

Notes on Industry Concerns with the Term “Toxic” in CEPA

Industry’s Concern

Two industry associations are concerned with the term “toxic” in CEPA. They have advocated either wholesale removal of the term from the Act, or selective removal. It is unclear how they would undertake the latter, but changing the “Toxic Substances List” to a more benign term would likely be their first priority.

The associations have outlined two main concerns with the term. First, that once a substance has been labeled CEPA-toxic, markets for that substance can be hindered. As noted in the May 2006 parliamentary committee submission of the Canadian Chemical Producers Association,

The term “toxic” creates stigma for many substances that are subject to a wide range of risk management options under CEPA. One solution in the review would be to remove the “toxic” term from the Act.

The second concern relates to how “toxic” is communicated with the general public, and a possible distinction between the CEPA definition of the term and the commonly understood definition. As stated in the submission of the Canadian Consumer Specialty Products Association,

The use of the term “toxic” in CEPA is not the same as the commonly understood definition of toxic. The commonly understood meaning of the word “toxic” is poisonous, even in small amounts. To the general public, substances designated as “toxic” under CEPA and listed on Schedule 1 are “poisonous” and should not to be used. This designation of “toxic” is misleading because many of the substances on Schedule 1 are being managed and can be used safely and effectively. Labeling substances requiring care and management as “toxic” does not fairly or adequately inform Canadians of their nature or the level of risk they represent. We believe there is misunderstanding of the legislation and the use of the term “toxic” among Canadians and it undermines the credibility of CEPA and Schedule 1. We respectfully provide two examples:

- The designation of greenhouse gases, such as carbon dioxide (CO₂), as CEPA “toxic”. Carbon dioxide is a gas that all breathing beings exhale, that plants rely on for photosynthesis, and is present for example, in carbonated beverages.
- Excerpt from a Canadian environmental group’s pamphlet and website:
Ammonia is an extreme eye and respiratory irritant and will react with bleach to form toxic chloramine gas. It may also cause kidney and liver damage. Ammonia has been listed as

CEPA toxic in the aquatic environment by the Canadian Environmental Protection Act (CEPA). Used in liquid glass cleaners and hard surface cleaners.

Environment Canada's risk assessment of ammonia indicated the following:

It was determined from reviewing toxicity and exposure data that freshwater organisms are most at risk from releases of ammonia in the aquatic environment. The major quantifiable sources of ammonia released to aquatic ecosystems across Canada are municipal wastewater treatment plants (WWTPs).

Substantive Analysis

The above concerns would appear to assume that "toxic" relates only to human health, whereas a substance can also be toxic to the environment. Toxicity may also relate to human health *via* the environment, as would be the case for a substance that is persistent and bio-accumulative.

Toxicity relates to dose. The term "toxic" in CEPA refers to a range of substances that are indeed toxic (i.e. harmful or poisonous) in particular contexts. Even the example of CO₂, above, is toxic at a global scale, especially when one considers the volumes being emitted by human sources. At the other end of the scale, even PCBs are *not* toxic below a certain level. While there is wide variation in the levels at which substances become truly toxic, it is not unreasonable to describe substances that pose a serious risk to human health or the environment with this label. The Act itself addresses the dose issue, for example by prescribing a concentration level for releases of each substance on the Virtual Elimination List (s. 65(3)).

Contrary to the view expressed by the two industry associations, the CEPA definition of "toxic" is arguably quite narrow. Attaran, in his case comment on the *Hydro Québec* case (more on this case below), illustrates this in the following example:

a notional substance that billows liberally out of Canadian smokestacks and is uniquely lethal to Saurus Cranes (a species found uniquely in Vietnam) may not enter their distant habitat at concentrations sufficient to cause harmful effects, and may therefore not be "toxic" under Part II [of CEPA]. Seen in this light, *CEPA's* definition of toxicity is actually *narrower* than the scientific meaning of the word, which focuses simply on the substance's ability to cause mortality or morbidity on any species, at any concentration, quite apart from its ability to do so in the course of ordinary or foreseeable exposure.

The footnote attached to this paragraph reads:

"In scientific parlance, toxicity is the inherent capability of a substance to cause harm, which does not take into account exposure. However the [CEPA definition] is a legal one which may be equated with risk since it embodies the concept that harm to the environment or to human health is a function of both intrinsic toxicity (i.e. toxicity in the

traditional sense) and the extent of exposure. ...”: Canada, Health Canada, *Canadian Environmental Protection Act – Human Health Risk Assessment for Priority Substances* (Ottawa: Health Canada, 1994), p. 2. The crude “traditional sense” of toxicity is what scientists report by statistics such as LD⁵⁰ (96 h), which is the concentration of a toxin at which 50% of the population of a certain experimental animal will die in the course of a 96 hour exposure. By imposing a further criteria of entry, or possible entry, into the environment; and lowering the regulatory threshold of exposure at which there is actual danger or harm to a level at which exposure “may constitute a danger” or “may have” harmful effects; a finding of *CEPA* toxicity comprises both a scientific determination, usually from experimental studies, and a considered judgment, erring in all cases on the side of precaution, as to the probability of entry into the environment and the probability of resulting effects. ...

