THE ENVIRONMENT AND THE CONSTITUTION SERIES

DROWNING IN PLASTIC:

Toxins and the Constitution

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DROWNING IN PLASTIC: TOXINS AND THE CONSTITUTION

The regulation and management of toxic substances falls under both provincial and federal control despite not being specifically mentioned in the *Constitution Act, 1867*. Federally, the primary act managing toxic substances is the *Canadian Environmental Protection Act, 1999* while at the provincial level, in Alberta, it is the *Environmental Protection and Enhancement Act*.[1] As is the case for most areas of environmental law, both levels of government have a valid role to play in this regulatory framework. The following section will summarize these two levels of jurisdiction, some of the relevant caselaw, and some of the newest constitutional questions that have arisen.

The Constitution & Toxic Substances

As we noted above, the *Constitution Act, 1867* does not refer specifically to toxic substances. Instead, jurisdiction over toxic substances has been situated in a variety of other federal heads

[1] *Canadian Environmental Protection Act, 1999,* SC 1999, c 33 [CEPA]; *Environmental Protection and Enhancement Act,* RSA 2000, c E-12 [EPEA].

of power including the federal peace order and good government power (POGG), criminal law, navigation and shipping, and seacoast and inland fisheries powers.[2] Notably, the specific head of power has differed depending on the type of pollution. For example, federal jurisdiction over the dumping of waste products in waters, other than fresh waters, within a province was situated within the POGG power in the Supreme Court of Canada decision of *R v Crown Zellerbach,* discussed below.[3] On the other hand, the regulation of toxic substances through the *Canadian Environmental Protection Act, 1999* has been upheld under the criminal law power, as in *R v Hydro-Quebec*.[4] At the provincial level, jurisdiction over toxic substances may be situated in the provincial heads of power of local works and undertakings, all matters of a merely local or private nature, and the section 92A jurisdiction over the development of non-renewable natural resources, forestry, and electrical energy resources.[5] We consider both in turn.

Federal Jurisdiction over Toxic Substances

Similar to many areas of the environment, section 91 of the *Constitution Act, 1867* does not make any mention of toxic substances. However, the federal jurisdiction to regulate toxic substances can be slotted into other federal heads of power including the POGG power, navigation and shipping, seacoast and inland fisheries, and the criminal law.[6] As we note above, the relevant head of power differs depending on the type of toxic substances and/or where the pollution is going. One example is the federal government's jurisdiction to manage seacoast and inland fisheries. This has been understood as meaning that the federal government also has the jurisdiction to manage pollution in these fisheries. We can see this in section 36 of the *Fisheries Act*.[7] We highlight the constitutional framework with regards to fisheries and water management in our accompanying report "A Fish out of Water: Inland Fisheries, Water Management and the Constitution." On the other hand, pollution in waters, other than fresh waters, within a province was situated as federal jurisdiction under the POGG power.

Below, we will focus primarily on the POGG and criminal law powers, both of which have been upheld at the SCC. We begin with *R v Hydro Quebec,* the leading Supreme Court of Canada ("SCC") decision on the criminal law power and toxic substances.

R v Hydro-Quebec: The Criminal Law Power & Toxic Substances

The SCC decision in *R v Hydro-Quebec* is the leading decision on the federal jurisdiction to regulate toxic substances under the *Canadian Environmental Protection Act* ("CEPA").[8] Specifically, this decision involved a challenge to the *Chlorobiphenyls Interim Order* which was

[2] *Constitution Act, 1867* (UK), 30 & 31 Vict, c 3, reprinted in RSC 1985, App II, No 5, ss 91, 91(10), (12) & (27) [*Constitution Act, 1867*].
[3] *R v Crown Zellerbach Canada Ltd.*, [1988] 1 SCR 401 [Crown Zellerbach].
[4] *R v Hydro-Quebec,* [1997] 3 SCR 213 [Hydro-Quebec].
[5] *Constitution Act, 1867, supra* note 2, ss 92(10), (16) & 92A.
[6] *Ibid*, ss 91, 91(10), (12) & (27).
[7] *Fisheries Act,* RSC 1985, c F-14, s 36.
[8] Hydro-Quebec*, supra* note 4.

an order adopted under the previous *Canadian Environmental Protection Act*. While, the specific Act has since been updated, many of the same principles remain and the focus of the decision, specifically whether the federal government can rely on the criminal law power found in section 91(27) of the *Constitution Act, 1867* to regulate toxic substances still applies.

