E2 Regulations.	a) that for substances that are not	a) Even though the risk assessment conducted by the Chemicals
ule Lz Negulations.	CEPA toxic, or regulated by a	Management Plan may indicate that a substance is not toxic under
A1.2 Add 16 substances from the	Significant New Activity (SNAc),	Part 5 of CEPA 1999, the substance may still exhibit emergency
Chemicals Management Plan	such as C.I. Pigment Yellow 34,	hazard characteristics that warrant the addition of the substance to
(CMP) Petroleum Sector Stream to Schedule 1 of the E2 Regulations.	their addition to the E2 Regulations and public risk communication	the E2 Regulations. The risk assessment methodology developed under Part 8 of CEPA 1999 differs from the methodology used to

Potential Amendment	Summary of Comments	Response
A1.3 Add 4 strong acids to Schedule 1 of the E2 Regulations.  A1.4 Add 8 strong bases to Schedule 1 of the E2 Regulations.	measures at 0.22 tonnes is not warranted;	identify hazardous substances as defined under Part 5, Section 64 of the Act. Although the definitions within Part 5, Section 64 and Part 8, Section 200 are similar, the definitions are interpreted according to what causes immediate harmful effects (Section 200) versus long-term toxicity (Section 64).
A1.5 Add ammonium hydroxide to Schedule 1 of the E2 Regulations.	b) that the increase in administrative burden for creating an E2 plan for this substance will not increase environmental protection;	b) An existing E2 plan can be adapted to include additional substances and a new E2 plan can be created to include more than one substance. This could significantly reduce the financial cost of an E2 plan.
	c) and that carcinogenicity for this substance poses a low risk since the pigments have negligible vapour pressure and that the general population is not expected to be exposed to the substance.	c) C.I. Pigment Yellow 34 was determined to have an emergency hazard characteristic (carcinogenicity), and is in use in Canada. Vapour pressure is not a parameter that is considered for this hazard category. Therefore, it was identified as a candidate for addition to the E2 Regulations. The E2 Regulations require that companies assess the extents of potential release scenarios and plan for public notification accordingly. If a regulatee demonstrates that the impacts will not extend beyond the facility boundaries and no public exposure would result, the need for public notification would not be as extensive as in other situations where the impacts of releases would extend beyond facility boundaries.
A1 Addition of substances	Hexane	Hexane
A1.1 Add 20 substances from the Chemicals Management Plan (CMP) Challenge to Schedule 1 of the E2 Regulations.  A1.2 Add 16 substances from the Chemicals Management Plan (CMP) Petroleum Sector Stream to Schedule 1 of the E2 Regulations.	Comments received included that the risk assessment conducted under the Chemicals Management Plan for hexane indicated that the substance is not a risk so it should not be added to the amendments.	Even though the risk assessment conducted by the Chemicals Management Plan may indicate that a substance is not toxic under Part 5 of CEPA 1999, the substance may still exhibit emergency hazard characteristics that warrant the addition of the substance to the E2 Regulations. The risk assessment methodology developed under Part 8 of CEPA 1999 differs from the methodology used to identify hazardous substances as defined under Part 5, Section 64 of the Act. Although the definitions within Part 5, Section 64 and Part 8, Section 200 are similar, the definitions are interpreted according to what causes immediate harmful effects (Section 200) versus long-
A1.3 Add 4 strong acids to Schedule 1 of the E2 Regulations.		term toxicity (Section 64).
A1.4 Add 8 strong bases to Schedule 1 of the E2 Regulations.		
A1.5 Add ammonium hydroxide to Schedule 1 of the E2 Regulations.		

Potential Amendment	Summary of Comments	Response
A1 Addition of substances  A1.1 Add 20 substances from the Chemicals Management Plan (CMP) Challenge to Schedule 1 of the E2 Regulations.  A1.2 Add 16 substances from the Chemicals Management Plan (CMP) Petroleum Sector Stream to Schedule 1 of the E2 Regulations.  A1.3 Add 4 strong acids to Schedule 1 of the E2 Regulations.  A1.4 Add 8 strong bases to Schedule 1 of the E2 Regulations.	Vanadium Pentoxide  Comments suggested that the addition of the substance is not warranted because exposure to the substance may not occur in all circumstances.	Vanadium Pentoxide  Vanadium pentoxide is listed as a possible human carcinogen by the International Agency for Research on Cancer (IARC) and is also highly persistent in any medium. Although there may be instances where the exposure to the substance is low, addition of the substance to the E2 Regulations is warranted because there is still the possibility that exposure to the substance could occur.
A1.5 Add ammonium hydroxide to Schedule 1 of the E2 Regulations.		
A1 Addition of substances  A1.1 Add 20 substances from the Chemicals Management Plan (CMP) Challenge to Schedule 1 of the E2 Regulations.  A1.2 Add 16 substances from the Chemicals Management Plan (CMP) Petroleum Sector Stream to Schedule 1 of the E2 Regulations.  A1.3 Add 4 strong acids to Schedule 1 of the E2 Regulations.  A1.4 Add 8 strong bases to Schedule 1 of the E2 Regulations.  A1.5 Add ammonium hydroxide to Schedule 1 of the E2 Regulations.	Sulphuric acid, cobalt(2+) salt (1:1)  A comment suggested that a carcinogenic hazard should not be considered as an environmental emergency hazard.	A substance classified as carcinogenic or probably carcinogenic to humans (IARC / U.S. EPA) and having a half-life in any medium of at least five years is automatically assigned a high-risk threshold of 0.22 tonnes. The precautionary principle is implemented in this case to establish a timeline of five years in regards to those substances that may be carcinogenic in humans, specifically children.
A1 Addition of substances	Cobalt Chloride	Cobalt Chloride

Detential Amendment	Summary of Commonts	Document
Potential Amendment	Summary of Comments	Response
A1.1 Add 20 substances from the Chemicals Management Plan	A comment suggested that the addition of the substance is	Environment Canada agrees that the LC <sub>50</sub> value for cobalt chloride (II) is considered to be moderately toxic; however, the substance is
(CMP) Challenge to Schedule 1 of	'excessively precautionary' and	considered to be inductately toxic, however, the substance is considered to be a possible human carcinogen by IARC and is also
the E2 Regulations.	indicated that the hazards may exist	considered to be a possible number cardinogen by rance and is also considered to be indefinitely persistent in water. Given these
the L2 Regulations.	for the substance but the risks are	hazards, and Environment Canada's explanation of the reason for
A1.2 Add 16 substances from the	very remote. The comment	adding carcinogenic substances (above), the substance is still
Chemicals Management Plan	indicated that the aquatic half-life is	considered to be a candidate for addition to the E2 Regulations.
(CMP) Petroleum Sector Stream to	less than 182 days and the half-life	denotation to be a carraidate for addition to the 22 regulationer
Schedule 1 of the E2 Regulations.	in air is quite short. In addition, the	
	comment suggested that the lethal	
A1.3 Add 4 strong acids to Schedule	concentration (LC <sub>50</sub> ) value for the	
1 of the E2 Regulations.	substance would make it a	
	candidate for addition to the E2	
A1.4 Add 8 strong bases to	Regulations at a higher threshold.	
Schedule 1 of the E2 Regulations.		
A1.5 Add ammonium hydroxide to		
Schedule 1 of the E2 Regulations.		
A2 Change in threshold for	Comments suggest that the	The minimum quantity thresholds for the three already regulated
substances already listed under	minimum quantity thresholds for the	strong acids will be revised; however, the potential minimum quantity
Schedule 1 of the E2 Regulations	three already regulated strong acids	threshold will be changed from 0.22 tonnes to 3 tonnes. Refer to
	be retained. Refer to the summary	response for strong acids and bases in section A1 above.
A2.1 Change the threshold for 3	of comments for strong acids and	
strong acids already listed under	bases in section A1 above.	
Schedule 1 of the E2 Regulations.		
SECTION B		
	mprove regulatory clarity and regulatory	ease of use to increase industry understanding and compliance with
the E2 Regulations.		
B1 Clarification of terms		
B1.1 Clarify what is considered as a	B1.1	
"container" to include commonly	<i>5</i>	
interconnected containers and all	Comments were various and	
other connected items such as	included:	
piping and vents that may contain		
the regulated substance. The	a) Interconnected containers with	a) Automatic and/or remotely activated excess flow shut-off valves
storage container system should be	automatic shut-off valves between	can play an important role in comprehensive accidental release
compatible with, and appropriate	containers should be considered as	prevention systems. When they are properly designed, and installed
for, the regulated substance(s) that	one container system because there	and maintained in a manner appropriate for the intended use
it contains. If interconnected	is a high possibility that these valves	(between interconnected containers and/or other equipment), they
containers each have one or more	will fail.	can isolate container systems. Consequently, a spill from one
shut-off valves, then each		container system will not involve other container systems.

