



PROVISION COALITION

PROCESSING FOOD SUSTAINABLY

100 Stone Road West, Suite 205
Guelph, Ontario N1G 5L3
P. 519-822-2042
info@provisioncoalition.com
www.provisioncoalition.com

Brief: Proposed Amendments to Environment Canada's Environmental Emergency (E2) Regulations

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Author: Keith Mussar

Keith Mussar & Associates

Agri-FOOD CONSULTANTS

Background

Under the Environment Emergency Regulations (E2 regulations) of 2003 (<http://laws-lois.justice.gc.ca/eng/regulations/SOR-2003-307/index.html>), stakeholders are required to provide data to the Minister of the Environment regarding substances listed in Schedule 1 of the regulations. Stakeholders must provide data if the amount of the substance stored in a location exceeds a quantity prescribed in Schedule 1 or the size of the storage container at the location is equal to or exceeds the amount prescribed for the substance in Schedule 1.

Additionally, stakeholders are required to prepare an environmental emergency plan for those substances exceeding the amount listed in Schedule 1, and are required to test the effectiveness of the environmental emergency plan once per calendar year.

Proposed Amendments to the E2 Regulations

Addition of New Substances

Environment Canada is proposing to add 49 substances to Schedule 1 of the E2 regulations along with other amendments for clarification. The E2 consultation document can be found at <http://www.ec.gc.ca/ee-ue/default.asp?lang=en&n=6D7F0179-1>. The addition of the following 12 substances may be of importance to the food and beverage sector.

CAS Number	Name of Substance	Concentration (% by weight)	Minimum Quantity (tonnes)	Use
79-06-1	Acrylamide (2-propenamide)	1	9.10	plasticizer in food packaging
126-73-8	Phosphoric acid tri-butyl ester	10	4.50	anti-foam
110-54-3	Hexane	10	4.50	solvent
120-80-9	1,2-Benzenediol	1	4.50	naturally present in some fruit
1336-21-6	Ammonium hydroxide	20	9.10	cleaning agent leavening agent acidity regulator antimicrobial

If added to Schedule 1, companies would be required to report to Environment Canada the data prescribed in Schedule 2 of the E2 regulations (<http://laws-lois.justice.gc.ca/eng/regulations/SOR-2003-307/index.html>) and prepare an environmental emergency plan should the amount of the substance being stored at the location or the storage capacity for the substance be equal to or exceed the minimum quantity for the substance.

Strong Acids				
CAS Number	Name of Substance	Concentration (pH)	Minimum Quantity (tonnes)	Approximate Number of 200 L or 44 Imperial Gallon Drums
7664-93-9	Sulfuric acid, solution	≤ 2	0.22	0.6
7790-93-4	Chloric acid, aqueous solution	≤ 2	0.22	1.2
Strong Bases				
CAS Number	Name of Substance	Concentration (pH)	Minimum Quantity (tonnes)	Approximate Number of 200 L or 44 Imperial Gallon Drums
1310-73-2	Sodium hydroxide, solution	≥ 11.5	0.22	0.7
1310-58-3	Potassium hydroxide, solution	≥ 11.5	0.22	0.7
1305-62-0	Calcium hydroxide, solution	≥ 11.5	0.22	0.5
18480-07-4	Strontium hydroxide, solution [used in refining of beet sugar]	≥ 11.5	0.22	0.6
17194-00-2	Barium hydroxide, solution	≥ 11.5	0.22	0.3

For the strong acids and bases in the list above, companies would be required to report to Environment Canada the data prescribed in Schedule 2 of the E2 regulations (<http://laws-lois.justice.gc.ca/eng/regulations/SOR-2003-307/index.html>) and prepare an environmental emergency plan when the amount of the substance being stored at the location or the storage capacity for the substance be equal to or exceed the minimum quantity for the substance.

In addition to the above, the minimum quantity that triggers reporting of data to Environment Canada from Schedule 2 of the E2 regulations for the following strong acids that are already on Schedule 1 has been reduced to 0.22 metric tonnes.

CAS Number	Name of Substance	Concentration (pH)	Minimum Quantity (tonnes)	Approximate Number of 200 L or 44 Imperial Gallon Drums
7647-01-0	Hydrochloric acid	≤ 2	0.22	1.1
7697-37-2	Nitric acid	≤ 2	0.22	0.73
10035-10-6	Hydrobromic acid	≤ 2	0.22	0.74

Amendments for Clarification

Environment Canada is proposing amendments which would clarify provisions of the regulations. While Provision Coalition members are encouraged to review all of the proposed amendments, the following amendments may be of particular importance to food and beverage manufacturers.

B1.1 Clarification of the concept of “container”

In a system where two or more containers are interconnected by pipes with shut-off valves, each container and the piping between the shut-off values would be deemed to be a separate container. Industry may be required to report data based on each of the containers.

The shut-off valves or other engineering devices “*should*” be controlled automatically and/or remotely. Upon drafting into regulation, it is likely that “*should*” would be replaced by “*shall*” or “*must*” (interpretation provided by Environment Canada to Keith Mussar & Associates).

B1.3 Clarification of Environment Canada's Expectations for Emergency Plan Exercises

Environment Canada is proposing that companies would exercise one or more of the following aspects of the plan at least once a year on a rotational basis such that all aspects are exercised over a 5 year period and that all aspects [the complete plan] are exercised at least once over that 5 year period. The aspects of the plan would include but not be limited to the following:

- Environmental emergency plan activation
- Situational risk assessment of the environmental emergency scenario being exercised (i.e. specific nature of the emergency, nature of the hazard, determining potential threats to health and environment)
- Action plan (incident command)
- Site safety/security
- Response resource mobilization
- Notification and reporting (to all authorities, e.g. government, safety)
- Notification of the public and other communications

B7 Clarification for measures to notify members of the public

Provision B7.1 extends the responsibility of companies under their environmental emergency plan to indicate measures to be taken "to protect" the public in addition to the "notification of" the public in case of an environmental emergency.

Implications of the Proposed Regulations on Provision Coalition Members

The following are some of the high level implications that may face the Provision Coalition members upon passing of this regulatory amendment.

- Companies, including small and medium-sized, will be required to report data to Environment Canada on the storage of relatively low levels of acids and bases which are used for cleaning and other manufacturing applications. Many of these companies are currently not obligated to report to Environment Canada. Companies storing relatively small amounts of acids and bases will be required to implement and exercise environmental emergency plans which include provisions for the **notification** and the **protection** of the public.
- Companies may be required to invest capital for the automation of manual control valves in their manufacturing facilities.

How to Provide Comments

Deadline for submission of comments is April 7, 2014

Stakeholders are encouraged to provide comments to Environment Canada through the on-line feedback form which can be found at (<http://ec.sondages-surveys.ca/s/CEPAE2-LCPEUE/E2feedback/>).

Comments can also be submitted in via e-mail to Environment Canada at cepae2-lcpeue@ec.gc.ca or in writing to:

Susan Roe
Manager, Prevention
Environmental Emergencies Program
Environment Canada
351 St. Joseph Blvd, 16th floor