In the facts leading up to this decision, Hydro-Quebec was charged with discharging PCBs into a Quebec watercourse in contravention of the *Chlorobiphenyls Interim Order.*[9] In their defense, Hydro-Quebec argued the federal government lacked the constitutional jurisdiction to enact the order.[10] However, when the case made its way to the SCC, the majority disagreed, finding the Order, and the enabling statute, constitutional.[11]

The majority in this case held that the "impugned provisions are valid legislation under the criminal law power."[12] In coming to this conclusion, Justice La Forest began with a pith and substance review, finding that the criminal law power assigned to the federal government is "the criminal law in its widest sense [emphasis added]."[13] In support of this assertion the SCC cited *The Margarine Reference* in which Justice Rand defined the purposes of a criminal prohibition asking, "is the prohibition … enacted with a view to a public purpose which can support it as being in relation to criminal law? Public peace, order, security, health, morality: these are the ordinary though not exclusive ends served by that law."[14] In *Hydro-Quebec*, the SCC adds to this list, finding there is "no doubt that the protection of a clean environment is a public purpose within Rand J.'s formulation in the *Margarine Reference* … sufficient to support a criminal prohibition" or "to put it another way, pollution is an 'evil' that Parliament can legitimately seek to suppress."[15] This is important because it extends the ability to use the criminal law power to regulate harms to the environment beyond those impacting human health.[16] Despite this, the Court placed certain limits on this power including that the criminal law power cannot be used to colourably invade areas of provincial legislative competence and some legitimate public purpose must underlie the prohibition.[17]

In the end, the Court concluded "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."[18] In addition, the Court highlighted overlapping provincial jurisdiction, including that the use of the criminal law power does not "preclude the provinces from exercising their extensive powers under s. 92 to regulate and control the pollution of the environment either independently or to supplement federal

[9] *Ibid* at para 3.
[10] *Ibid* at para 4.
[11] *Ibid* at para 161.
[12] *Ibid* at para 110.
[13] *Ibid* at paras 112 & 119.
[14] *Ibid* at para 122 citing *Reference re Validity of Section 5(a) Dairy Industry Act*, [1949] SCR 1 at 50.
[15] *Ibid* at para 123.
[16] *Ibid* at para 127.
[17] *Ibid* at para 121.
[18] *Ibid* at para 130.

action."[19] Similar to other areas of criminal law there is "a broad area of concurrency between federal and provincial powers."[20]

The majority decision in *Hydro-Quebec* was reaffirmed in the 2020 SCC decision *Reference re Genetic Non-Discrimination Act*, in which the Court reiterated that the criminal law power could be used to manage "the harmful effects of toxic substances on the environment."[21]

Syncrude Canada Ltd. v Canada (Attorney General): Fuel Regulation under CEPA

In this decision, Syncrude challenged the "validity and applicability" of federal regulations requiring diesel fuel contain at least 2% renewable fuel – the *Renewable Fuels Regulations*.[22] The *Renewable Fuels Regulations* require "that diesel fuel produced, imported or sold in Canada must contain renewable fuel of at least 2% by volume."[23] This requirement can be met by blending diesel fuel with renewable fuels or by purchasing compliance units. The constitutional issue at the Federal Court was whether "Parliament ha[s] constitutional authority to apply the biodiesel blending requirement" to Syncrude's diesel fuel.[24]

To answer this question, the Court went through a pith and substance test, concluding that the pith and substance of section 5(2) of the *Renewable Fuels Regulations* is the reduction of GHG emissions – and potential other emissions.[25] From there, the Court identified which heads of power were engaged by the law to determine if it was *intra vires* Parliament's jurisdiction.[26] In particular, they considered whether the Regulation is *intra vires* the federal criminal law power.

The Federal Court reiterated the test for a valid criminal law purpose stating, "the law must address a public concern relating to peace, order, security, morality, health, or some similar purpose."[27] They highlighted past SCC decisions establishing the protection of the environment as a valid criminal law purpose.[28] From there, they moved on to the next two steps in the criminal law power - a prohibition backed by a penalty. In this case, the Federal Court held that the Regulation "prohibits the use of 100% crude diesel/gasoline for the supplier's average total distillate pool for each period."[29] In conclusion, they found "there are sufficiently precise prohibitions and penalties."[30] The decision was later upheld on appeal to the Federal Court of Appeal.[31]

In this decision, the Federal Court upheld the use of the criminal law power to regulate fuel and specifically to manage GHG emissions. This relates to our accompanying report "It's Getting Hot in Here: Greenhouse Gas Regulation and the Constitution" as it provides an example of the

[19] *Ibid* at para 131.
[20] *Ibid* at para 153.
[21] *Reference re Genetic Non-Discrimination Act,* 2020 SCC 17 at para 266.
[22] *Syncrude Canada Ltd. v Canada (Attorney General),* 2014 FC 776 at para 1 [Syncrude FC].
[23] *Renewable Fuel Regulations,* SOR/2010-189; Syncrude FC, *supra* note 22 at para 4.
[24] Syncrude FC, *supra* note 22 at para 10.
[25] *Ibid* at para 54.
[26] *Ibid* at para 55.
[27] *Ibid* at para 60.
[28] *Ibid* at para 77.
[29] *Ibid* at para 71.
[30] *Ibid* at para 77.
[31] *Syncrude Canada Ltd. v Canada (Attorney General),* 2016 FCA 160.

regulation of GHG emissions upheld under the criminal law power. We discuss the Court of Appeal decision in this accompanying report.