Potential Amendment	Summary of Comments	Response
segregated container would be considered a separate storage container system. If there are no shut-off valves between the interconnected storage container systems, the entire quantity within that system would be considered as	b) The automatic shut-off valves as a criterion for defining what is considered as a separate container system should be expanded to include manual shut-off valves.	b) As long as manual shut-off valves are accessible and can be activated remotely in the event of an environmental emergency, they may be acceptable for calculating the capacity of the container system.
one storage container system. The system used to isolate the containers, whether a shut-off valve or any other engineering device, should engage automatically and/or remotely.	c) Environment Canada should not regulate the control of shut-off valves or other engineering devices. Regulating the replacement of manual valves would be extremely expensive.	c) Environment Canada does not intend to mandate the types of shut-off valves that are to be used at facilities or that they have to be used at all. However, if a shut-off valve or mechanism is in place to stop the flow of a regulated substance from a container system in the event of an environmental emergency, the calculation of the largest container system on-site would take into consideration those shut-off valves or mechanisms.
	d) Piping and vents should only be considered if they are left in a charged state. If the system is purged (which, in the interest of safety, most systems should be), then valves or other control systems should not be considered.	d) The maximum capacity of the container system, which may include piping and vents, must always be taken into account, regardless of whether the pipes are purged or not.
	e) Recommendation: For harmonization with the Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations, a "container" should be defined as a storage tank system installed in a fixed location.	e) The intent of the amendments is to clarify what is considered a container to include all interconnected containers as one container system, similar to what is found in the <i>Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations</i> .
	f) Recommendation: The clarification of terms should be consistent and aligned with other documents. For example, there should be consistency between terms in the revised E2 Regulations and with Canadian Standards Association (CSA) standard Z1600 "Emergency Management and Business Continuity Programs", and the "National Fire Code of Canada".	f) Environment Canada aims for the terminology used in the E2 Regulations to be as consistent as possible with the terminology used in existing standards (e.g., CSA-Z731). That is why, for example, Environment Canada is proposing to change the word "test" to "exercise", as explained in section B1.2.

Potential Amendment	Summary of Comments	Response
	g) Clarify whether a flame arrester that engages automatically is considered as an "engineering device" in the context of this proposed amendment.	g) An automatic flame arrester will not be considered as an "engineering device" in the context of this proposed amendment because the flame arrester will not prevent a spill from one container to continue to other interconnected containers, like a shut-off valve would.
	h) Recommendation: Specify that transmission pipelines are exempted from the E2 Regulations similarly to how section 3(4)(b) of the <i>Transportation of Dangerous Goods Act</i> exempts commodities transported by a pipeline governed by the National Energy Board; and, that pipelines that are regulated by the National Energy Board or the Alberta Energy Regulator should be exempted from the E2 Regulations.	h) Environment Canada's proposal would include an exemption for quantities of E2 regulated substances governed by the <i>National Energy Board Onshore Pipeline Regulations</i> and the <i>National Energy Board Processing Plant Regulations</i> . Therefore, the quantity of an E2 regulated substance within a pipeline (as defined by the <i>National Energy Board Act</i> ) that is regulated under these regulations would not to be included in the total onsite substance quantity considerations of the E2 Regulations. Any E2 regulated substance that is not regulated by the <i>National Energy Board Onshore Pipeline Regulations</i> or the <i>National Energy Board Processing Plant Regulations</i> would continue to be subject to the provisions of the E2 Regulations. In addition, in the event of an environmental emergency involving a substance regulated under the E2 Regulations, a spill report would still need to be provided to Environment Canada.
		As for pipelines governed by a provincial government, Environment Canada does not intend to regulate the movement of E2 regulated substances through those pipelines unless the substances are located at a facility or place in Canada where the substances are in storage or in use. Therefore, the quantity of a regulated substance within a provincial pipeline must be included in the total onsite substance quantity considerations of the E2 Regulations for the portion of pipeline that is within the property boundaries of a facility. Also, the capacity of the provincial pipeline within the property boundaries of a facility must be included in the calculation of the maximum container capacity requirements of the E2 Regulations. However, quantities of a regulated substance in the portion of a provincial pipeline that is outside the property boundaries do not need to be included in the onsite quantity considerations.
		As per subsection 7(1) of the current E2 Regulations, persons may satisfy E2 plan requirements and minimize duplication of effort by using an existing E2 plan that has been prepared on a voluntary basis, for another government or under another act of Parliament. Where such an E2 plan does not meet all the requirements identified

Potential Amendment	Summary of Comments	Response
		within the E2 Regulations, the E2 plan must be amended to meet the remainder of those requirements. All notices, reports and forms for this E2 plan must be sent to the Minister.
	i) Recommendation: For the purpose of modeling the worst-case release scenario, to use the quantity of a regulated substance stored in the largest single container but not in a container system.	i) Environment Canada intends to require that, for the purpose of modeling the worst-case release scenario for a regulated substance, the volume in the largest container system (that can be isolated via shut-off valve or mechanism) should be used.
B1.2 Change the term "test" to "exercise".	B1.2	B1.2
	Comments suggest that respondents are supportive of this potential amendment.	No revision is proposed for this potential amendment.