Finally, there are sound regulatory policy reasons for maintaining the “toxic” designation. There are substances currently managed by CEPA that have been regulated for more than three decades (e.g. PCBs). These substances, as well as the more recent regulated chemicals such as PERC, TCE and vinyl chloride, are included on the *List of Toxic Substances*, as well as being bound up in the Government of Canada’s *Toxic Substances Management Policy*, which remains the core policy for regulating dangerous substances.

Reference to the *List of Toxic Substances* and the *Toxic Substances Management Policy* and all of the substances captured by them is necessary because 30 years of regulation of these substances hinges on this language. From an administrative point of view, the fact that the substance is “toxic” is the common thread for the regulations and other measures. From the public’s perspective, there is a shared understanding, even if subconscious, that a “toxic” substance is among the worst. There is a shared expectation that government will, and is obliged to, deal appropriately with those “toxic” substances that emerge in the future. Removing or weakening the term may thereby reduce the impetus for proper regulation of harmful substances.

The Constitutionality Issue

Given the above discussion about removing or watering down of the term “toxic” in CEPA, it is worth exploring whether this would endanger the constitutionality of the legislation. In this regard, below are some preliminary observations about parts of the *Hydro Québec* case dealing with the term “toxic.” Please note that the following are simply observations and do not constitute formal legal advice or opinions.

1. *Hydro Québec* is a seminal case, putting to bed the issue of whether CEPA’s regulatory provisions lie properly within federal jurisdiction. Had the Supreme Court gone the other way (as lower courts in Quebec held), the regulatory provisions that form the basis of CEPA’s effectiveness would have been effectively struck down.
2. The Court was deeply divided on the issue, delivering a 5-4 split judgment. The legislation’s validity was upheld, but just barely. It is difficult to determine what slight changes

to the Act might have moved one of the judges to decide differently on the issues, but discussion of the term “toxic” throughout the judgment is instructive.

3. The term “toxic” was central to the case. As stated at para 107 by the majority judgment, written by Justice La Forest: “Above all, the respondent is concerned with the term ‘toxic’ as it is used in s. 11, which, together with the definitions just quoted, it contends, constitute an impermissibly broad interference with provincial legislative powers.”

4. The minority argued vigorously that the ambit of the legislation was too wide, with specific reference to the term “toxic.” Consider the following passage from the dissent (at para 60):

the countless spheres of human activity, both collective and individual, which could potentially fall under the ambit of the Act are apparent. Many of them fall within areas of jurisdiction granted to the provinces under s. 92. Granting Parliament the authority to regulate so completely the releases of substances into the environment by determining whether or not they are “toxic” would not only inescapably preclude the possibility of shared environmental jurisdiction; it would also infringe severely on other heads of power assigned to the provinces.

Had the word “toxic” not been present in the legislation to provide specificity at the time of *Hydro Québec*, this would have increased the ambit of the legislation even further, strengthening the minority’s view considerably.

5. On the other side of the judgment, “toxic” was a feature of the reasons why the federal government was deemed to be justified in using the criminal law power to regulate under CEPA. (Arguments for upholding the law under another head of federal power -- peace, order and good government -- were rejected.) La Forest notes at para 123: “pollution is an ‘evil’ that Parliament can legitimately seek to suppress. Indeed, as I indicated at the outset of these reasons, it is a public purpose of superordinate importance; it constitutes one of the major challenges of our time.” To strengthen his argument he adds (at para 126):

This is, of course, in line with the thinking of various international organisms. The World Commission on Environment and Development (the Brundtland Commission) in its report *Our Common Future* (1987) (see at pp. 219-20, and pp. 224-25) long ago recommended the adoption of appropriate legislation to protect the environment against toxic and chemical substances, including the creation of national standards that could be supplemented by local legislation. [Emphasis added.]

6. This leads La Forest, at para 127, into a discussion of environmental protection as “a major challenge of our time” -- one with a significant international component. Again, the importance of regulation of toxics per se plays prominently in this part of the judgment. “I am confident that Canada can fulfil its international obligations, in so far as the toxic substances sought to be prohibited from entering into the environment under the Act are concerned, by use of the criminal law power,” he states. [Emphasis added.] Note the specific link between the

“evil” of “toxic substances” and the criminal law power as the justifying authority for regulating in this area.

