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Environmental Emergency Regulations (E2 Regulations)

Overview of the Proposed 2nd Amendment

Environmental Emergencies Program
November, 2013

Outline

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Current status of the E2 Regulations

- The E2 Regulations, made under the *Canadian Environmental Protection Act, 1999*, subsection 200(1), aim to
 - Enhance the protection of the environment and human health from environmental emergencies by promoting prevention and ensuring preparedness, response and recovery
 - Reduce the frequency and consequences of environmental emergencies caused by uncontrolled, unplanned or accidental releases of toxic or other hazardous substances
- The E2 Regulations may apply to any person who owns or has the charge, management or control of any of the 215 listed substances at a fixed facility. There are currently about 4350 regulatees.
- The E2 Regulations first came into force in November 2003 and were amended in December 2011.
- E2 Regulations are one of the instruments used in Risk Management Approaches under Chemicals Management Plan

E2 Regulations requirements

- Schedule 1 of the E2 Regulations contains a list of substances that, should they enter the environment as a result of an environmental emergency, would be or may be harmful to the environment, its biological diversity or human life or health.
- All the substances on Schedule 1 of the E2 Regulations have at least one emergency hazard characteristic (they are either explosive, flammable, toxic if inhaled or added to an aquatic environment, or carcinogenic). Listed substances pose a credible risk to the environment and human health if stored or handled on facilities at or above the regulated concentrations and threshold quantities.
- Under the E2 Regulations, any person who owns or has the charge, management or control of a listed substance may be required to
 - Identify substance and place
 - Prepare an environmental emergency plan (E2 plan)
 - Implement, update and test the E2 plan annually
 - Notify of closure or decommissioning
 - Report environmental emergencies involving regulated substances

E2 Regulations success stories

- The E2 Regulations protect the environment by encouraging industry members to reformulate their products, reduce quantities on site, change to safer processes, and reduce potential impact zones around facilities. Here are successes:
 - Substituted chlorine for sodium hypochlorite for water treatment and reduced risk zone from 4 km to no impact on the surrounding population
 - Eliminated or reduced the size of large reservoirs of propane, hydrochloric acid and diethyl ether
 - Captured vapours to reduce risk to human health due to inhalation or explosion
 - Reduced concentration of ammonium hydroxide from 31.5 to 19.5%, thus reducing the impact zone
 - Established multi-disciplinary teams to evaluate risks of facility activities and equipment



- Sharing of information and best practices among E2 regulatees:
 - In Quebec, several cities have established a joint committee (*comité mixte municipal industriel*) (CMMI) with industrial, municipal and different provincial and federal government representatives to manage the risks of industrial accidents linked to E2 substances.

Objectives of the proposed amendments

- Improve protection of environment and human health
 - Add new chemicals to the E2 substance list (Schedule 1): These chemicals were identified under the federal government's Chemicals Management Plan (CMP) or have been internationally recognized as hazardous and a significant emergency risk
- Improve clarity and effectiveness of the E2 Regulations
 - Add new text and modify wording where needed, thus making the regulations clearer and providing more guidance to regulatees.
 - Make the regulations more prescriptive and more specific, thus helping industry better comply with the regulations
- Harmonize E2 Regulations with existing laws and regulations and streamline administrative requirements
 - Consider the reporting requirements of the *Transport of Dangerous Goods Regulations* and provincial/territorial requirements. The aim is to establish clear reporting requirements that protect the environment and reduce the burden on industry so that small spills or releases that do not pose a threat to the environment or to human health would no longer be reported.

Key changes of the proposed amendments

- Add 49 substances and amend 3 others that meet the triggers for E2 Regulations (i.e., flammable, combustible, human health toxicity and/or aquatically toxic)
 - Propose to add 36 CMP substances
 - 20 from the CMP Challenge (batches 1–10), affecting different sectors (e.g. vanadium pentoxide and hexane)
 - E2 Regs identified in risk management approach for 5 of these substances
 - 16 from the CMP Petroleum Sector Stream Approach
 - E2 Regs identified in risk management approach for many of these substances
 - Propose to add 12 strong acids and bases
 - Meet OECD definition of “corrosive” (destruction of skin and irreversible damage to eyes) (e.g. sulphuric acid)
 - Propose to amend 3 other strong acids and bases already in the regulations so that the threshold for all acids and bases are consistent (e.g. hydrochloric acid)
 - Propose to add 1 additional substance to meet our intent to regulate ammonia
- Change Schedule 1 to a single list of substances:
 - Organize by CAS # rather than in different parts, thus eliminating problems when a substance could fall under more than one part
 - Add column to indicate the hazard(s) on which the threshold is based

Key changes of the proposed amendments

(cont'd)

- Add minor prescriptive changes to the E2 Regulations to clarify what is expected for
 - Testing / exercising an E2 Plan
 - Informing the public
- Revise guidance in the Implementation Guidelines to increase flexibility for stakeholder
 - Clarify expectations regarding hazard assessment and consideration of site-specific factors that may be unique and difficult to include in the regulations themselves
- Clarify regulatory text based on comments from all stakeholders, including industry



Preliminary consultation: Sectors

- Phased-in approach: start with key sectors and include remaining sectors as consultations progress
 - Preliminary sector analysis indicates that dozens of sectors are implicated
- There are 6 key sectors:
- chemical manufacturing
 - petroleum refineries
 - rubber products manufacturing
 - textile mills
 - paints and coatings
 - mining, quarrying, and oil and gas extraction
- High priority for consultation: high-volume substances used by multiple sectors
 - Low priority for consultation: sectors unlikely to require an E2 plan

Preliminary consultation: Sectors

(cont'd)

- Include industries involved with the CMP substances, current regulatees, potential regulatees and other interested parties / stakeholders / associations
- Identify and focus on small and medium-sized enterprises (SMEs) in all implicated sectors
- Use existing industry fora for communication
- Align with ongoing consultation activities (consultations for other regulations, existing consultation groups, compliance promotion activities)
- Use technologies and tools such as teleconference, video conference, webinars and online surveys

Preliminary consultation: Timelines

- Preliminary consultation: launched in fall 2013
 - Host or attend consultation venues: winter 2014 / spring 2014
 - Finalize recommendations: spring 2014
 - Close of preliminary consultation period: late spring 2014
- Environment Canada prepares draft regulations based on stakeholder input: summer 2014
- Publication in the *Canada Gazette*, Part I (CGI) and formal public comment period: November 2014

Need more info?

- Environmental Emergencies website:
<http://www.ec.gc.ca/ee-ue/>
- Current E2 Regulations:
<http://laws-lois.justice.gc.ca/eng/regulations/SOR-2003-307/index.html>
- Current Implementation Guidelines for the E2 Regulations:
http://www.ec.gc.ca/lcpe-cepa/documents/reglements-regulations/ue-ee/guidelines_e2_regulations-eng.pdf
- CEPA Registry:
<http://ec.gc.ca/lcpe-cepa/eng/Regulations/DetailReg.cfm?intReg=111>



Where to send your feedback

- We encourage you to send your feedback through our online form:
<http://ec.sondages-surveys.ca/s/CEPAE2-LCPEUE/E2consultation/>
- You can also send comments to our email address:
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