Potential Amendment	Summary of Comments	Response
B1.3 Clarify what Environment Canada expects regulatees to carry out when regulatees exercise an environmental emergency plan: it includes practicing and updating at least one of the following elements	(Note that similar or additional comments on exercising E2 plans were also provided under section B8.)	B1.3  (Refer to section B8 for similar or additional responses.)
of the plan at least once a year on a rotational basis such that all elements of the plan are exercised over a 5 year period. All aspects of the plan should be exercised simultaneously (i.e., full-scale test)	Comments were varied and included:  a) Clarify if all E2 plans are expected to be exercised in similar	a) Environment Canada expects that all E2 plans be exercised in similar scope and depth by the end of the fifth year.
at least once over that five year period.  The following are examples of such elements:	scope and depth.  b) Exercise requirements add significant administrative burden and the time frame should be	b) For reasons of public safety, Environment Canada does not consider it acceptable to reduce the frequency of exercising an E2 plan to every two years. The clarification related to exercising the E2
<ul> <li>Activation of the environmental emergency plan</li> <li>Situational assessment (for example, nature of the emergency, nature of the hazard, determining potential threats to health and the environment, etc.)</li> <li>Action Plan (incident command)</li> </ul>	increased to every 2 years.	plan allows regulated persons to implement and exercise as is appropriate for their regulated substance(s) and sector(s). A range of exercise types (e.g., from table top to full-scale) may be used as long as regulated persons meet the requirement to exercise at least one of the components of the E2 plan once a year such that all components of the E2 plan are exercised over a five year period. All components of the E2 plan must be exercised simultaneously (i.e., full-scale exercise) at least once over that five year period.
<ul> <li>Site Safety/Security</li> <li>Response resource mobilization</li> <li>Notification and reporting (for example, to governments, safety authorities)</li> </ul>		
<ul> <li>Public and other communication</li> <li>Reviewing, debriefing, plan updating</li> </ul>		

Potential Amendment	Summary of Comments	Response
	c) When exercising an E2 plan for one regulated substance that has similar chemical properties and require the same response to an environmental emergency as another regulated substance (e.g., hydrogen sulphide and chlorine gases), the exercise should be considered done for both. Some facilities have multiple regulated substances on site, but the general response to an environmental emergency would be very similar. In addition, clarify if regulated persons are expected to exercise the E2 plan as it relates to individual regulated substances or if they are expected to exercise how they would respond to a site-wide emergency (e.g. evacuate, notify the public, contain the release, etc.).	c) The type of response to an environmental emergency will largely depend on the type of hazard (e.g., explosive vs. toxic by inhalation) that regulated substances represent. When exercising an E2 plan for one regulated substance that has similar chemical properties and type of hazard, and requires the same response to an environmental emergency as other regulated substances on-site (e.g., anhydrous ammonia and chlorine gases), the exercise would be considered completed for all regulated substances within that hazard category. Full-scale exercises for regulated substances from different hazard categories may be conducted separately or simultaneously.
	d) Clarify why a regulated person that has an Emergency Response Assistance Plan (ERAP) in place for shipping hydrocarbons which, if managed correctly, do not pose a significant threat, should complete a yearly exercise and a full-scale exercise every 5 years.	d) All regulated substances require E2 plans that are site-specific which may not be the case for Emergency Response Assistance Plans (ERAPs) prepared for the <i>Transportation of Dangerous Goods Act and Regulations</i> . All regulated substances are hazardous at specific minimum thresholds and therefore the exercising requirement is applicable to all these regulated substances, including hydrocarbons. A regulated substance that is subject to the <i>Transportation of Dangerous Goods Act</i> is exempt from the E2 Regulations.
	e) Exercising the E2 plan fully and tracking what exercise and which year could be onerous. The exercise may not actually help in an emergency; typically, rural emergency responders are volunteers and in a 5 year period, their entire response team may change during this time period.	e) Exercising the E2 plan is a very important activity that will help the regulated person to prepare for and respond to an environmental emergency. The regulated person must at all times keep track of the individuals who are to carry into effect the E2 plan, their roles and responsibilities, and make sure that they are well trained for their tasks. Regular changes in personnel of the rural emergency response team are a good reason for an extra effort to satisfy the requirements of the E2 Regulations.

Potential Amendment	Summary of Comments	Response
Potential Amendment	f) Environment Canada should engage with the petroleum industry, which is already highly regulated, to harmonize exercising requirements with those of other agencies. Environment Canada should offer exemptions for regulated persons that are already conducting emergency response exercises as outlined in CSA standards or as per other regulatory requirements such as those set out in the Spill Prevention and Contingency Regulations in Ontario, to avoid duplication of requirements under other jurisdictional regulators.  g) Clarify if the activation of the E2 plan for an actual environmental emergency in any given year would qualify as "exercising" the E2 plan for that year.	f) The "exercise" requirement under the E2 Regulations is not expected to duplicate any requirements of other jurisdictional regulators. Exercises performed for other legislative purposes (federal, provincial, territorial or municipal acts/regulations/directives) can be considered as an exercise for the purposes of the E2 Regulations if they meet the requirements of the E2 Regulations.  g) An actual environmental emergency may be considered an exercise of the E2 plan only if certain conditions are met. For an actual environmental emergency to be recognized as an exercise, it must involve the appropriate agencies, proper debriefing and evaluation, corrective actions and documentation that would be used in a typical exercise. Solely responding to an actual environmental emergency is not necessarily a valid or appropriate exercise, as follow-up to determine what happened and its broader implications
	h) The proposed change in the requirements for exercising an E2 plan would unnecessarily endanger persons who respond to the environmental emergency.	for the E2 plan as a whole is required for learning and improvement. It would be detrimental to apply an unexercised plan, as it may not be adequate to handle the environmental emergency at hand. Exercising an E2 plan enables critical aspects of the E2 plan to be examined in a structural way, simulating conditions to reveal major mistakes and omissions so that they can be subsequently corrected without disastrous consequences. The same cannot be said for conditions experienced in a real-life environmental emergency (see our Frequently Asked Questions <a href="http://www.ec.gc.ca/ee-ue/default.asp?lang=En&amp;n=95FF9482-1#X-201203270936143">http://www.ec.gc.ca/ee-ue/default.asp?lang=En&amp;n=95FF9482-1#X-201203270936143</a> ).  h) Environment Canada believes that the benefits of exercising an E2 plan, for which there is no actual spill or release of a regulated substance, far outweigh any risks to facility personnel who deal with the simulated emergency. Environment Canada considers that exercising an E2 plan is a very important activity that will help the

Potential Amendment	Summary of Comments	Response
		emergency which will in the end protect the life and health of the public and of facility personnel.
	i) Clarify what are the "aspects" of the E2 plan, define "exercise" in the E2 Regulations to provide consistency with industry terminology and existing standards, clarify that field exercises and table top scenarios qualify as "exercises", and provide further guidelines or examples that demonstrate the expectations for exercises.	<ul> <li>i) The following are examples of components of an E2 plan that can be exercised separately every year. These components are consistent with CSA-Z731-03 ("Emergency Preparedness and Response", p. 12): <ul> <li>Activation of the E2 plan</li> <li>Situational assessment (for example, nature of the emergency, nature of the hazard, determining potential threats to health and the environment, etc.)</li> <li>Action Plan (incident command)</li> <li>Site Safety/Security</li> <li>Response resource mobilization</li> <li>Notification and reporting (for example, to governments, safety authorities)</li> <li>Public and other communication</li> <li>Reviewing, debriefing, plan updating</li> </ul> </li> <li>Environment Canada will provide more details on exercising requirements in the Implementation Guidelines for the E2 Regulations to help regulated persons understand this requirement.</li> </ul>
	j) One comment suggested that the exercise should not necessarily involve a regulated substance.	j) To meet the exercising requirements of the E2 Regulations, the exercise must involve a regulated substance at the facility or place at which the regulated substance is located. The exercise may also include on a voluntary basis other non-regulated substances.
B1.4 Clarify what is considered as the "maximum quantity" of a	B1.4	B1.4
substance, to include the maximum quantity of a substance found during	Comments included:	
the calendar year in all the storage container systems and for bulk material that are within the borders of the facility.	a) B5.1 and C2.3 seem to contradict section B1.4 in that they allow for advanced notification of lesser or expected quantities.	a) The current E2 Regulations already require that the expected maximum quantity of a regulated substance found at any time must include the substance in containers. The purpose of this potential amendment is to clarify that quantities of uncontained regulated substances must also be included in the determination of expected maximum quantity. This potential amendment does not affect the time period for sending notifications. The purpose of the potential amendment C2.3 is to require regulated persons to indicate the date on which either of the circumstances under 3(1)(a) or (b) of the current E2 Regulations first occurs (i.e., the date on which they