7. La Forest further emphasizes the importance of the regulated substances being “toxic” at para 130: “I conclude that Parliament may validly enact prohibitions under its criminal law power against specific acts for the purpose of preventing pollution or, to put it in other terms, causing the entry into the environment of certain toxic substances.” [Emphasis added.]

8. He restates this at para 132, noting the importance of reducing pollution not only for the purposes of human health, but also for environmental protection: “The protection of the environment, through prohibitions against toxic substances, seems to me to constitute a wholly legitimate public objective in the exercise of the criminal law power. Humanity’s interest in the environment surely extends beyond its own life and health.” This may run counter to industry claims that CO₂, for example, should not be deemed “toxic,” especially in light of La Forest’s other comments on the international aspect of environmental protection.

9. Some may argue that it was the definition of the term “toxic” that was really at issue, so as long as the definition (i.e. “having or that may have an immediate or long-term harmful effect on the environment”) remains the same, we can do away with the specific term “toxic.” However, there are strong suggestions that the Court attached weight to the term itself. At 141:

one cannot look at a phrase like "having or that may have an immediate or long-term harmful effect on the environment" in a manner divorced from the term "toxic" (i.e. "poisonous"; see the Oxford English Dictionary (2nd ed. 1989)). As well, the provision underlines that toxic as used in the Act includes substances that are not per se, toxic, but that may, when released into the environment in a certain quantity, concentration or condition, become toxic. Lead, for example, which appears in Schedule I, entitled "List of Toxic Substances", is not per se toxic but it can be so when it enters the environment in the course of its use. (This approach is strongly fortified by the nature of Schedule I, which I shall examine later.) The phrase, in other words, describes the nature of toxicity in respect of which substances are to be tested or assessed. [Emphasis added.]

(As an aside, some may argue that CO₂ and other substances are not truly “toxic” (i.e. poisonous), but this passage makes clear that “quantity, concentration or condition” can render a substance toxic. Even CO₂, at a global scale, would arguably fit this criteria.)

10. “Toxic” was further discussed in the Court’s examination of the intent of the legislation. At para 137, La Forest quotes a 1987 Environment Canada document outlining the reasons why CEPA was necessary: “The fact that most human beings have detectable levels of synthetic chemicals in their bodies is evidence of our collective carelessness in using them. In his Report Card on the environment in 1986, Environment Minister Tom McMillan gave Canada an “F” for its ability to handle toxic substances.” La Forest later states, at para 139, “The manner of assessment traditionally employed -- related as it was to the concern for ‘pollution that could be seen, touched, smelled or tasted’ and ‘cleaning up a mess after it occurred’ (p. 3) -- was no longer adequate. As the report put it (at p. 3): ‘Toxic chemical contamination cannot be handled in this way...’” Given that the report’s use of the term “toxic” predates the definition contained

in CEPA, the general term “toxic” (versus the defined term in the Act) was likely an important factor in determining the legislative intent of the Act.

11. According to the case, that the law deals with substances that are “toxic” also shields the legislation constitutionally, as it prevents it from being over-broad. At para 147:

Specific targeting of toxic substances based on individual assessment avoids resort to unnecessarily broad prohibitions and their impact on the exercise of provincial powers. Having regard to the particular nature and requirements of effective environmental protection legislation, I do not share my colleagues' concern that the prohibition originates in a regulation, the breach of which gives rise to criminal sanction. The careful targeting of toxic substances is borne out by practice. ...

11. The above-noted observations about the *Hydro Québec* case are not wholly determinative. It is indeed an open question as to whether the Court would decide differently on a constitutional division-of-powers challenge to CEPA if the word “toxic” is watered down or removed from the legislation. The point is that the Court assigned significant weight to the term “toxic” itself, and weakening it certainly cannot be said to be constitutionally risk-free. In common parlance, it is because this law deals with things that are toxic – not just any old substances, but substances that are toxic – that the law is legally sound. *Hydro Québec* settled the issue of the constitutionality of this section of CEPA. It is worth asking whether it is worth providing an opening for another challenge that could easily bog down implementation of the legislation for years to come. (It is noteworthy that the Attorneys General of two provinces joined as intervenors in the case, in opposition to the federal government.)

Conclusion

For reasons relating to both public policy and constitutional law, it is both unnecessary and dangerous to remove or weaken the term “toxic” in CEPA. Industry concerns should best be met by communicating effectively with the public the nature and usage of substances placed on the market, and through the fair and efficient administration of CEPA.