Potential Amendment	Summary of Comments	Response
		actually become subject to the E2 Regulations). The purpose of potential amendment B5.1 is to allow regulated persons to notify as soon as the quantity of a regulated substance falls below its minimum quantity threshold rather than only after the regulated substance has been less than its minimum quantity threshold for 12 consecutive months. Regulated persons would still have up to 90 days after the 12 consecutive months to notify, if they have not notified earlier. The notice could only be submitted once the quantity of the regulated substance would be below its minimum quantity threshold; advance notification of lesser expected maximum quantities would not be permitted.
	b) Clarify if the expression "bulk material within border" means it is in stationary storage or it includes transport units and other mobile forms of product storage.	b) The "bulk material within border", whether stored in stationary or in mobile storage, was already included in the expected maximum quantity on-site. We are now proposing to also include the bulk material that is not stored in any type of container (e.g., piles on the ground). Refer to section B2 for more details.
	c) Clarify what is the time period for sending a notification for "expected maximum quantity".	c) As per the current requirements of the E2 Regulations, regulated persons must submit a Schedule 2 within 90 days of the day on which either of the circumstances under 3(1)(a) or (b) first occurs (i.e., the day on which they actually become subject to the E2 Regulations). The regulated persons must indicate on Schedule 2 the expected maximum quantity of the regulated substance at any time during the calendar year, which could be different from the quantity that triggered them to submit the Schedule 2.
	d) Clarify if "expected maximum quantity" includes quantities exempted under the 72 hour exception.	d) If the quantities are exempted under the 72 hour exception, the quantities do not need to be calculated in the expected maximum quantity. Refer to section B4 for more details on the 72 hour exception.
	e) Clarify how to calculate the expected maximum quantity of flammable mixtures.	e) The current E2 Regulations specify how to calculate quantities for regulated substances found under Part 1 of Schedule 1 in subsections 4(1)(a) and 4(1)(b). Further information is provided in the Implementation Guidelines. Environment Canada is not proposing a change to the calculation at this time, but intends to clarify that mixtures of substances likely to explode do not include mixtures that have a flash point greater than 23°C and a boiling point greater than 35°C.
B1.5 Clarify what is considered as	B1.5	B1.5

Potential Amendment	Summary of Comments	Response
the "maximum capacity of the largest storage container system" to include the maximum quantity of a substance required to fill the storage container system to 100% capacity.	One respondent commented that including the "100% capacity" term could still lead to confusion and that the wording should be changed to "fill the entire volume of the container".	The intended wording of the amendment would clarify that the intent of "maximum capacity" is the absolute maximum quantity that can be physically added to the container. It is not the "safe-fill limit" that is recommended by manufacturers and is typically less than 100% of the physical volume of the container.
B1.6 Clarify how to calculate substance quantities for mixtures.	B1.6  Comments suggest that respondents are supportive of this potential amendment.	B1.6  No revision is proposed for this potential amendment.
B1.7 Clarify that for substances that are in the form of a solution, the concentration listed in Schedule 1 applies to the solute in the solution (e.g., 30% hydrochloric acid) and not to the concentration of the solution when it is mixed with another substance.	B1.7  Comments suggest that the E2 Regulations should indicate if the calculations for quantities are based on the solution or the pure substance (e.g. for 100 tonnes of hydrochloric acid at 30%, is the quantity used for calculations 100 tonnes or 30 tonnes?).	B1.7  The amendments to the E2 Regulations intend to clarify how to calculate quantities for solutions.
B2 Inclusion of bulk material  B2.1 Add a new requirement that bulk quantities that meet or exceed the thresholds identified in Schedule 1 should be subject to the same requirements as a substance within a storage container system.	Comments received suggest that respondents are in agreement with the concept of including bulk material, but that the term "bulk material" may not be understood or may be misconstrued as large quantities of material and not the intended definition of large quantities of uncontained material. The term "bulk material" may also be understood as large quantities of material in transportation, and not the intended quantities on site at a fixed facility. Comments also suggest confusion for bulk quantities containing trace quantities of a regulated substance (such as waste material or by-products).	Environment Canada's intent is for the E2 Regulations to apply to "bulk material" that is loose, kept in piles or otherwise uncontained or unpackaged.  Quantities of a regulated substance that are present at a facility but that are uncontained (e.g. "unpackaged" or "bulk material") and are distributed in one or more piles at a facility, would need to be included in the calculation for expected maximum quantities on-site. When there is a combination of a regulated substance that is contained and uncontained ("bulk material"), the expected maximum quantity of the contained and uncontained regulated substance would be used to determine if the minimum quantity thresholds are met. If the total expected maximum quantity on-site of the uncontained regulated substance alone meets or exceeds the minimum quantity threshold, an E2 plan would be required even if the capacity of the largest container (if one exists) for that uncontained regulated substance is less than the minimum quantity threshold. There are several situations where large quantities of

Potential Amendment	Summary of Comments	Response
		regulated substances in solid state (e.g. ammonium nitrate) are uncontained at facilities (i.e., the regulated substance is placed in a pile at a facility).
B3 Clarification on exclusions or exemptions		
B3.1 Clarify that flammable substances in a mixture that are excluded from the definition of "substance" are the ones that are a component of a mixture for which the flash point is equal to or greater than 23°C <b>and</b> the boiling point is equal to or greater than 35°C.	B3.1  Comments suggest that respondents are supportive of this potential amendment.	B3.1  No revision is proposed for this potential amendment.
B3.2 Clarify that substances that are hazardous when inhaled are only excluded from the definition of "substance" when they are a component of a mixture for which the partial pressure of the mixture is less than 1.33 kilopascals (10 mm of mercury).	B3.2  Comments suggest that respondents are supportive of this potential amendment.	B3.2  No revision is proposed for this potential amendment.
B3.3 Clarify that for propane to be exempted, the minimum distance of 360 m from the boundaries of the property on which the storage container is located is a radial distance.	B3.3  Comments received suggest that respondents did not understand that this section is an amendment of the current 360 metres (m) exclusion limit in the E2 Regulations.  Comments also suggest that rural and urban locations should be treated differently.	This is an amendment to an existing requirement. The amendment aims to specify that it is the distance in all directions (radial distance) that must be at least 360 m from the container to the boundary of the property, as opposed to the linear distance in any one direction.  Because the E2 Regulations aim at protecting both the human health and the environment, the distance to be considered is the same for rural and urban areas. The difference between rural and urban areas may be addressed in the potential consequences that must be considered and the identification of any environmental emergency that must be included in an E2 plan.
B4 Clarification on 72 hour exception		
B4.1 Clarify that substances subject to the <i>Transportation of Dangerous</i>	Comments received suggest that respondents thought that the 72	This is an amendment to an existing requirement. Environment Canada intends on clarifying the current exemptions provided in 2(d)

Potential Amendment	Summary of Comments	Response
Goods Act, 1992 or the Canada Shipping Act, 2001 are not excepted from the application of the E2 Regulations if they are located at the facility for more than 72 hours or are being loaded or unloaded.	hour exemption was a new addition to the E2 Regulations and not an amendment to clarify the existing wording of the E2 Regulations.	<ul> <li>and 3(2)(a) so that:</li> <li>All quantities of regulated substances subject to the Transportation of Dangerous Goods Act, 1992 or the Canada Shipping Act, 2001 would be exempted from the application of the E2 Regulations.</li> <li>For E2 regulated substances not subject to the Transportation of Dangerous Goods Act, 1992 or the Canada Shipping Act, 2001, the quantities on-site would still be included in the calculations for total actual on-site quantities to determine if an E2 plan is required if the substances are loaded or unloaded, regardless if the regulated substance is contained or not. The 72 hour exemption provided in 3(2)(a) would only apply if the regulated substance is not being loaded or unloaded.</li> </ul>
B5 Clarification on notification for quantities that no longer meet the threshold quantities  B5.1 Clarify that a person does not have to wait twelve consecutive	Comments received indicate that the potential amendments suggested in this subsection are positive. See below for specific comments.	This is an amendment to an existing requirement. See also B1.4 above.
months to notify Environment	Online Notification	Online Notification
Canada when the quantity of the substance on site or the maximum capacity of the largest container in which the substance is stored no longer meets the threshold quantities set out in Schedule 1 when there are extraordinary	Comments received include that the Environmental Emergency Database should be altered to allow for online notification of the information.	Environment Canada will make every effort to update the E2 Regulations Regulatee Reporting System so that all of the required information can be submitted online in order to streamline the submission of notices and to reduce the administrative burden to regulated persons.
circumstances which indicate that	Timeline	Timeline
the quantities will not be met for 12 consecutive months.  B5.2 Clarify that seasonal operators do not need to submit the notice of closure or decommissioning (Schedule 6) if they expect that their maximum expected quantities will go back up within the calendar year.	Comments suggest that the timeline should be extended to two years because of weather-related specifics for certain locations.	Environment Canada considers that the current provision provides a reduction in burden to regulated persons by removing the requirement to wait 12 months to send a notification. Changing the requirement from 1 to 2 years before a regulated person needs to notify of a decommissioned or closed facility could result in a decrease in public safety because Environment Canada will not have updated information.
	Seasonal Operators	Seasonal Operators
	Comments received include that the container should be emptied by seasonal operators (and not just	If quantities of a regulated substance are below the specified minimum quantity thresholds, the facility is not subject to the E2 Regulations, whether it is seasonal or not. This amendment is

Potential Amendment	Summary of Comments	Response
	below the minimum quantity threshold) because leaving inventories at an unattended facility creates additional hazards.	intended to reduce the administrative burden by no longer requiring a notice of closure or decommissioning (Schedule 6) for seasonal operators.
	Comments also indicated that the potential amendment is not clear and that it seems to suggest that the increase in quantities will not have to be notified as is required in 3(4)(b).	Paragraph 3(4)(b) of the current E2 Regulations requires a regulated person to send a notification for any increase of 10% or more in the expected maximum quantity of a regulated substance as indicated in Schedule 2. If a facility is temporarily closed for a season and the quantity stored on-site is not going to be 10% more than the expected maximum quantity that was indicated in Schedule 2, once the facility resumes operations, the regulated person will not have to send a notification as per 3(4)(b). However, if the facility resumes operations for a new season and the quantity on-site will be 10% greater than the expected maximum quantity indicated in Schedule 2, the regulated person will need to send a notification for the new total actual on-site quantity as required under 3(4)(b).
B6 Clarification for the requirements of the environmental emergency plans	Several remarks suggest that the commentators thought that this requirement was new rather than an amendment to an existing requirement. See below for specific comments.	This is an amendment to an existing requirement.
B6.1 Clarify that the environmental emergency plan should include identification of the consequences of the release of the greatest quantity of each environmental emergency substance on-site from a single storage container system.	Some comments suggest that emergency planning should not be based on "greatest quantity" only, but on an all-hazards approach.	Environment Canada is not proposing to restrict consequence determination to just the "greatest quantity"; rather, it is proposed that this requirement be added to the existing requirement to identify "any environmental emergency that can reasonably be expected to occur".
B6.2 Clarify that the individuals and their position title that must be identified in the environmental emergency plan are the individuals who are to respond in the event of an environmental emergency.	Most comments express the concern that identifying the name of the individuals who are to respond is not necessary; only the title of the position is necessary. Individuals responsible for the various tasks might change frequently (e.g., due to vacations, sick leave) and vary	B6.2  In light of the comments received, only position titles would be required to be indicated.

Potential Amendment	Summary of Comments	Response
	from shift-to-shift; however, their title will remain.	
B6.3 Clarify that the identification of the training required under the	B6.3	B6.3
environmental emergency plan for	Some comments recommend that	It is the responsibility of the person who owns or has the charge,
the individuals responding to an environmental emergency is training related to response.	Environment Canada considers awareness and prevention training; that not all individuals involved in the response to an environmental emergency require the same training; and, that Environment Canada should indicate the factors to determine whether the specific	management or control of a regulated substance to determine which training is appropriate for individuals involved in the response to an environmental emergency related to that regulated substance at a specific facility.
	training provided is sufficient.	
B7 Clarification for measures to notify members of the public	Comments suggest that the intent of the potential amendments related to this subsection was not well	The Implementation Guidelines, as well as other sources (e.g., the Organisation for Economic Co-operation and Development, the United Nations Environment Programme, etc.), provide advice on
B7.1 Clarify that the environmental	understood by respondents, that	how to proceed with public notification; however, it is the
emergency plan should not only indicate the measures taken to notify the public, but also indicate the measures taken to protect the public in case of an environmental emergency.	further clarification is required (radius for notifications, frequency, etc.), as well as guidelines and examples of appropriate public protection measures.	responsibility of each regulated person to determine how best to notify affected members of the public in each specific circumstance.
B7.2 Clarify that the measures taken in the event of an	Comments were various and included:	
environmental emergency should be associated with the risk factors considered in the environmental emergency plan.	a) the request to exclude small businesses from the burden of having to notify the public;	a) Because the hazard to the public is based on the regulated substances and quantities on-site, the size of the company cannot be considered to provide any exemptions from the requirement to notify the public.
B7.3 Clarify that information provided to the public that may be affected in case of an environmental emergency should include considerations <u>before</u> , <u>during and after</u> the incident.	b) that the post-incident information is difficult to predict, and that companies are not authorized to call for evacuations (those are the responsibility of public safety organizations);	b) It is the responsibility of the person who owns or has the charge, management or control of a regulated substance to inform the public before an environmental emergency of the behavior to adopt before, during and after an environmental emergency. For example, the public should be informed of what an alarm means, so that they know how to behave in case they do hear it, and they should be informed if further instructions for protection will be provided by the
B7.4 Add a request to identify the individuals and their position title		local safety organization. The amendments are not proposing to remove public safety authorities and first responders from their roles.

Potential Amendment	Summary of Comments	Response
who are responsible for notifying the public.		The objective of this amendment is to clarify that the affected public needs to know how to react in an environmental emergency prior to that environmental emergency occurring.
	c) that notifying the public before an environmental emergency event is onerous and unproductive, that public confidence may be eroded if they are included in environmental emergency planning, and that the increase in the number of regulated facilities will cause a burden to municipalities, reducing the focus on high priorities;	c) Providing the potentially affected community with the knowledge of how to react in an environmental emergency will greatly reduce the possible adverse human health effects of an environmental emergency. The prevention burden for municipalities is far less than the burden that a municipality may experience in case of an environmental emergency.
	d) that only including the title of the person(s) responsible is necessary, and not the name of the person(s);	d) In light of to the comments received, only position titles would be required to be indicated to identify the individuals who are responsible for notifying the public on behalf of a regulated person in the event of an environmental emergency.
	e) that requirements to notify the public should only apply to releases involving a regulated substance;	e) The requirements to notify the public as well as all other requirements outlined in the E2 Regulations only apply to the regulated substances.
	f) the concern about releasing sensitive information to the public;	f) Notifying the public should not involve the release of sensitive information. Although regulated persons would be required to inform the public of the potential hazards and risk factors, and what behavior to adopt in case of an environmental emergency (e.g., if the public hears an alarm), they may do so without releasing sensitive information (e.g., what regulated substances are on-site and in what quantities). Environment Canada encourages transparency and recommends that all appropriate information be shared with the public.
	g) and the concern that Environment Canada is eliminating the option for companies to pair with public safety authorities to implement their E2 plans during an environmental emergency.	g) The E2 Regulations do not prevent companies from collaborating with public safety authorities during all aspects of E2 plan preparation, implementation, exercising and activation. Environment Canada encourages companies to integrate public safety authorities into all aspects of environmental emergency planning.
B8 Clarification for exercising an environmental emergency plan	(Note that similar or additional comments on exercising E2 plans	(Refer to section B1.3 for similar or additional responses.)

Potential Amendment	Summary of Comments	Response
B8.1 Clarify that exercising an environmental emergency plan	were also provided under section B1.3.)	
involves an exercise followed by an update, if necessary, and that the environmental emergency plan exercise must involve at least one substance that is regulated under the E2 Regulations.  B8.2 Add a requirement to indicate what actions/steps were taken in order to exercise the environmental emergency plan.	Comments indicated that some respondents did not understand the current requirements of the E2 Regulations and thought that the updated E2 plan needs to be submitted to Environment Canada and that the E2 plan needs to cover road transportation. In addition, one respondent objected to the fact that Environment Canada seemingly requires that a regulated substance should be released during the exercising of an E2 plan.  Comments were various and included: that the section will be too prescriptive; that the exercising should be done semi-annually (every two years); that examples of E2 plans be available; that responses to actual environmental emergencies could be used as	In order to clarify the requirements for exercising an E2 plan, the following information would be added to the E2 Regulations: Exercising an E2 plan means exercising and updating at least one of the components of the E2 plan at least once a year for each regulated substance. All components of the E2 plan are exercised over a five year period. At least once over that five year period, all components of the E2 plan must be exercised simultaneously (i.e., full-scale exercise). To meet the requirements for exercising, the full-scale exercise must include at least one regulated substance in each of the hazard category as identified in Schedule 1. Full-scale exercising does not need to include the simultaneous exercising of all on-site regulated substances/categories. A full-scale exercise can be conducted individually for each of the multiple regulated substances/categories or can include any combination of the regulated substances/categories. For contained regulated substances, the regulated substance which has the largest maximum container capacity (as per 3(e) of Schedule 2) on-site must be considered for the full-scale exercise. For uncontained regulated substances, the regulated substance with the greatest expected maximum quantity (as per 3(d) of Schedule 2) must be considered for the full-scale exercise.
	exercises; and, that the exercise may involve a non-regulated substance if the response to an	Exercises do not require a regulated substance to actually be released.
	environmental emergency is the same, as long as the regulated substance is exercised every 3-5 years.	Exercises may range from administrative exercises to tabletop exercises to full-scale deployment exercises. Environment Canada intends to incorporate into the Implementation Guidelines for the E2 Regulations the following list of components from CSA-Z731-03 ("Emergency Preparedness and Response", p.12) to be part of an
	Comments also indicated that clarification is needed to indicate how the E2 plan is to be updated; when and how updates need to be sent to Environment Canada; what type of actions are admissible; what is considered a regulated	<ul> <li>emergency response and therefore to be part of an exercise:</li> <li>Activation of the E2 plan</li> <li>Situational assessment (for example, nature of the emergency, nature of the hazard, determining potential threats to health and the environment, etc.)</li> <li>Action Plan (incident command)</li> <li>Site Safety/Security</li> </ul>
	substance when exercising and updating an E2 plan; if exercising	<ul> <li>Response resource mobilization</li> <li>Notification and reporting (for example, to governments,</li> </ul>

Potential Amendment	Summary of Comments	Response
	can involve a group of similar substances; and, if local emergency response personnel are required to be part of the exercise.	safety authorities)  • Public and other communication  • Reviewing, debriefing, plan updating  For reasons of public safety, Environment Canada does not consider it acceptable to reduce the exercising frequency to every two years. The clarification related to exercising the E2 plan allows regulated persons to implement and exercise as is appropriate for their regulated substance(s) and sector(s).  Exercising the E2 plan will identify how it should be updated (e.g., out of date names, newer technology available, etc.). Environment Canada does not require regulated persons to submit the updates or
		the updated plan.
B9 Clarification for the use of existing emergency plans that were created on a voluntary basis or for another government  B9.1 Clarify that timelines and reporting requirements for the use of existing emergency plans should be the same as for new plans created under the E2 Regulations.  B9.2 Clarify that existing environmental emergency plans should be updated and tested annually as for newly prepared plans.	Comments suggest that the respondents did not realize that this requirement currently exists in the E2 Regulations. Some comments suggest that the timeframe for implementing and exercising an E2 plan should be extended (2 or 3 years). One comment suggests that an existing plan prepared for another organization would not need to be exercised under the E2 Regulations because there is too much overlap.	This is an amendment to an existing requirement.  Given the importance of timely emergency planning, Environment Canada does not support the idea of extending the time period to implement and exercise an E2 plan from the current 1 year to 2 years. If an existing E2 plan prepared for another organization is used to satisfy the requirements of the E2 Regulations, that E2 plan must also be exercised under the E2 Regulations; however, the exercise may be done concurrently such that requirements for the E2 Regulations and those for other organizations are met.
B10 Clarification for reporting B10.1 Clarify the intent for "location of release" in the written report. B10.2 Clarify who is supposed to provide the written report following an environmental emergency. B10.3 Clarify when the written report	Generally, respondents are in favour of indicating notification and reporting release thresholds in the E2 Regulations. A large number of comments recommended harmonizing with all existing reporting requirements (e.g. provincial, other regulations).  Comments also included: clarifying if the report is for a substance for	Currently, the E2 Regulations do not specify any quantified written spill reporting thresholds for substances released into the environment. Therefore, all environmental emergencies involving a regulated substance must be reported under the E2 Regulations. Environment Canada has undertaken a review of provincial regulations as well as the federal <i>Transportation of Dangerous Goods Regulations</i> (TDGR). Some provinces have identified quantified thresholds, while others have not. The TDGR thresholds are based primarily on public safety, whereas, the E2 Regulations primarily consider the environment and human health and life.
should be sent.	if the report is for a substance for which the regulated person has an	Given the different policy intents, the E2 Regulations would not be

Potential Amendment	Summary of Comments	Response
B10.4 Possibly include substance release thresholds for reporting.	E2 plan or the report is for any regulated substance spilled, regardless of whether it was included in an E2 plan; to only indicate the position and not the name of who is supposed to provide the written report; adding an exception for facilities that have large property boundaries; and setting high notification and reporting thresholds to avoid reporting for releases that have low risk on the environment or human health. One commenter recommended providing wording that would include any special reporting considerations that may exist for sensitive sites such as provincial parks, wildlife reserves, etc.  Also, because they state that adding notification and reporting thresholds	aligned with the TDGR with respect to spill reporting thresholds. Written spill reporting would continue to be required in the E2 Regulations for releases involving an environmental emergency (as defined under the <i>Canadian Environmental Protection Act</i> , 1999) of a substance that is listed in the E2 Regulations.
	will increase burden by having to provide multiple reports, comments suggest that some respondents are not aware that currently, since no notification and reporting release thresholds are defined under the E2 Regulations, all releases must be	
B11 Consolidation of all parts of Schedule 1 into one part  B11.1 Combine the three tables (one for each part) into one table. Substances should be sorted by ascending CAS Registry Number.	reported.  In general, comments suggest that respondents are supportive of this potential amendment. Several commenters suggested that the regulated substances be sorted alphabetically instead or in addition of by CAS registry number.  Comments suggest that respondents were unclear about the fact that Environment Canada intends to identify the associated	Environment Canada intends to provide only one list in the E2 Regulations. That list would be sorted by CAS. The associated hazard would be identified in a separate column. In compliance promotion documentation, Environment Canada would be able to provide regulated substance lists sorted by both CAS registry numbers and substance names.

Potential Amendment	Summary of Comments	Response
	hazards in a separate column.	
B12 Clarification for some substances already listed under Schedule 1 of the E2 Regulations	Comments are supportive of this potential amendment.	No revision is proposed for this potential amendment.
B12.1 Add clarification for napthalene (in liquid form) (CAS # 91-20-3) to indicate that the liquid state is achieved by heating the naphthalene to convert it from a solid to a liquid.  B12.2 Identify the substances that are in the form of a solution.		
B13 Clarification for Notice regarding the identification of substance and place (Schedule 2)  B13.1 Clarify that the maximum expected quantity, and the concentration of the mixture or the concentration of the solution, should always be declared.	Comments are supportive of this potential amendment.	No revision is proposed for this potential amendment.

#### **SECTION C**

These potential amendments aim at better managing the risks associated with substances that are currently used in large quantities in Canada by increasing regulatee accountability, with oversight by Environment Canada.

#### C1 Re-submission of schedules

C1.1 In addition to the existing requirement to submit a change to a notice within 60 days, add a new requirement to annually re-submit the Notice regarding the identification of substance and place (Schedule 2).

C1.2 Add a new requirement to annually re-submit the Notice of the implementation and testing of an environmental emergency plan (Schedule 5).

Commenters generally thought that the resubmission of forms would be very burdensome both for industry and the government and that Environment Canada would need to update and overhaul the current online reporting system to accommodate for the requirement to annually resubmit data. Commenters indicated that the increase in burden would not create an increase in benefit to the environment. Commenters recommended enforcing the current updating requirements instead of imposing new notification

Environment Canada proposes to add a new, one-time requirement to re-submit the information contained in current Schedule 2, Schedule 4 and Schedule 5 (in one combined new schedule) within the year that the amendments are promulgated, and add a new requirement for notification every 3 years for regulated persons that have E2 plans, and notification every 5 years for regulated persons that were only required to submit a Schedule 2 notice and that were not required to prepare an E2 plan. The current resubmission requirements of 3(4) to submit a change to a notice within 60 days would still apply, whether the regulated persons were required to prepare an E2 plan or not.

The periodic notifications would be due on June 1st (as for the National Pollutant Release Inventory (NPRI)) every 3 or 5 years as described above. The information would be submitted in the form of a new schedule that will contain the same information as the

Potential Amendment	Summary of Comments	Response
C2 Request for new information C2.1 Add a new requirement for an up-to-date material safety data sheet (MSDS) to be included in the environmental emergency plan. C2.2 Add a new requirement to provide the North American Industry Classification System (NAICS) codes, complete to at least 4 digits, that describe the operations at the facility. C2.3 Add a new requirement to provide the date the facility became subject to the E2 Regulations for each substance.	requirements. Recommendations included changing the resubmission timeline to 2 or 3 years; allowing for electronic notification; and coordinating reporting with the National Pollutant Release Inventory (NPRI) or with the Single Window Information manager (SWIM), including the annual reporting date (June 1st). Comments also indicated that Environment Canada will need to clarify if a regulated person who has submitted new information within 60 days or 90 days (as per sections 3(2)(4), 3(2)(5) and 7(3)) would still be required to submit an annual notification - submitting both is viewed as redundant. One comment indicated that the potential amendment would be positive by improving clarity and annual accuracy of information.  Several commenters have indicated that Environment Canada should reconsider including a requirement for a MSDS (or equivalent) in the E2 plan. Commenters indicated that it is better to have all necessary response information included in the E2 plan.	individual notices of identification of substance and place, preparation of an E2 plan and implementation and testing of an E2 plan. Schedule 3 certification would also be required with this new notice.  Following consultations, Environment Canada agrees with comments that the requirement to provide a MSDS (or equivalent) may result in regulated persons deciding not to incorporate substance-specific hazard information into the body of the E2 plan. This could diminish the efficacy of the E2 plan and increase the risk to the facility. Therefore, Environment Canada would not proceed with the requirement to include a MSDS (or equivalent) in an E2 plan.  For C2.3, see also B1.4 above.
C3 Certification for environmental	Comments indicated that	The certification that is being proposed is to provide a signed copy of

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Summary of Comments	Response
certification should not be required at the same time as written reports	Schedule 3 when a written report is submitted as required in section 9 of the current E2 Regulations.
following an environmental	
emergency as certifications can	
issuance of a written report.	
	Committee on the Scrutiny of Regulations. They also include
Comments are generally in favour of improving language consistency. Some commenters suggested that the unit of measure for minimum	The E2 Regulations were originally based on similar regulations from the US Environmental Protection Agency which list the minimum quantity thresholds in tonnes. In addition, using this unit of measure allows for the use of only one unit for all regulated substances,
quantity thresholds listed under Schedule 1 should be in litres, for all or some regulated substances, for example, for regulated substances	whether they are in the solid, liquid or gaseous form. Also, weight is constant regardless of temperature.
that are typically in liquid form.	
educing the administrative burden for in	
Comments generally indicate that	In light of the comments received, Environment Canada proposes to
reducing the burden for small	make changes for the re-submission of schedules to reduce the burden on all businesses. Refer to section C1 for more details.
also indicate that reducing the burden should not be directed at small businesses only, but to the	Aspects such as secondary containment and remote location may be considered in the risk assessment, preparedness, and response portions of the E2 plan.
overall industry sector.	
	Exemptions are provided for certain uses. For example, currently,
	the E2 Regulations provide an exemption for ammonia used in
	agriculture. Also, comments have suggested exempting strong acids
	and bases used in the fabrication of cement, which will be proposed in the amendments to the E2 Regulations, as explained in section
	A1.
businesses more time to comply will	
	certification should not be required at the same time as written reports following an environmental emergency as certifications can take longer, impeding the timely issuance of a written report.  Comments are generally in favour of improving language consistency. Some commenters suggested that the unit of measure for minimum quantity thresholds listed under Schedule 1 should be in litres, for all or some regulated substances, for example, for regulated substances that are typically in liquid form.  educing the administrative burden for in Comments generally indicate that respondents are supportive of reducing the burden for small businesses, but many comments also indicate that reducing the burden should not be directed at small businesses only, but to the overall industry sector.  Requirements should be the same for a given quantity of a regulated substance, based on the environmental risk. Comments also indicate that giving small

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obligations; and, exemptions for	for all; that burden is higher for	
certain uses.	regulated persons in charge of	
	Federal House facilities that are	
	already subject to the Storage Tank	
	Systems for Petroleum Products	
	and Allied Petroleum Products	
	Regulations; and, that burden will be	
	significantly increased for small	
	businesses if the low quantity	
	thresholds for the strong acids and	
	bases are implemented.	
	Suggestions for reducing the burden	
	include: flexibility in the regulatory	
	requirements for facilities that have	
	secondary containment; longer time	
	periods to comply for small	
	businesses; simplified versions of	
	Schedules for small businesses;	
	exemptions for facilities in remote	
	locations; and, providing	
E2 Providing more options for	exemptions for certain uses.  Comments generally indicate that	As indicated in B5, Environment Canada will make every effort to
	respondents are supportive of	update the E2 Regulations Regulatee Reporting System so that all of
reporting	providing more options for reporting	the required information can be submitted online.
E2.1 Add a provision to provide	and suggest: electronic reporting	the required information can be submitted orinine.
regulatees with the option to submit	(database or e-mail); using or	Although electronic reporting would be the primary submission
their reports using technologies	integrating with systems similar to	method, the option to submit notices and reports by paper will still be
such as internet, email, PDF	the National Pollutant Release	available.
documents, electronic signatures,	Inventory (NPRI) or the Single	a randolor
etc.	Window Information Manager	The E2 Regulations require that a paper copy of the E2 plan be
	(SWIM); easy access to electronic	readily available for the individuals who are to carry into effect the E2
	templates for schedules; and,	plan in the event of an environmental emergency. In addition,
	clarifying if the amendment applies	records of annual updates and exercises must be kept with the E2
	to schedules or also to the reporting	plan. Note that although some facilities may be unattended on a daily
	of releases. Comments also	basis and are not considered as a place of work, the regulated
	indicate that certifications should	person required to prepare the E2 plan should keep in mind that
	also be submitted electronically	there are still persons who will go to the facility from time to time for
	(electronic signatures).	maintenance, filling containers, etc., and a copy of the E2 plan must be readily available to them.
	It is also suggested that electronic	be readily available to them.
	reporting could be difficult in rural	
	and remote areas, in particular	

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	northern communities.	
	A commenter also suggested that electronic copies of E2 plans should	
	be accepted for remote sites or	
	sites with no buildings to reduce	
	cost of printing and storage.	
OTHER COMMENTS		
Other comments not directly related t	to a specific section of the Consultation	Document were provided.
n/a	Several respondents suggested to better integrate the risk assessments of substances with the Chemicals Management Plan or other regulations (e.g. Transportation of Dangerous Goods Regulations).	As explained in section A1, the methodology developed under Part 8 of CEPA 1999 differs from the methodology used to identify toxic substances as defined under Part 3, Section 64 of the Act. Although the definitions within Part 3, Section 64 and Part 8, Section 200 are similar, the definitions are interpreted according to what causes immediate harmful effects (Section 200) versus long-term toxicity (Section 64). However, the Environmental Emergencies Program does consider and use data from the Chemicals Management Plan as appropriate. The E2 Regulations can be used as an instrument to manage the risk posed by certain substances considered toxic as per the criteria for the Chemicals Management Plan, as long as they also meet the criteria considered for evaluation under the E2 Regulations.
	Other substantive comments include:	In response to the other comments:
	a) Suggestion to provide E2 plan templates for different hazard categories;	a) Considering the various industry sectors and uses for the numerous regulated substances, E2 plans must be site-specific. As such, generic templates have not been developed.
	b) Clarify how the E2 Regulations align with regulatory requirements, standards and guidelines that exist for nuclear generating stations;	b) Radioactive substances are not regulated by the E2 Regulations. However, if there are regulated substances at the site of a nuclear generating station, compliance with the E2 Regulations for these regulated substances is required, as appropriate.
	c) Revising the Risk Evaluation Framework;	c) The Risk Evaluation Framework is continuously under revision. For example, aquatic toxicity was considered for the substances added with the 1 <sup>st</sup> amendment to the E2 Regulations, and pool fires are now being considered for the substances added with the 2 <sup>nd</sup> amendment. Environment Canada intends to revise in future amendments the evaluations for the regulated substances appearing

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		when the E2 Regulations were first published, in 2003.
	d) Better representation of the end points used for risk evaluation;	d) The end points used for risk evaluation appear in the Summary Reports for each regulated substance which are accessible at the following page: <a href="https://www.ec.gc.ca/ee-ue/default.asp?lang=en&amp;n=B2B4A2B2-1">https://www.ec.gc.ca/ee-ue/default.asp?lang=en&amp;n=B2B4A2B2-1</a> . Details on the methodology are also available in the Summary of the Risk Evaluation Framework for Determining Quantity Thresholds and Concentrations for Potential Substances: <a href="https://www.ec.gc.ca/ee-ue/B2B4A2B2-D46D-460F-BCD9-C742A0F79191/ue-summary-ref-en.pdf">https://www.ec.gc.ca/ee-ue/B2B4A2B2-D46D-460F-BCD9-C742A0F79191/ue-summary-ref-en.pdf</a> .
	e) Indicating in the short form reports which industry sectors would particularly be affected by the addition of a specific substance;	e) The E2 Regulations are substance-based, not sector-based. It is the responsibility of the person who owns or has the charge, management or control of a substance to determine if this substance is regulated under the E2 Regulations. Some uses are identified in the Summary Reports, but Environment Canada cannot identify all industry sectors that could be affected by the addition of certain substances to the E2 Regulations. Where available, additional information on sectors can be found in Screening Assessment Reports and Risk Management Approaches prepared under the Chemicals Management Plan.
	f) Streamlining the notification requirements (e.g. annually) to avoid multiple reporting under one regulation; and	f) When a facility becomes subject to the E2 Regulations, the regulated person has the option to submit all notices at once if they wish to do so. They do not have to wait to submit the Notice regarding the preparation of an E2 plan (Schedule 4) and the Notice of the implementation and testing of an E2 plan (Schedule 5) if their E2 plan is ready and has been exercised and implemented at the same time as they submit the Notice regarding the identification of substance and place (Schedule 2).
	g) Clarification on the use of 3rd party contractors to prepare E2 plans (as in the case for Emergency Response Assistance Plans (ERAPs) under the <i>Transportation of Dangerous Goods Regulations</i> ).	g) It is the responsibility of the person who owns or has the charge, management or control of a regulated substance to prepare the E2 plan for their facility. Environment Canada requires that the E2 plan meets the requirements of the E2 Regulations and that it is kept current. Environment Canada does not exclude other individuals from contributing to the preparation of the E2 plan; however, it is the regulated person who is ultimately responsible for ensuring all requirements are met.
		Required resources and equipment for preparedness planning,

## Summary of Comments and Responses

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		including the preparation of an E2 plan, could be obtained through arrangements with other parties, such as other industries or outside agencies. Environment Canada encourages such arrangements, which could be formalized if the regulated person chooses to do so.
	h) Environment Canada should focus on improving current compliance promotion instead of amending the E2 Regulations.	h) While actively engaging in compliance promotion initiatives, Environment Canada is also expanding the E2 Regulations based on the determined emergency hazards of recently assessed chemicals.