R v Crown Zellerbach Canada Ltd.: Marine Pollution

The case of *R v Crown Zellerbach* is a SCC decision which considered federal jurisdiction over the dumping of waste products in waters, other than fresh waters, within a province.[32] Justice Le Dain, writing for the majority summarized the issue as the question of whether "federal legislative jurisdiction to regulate the dumping of substances at sea, as a measure for the prevention of marine pollution, extends to the regulation of dumping in provincial marine waters."[33] The Act at issue was the *Ocean Dumping Control Act* which has now been subsumed into the CEPA and the facts of the case began when Crown Zellerbach was charged with "unlawfully dumping in the waters of Johnstone Strait near Beaver Cove in the Province of British Columbia."[34] The specific section of the Act prohibited dumping, except in accordance with a permit.

The constitutional question before the SCC was: "[i]s section 4(1) of the *Ocean Dumping Control Act, ultra vires* of the Parliament of Canada, and, in particular, is it *ultra vires* of the Parliament of Canada in its application to the dumping of waste in the waters of Beaver Cove, an area within the province of British Columbia?"[35] The details of the jurisdictional dilemma are as follows - it is clear the federal government has jurisdiction to regulate dumping in the following scenarios:[36]

- in waters that lie outside the territorial limits of any province;
- in provincial waters to prevent pollution of those waters that is harmful to fisheries; and
- in provincial waters if the substance is found to cause pollution in extra-provincial waters.

However, Canada argued "the control of dumping in provincial marine waters, for the reasons indicated in the Act, was part of a single matter of national concern or dimension which fell within the federal peace, order and good government power."[37]

The Court agreed that marine pollution is clearly a matter of national concern but considered whether "the control of pollution by the dumping of substances in marine waters, including provincial marine waters, is a single, indivisible matter, distinct from the control of pollution by the dumping of substances in other provincial waters."[38] In their conclusion, the majority found that not only is there a relationship between pollutants dumped in internal marine waters of a state and pollution in the territorial sea but that it is difficult to ascertain any visual boundary between the territorial sea and internal marine waters creating an unacceptable degree of

[32] Crown Zellerbach, *supra* note 3.
[33] *Ibid* at para 1.
[34] *Ibid* at para 2.
[35] *Ibid* at para 15.
[36] *Ibid* at para 16.
[37] *Ibid* at para 17.
[38] *Ibid* at para 37.

uncertainty.[39] They held that the focus on saltwater, and distinction between salt and fresh water, served as a limit on the use of the national concern doctrine and its impact on provincial jurisdiction.[40] In light of these conclusions, the Court found section 4(1) of the *Ocean Dumping Control Act* to be constitutionally valid under the national concern doctrine of the peace, order and good government power.[41] In their assessment of this decision, Lynda Collins and Lorne Sossin argue that the decision in *Crown Zellerbach* confirms that the prevention of marine pollution can constitute a matter of national concern under POGG.[42]

The Federal Regulatory Framework over Toxic Substances

Canadian Environmental Protection Act, 1999

The *Canadian Environmental Protection Act, 1999* ("CEPA") is the federal statute focused primarily on pollution protection and the regulation of toxins and waste.[43] CEPA's preamble outlines the legislation's overarching goals including:

- pollution prevention;
- the virtual elimination of releases of substances that are the most persistent and bioaccumulative toxic substances; and
- the recognition that the risk of toxic substances in the environment is a matter of national concern in part because they cannot always be contained within geographic boundaries.[44]

Background Provisions

With regard to toxic substances, the CEPA takes a "risk-based" approach which purports to uphold the precautionary principle.[45] The precautionary principle is defined in the Act as a principle which ensures that "where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environment degradation."[46] To do this, the CEPA requires the Government of Canada, in its administration of the CEPA, to "exercise its powers in a manner that protects the

[39] *Ibid* at para 38.
[40] *Ibid* at para 39.
[41] *Ibid* at para 40.
[42] Lynda Collins & Lorne Sossin, "Approach to Constitutional Principles and Environmental Discretion in Canada" (2019) 52:1 UBC L Rev 293 at 305.
[43] CEPA, *supra* note 1.
[44] *Ibid*, preamble.
[45] The *United Nations Rio Declaration on the Environment and Development* Principle 15 highlights the use of the precautionary principle stating that "where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."
[46] CEPA, *supra* note 1, preamble.

environment and human health [and] applies the precautionary principle."[47] The use of the precautionary principle also applies to toxic substances, and the Act requires that "[w]hen the Ministers are conducting and interpreting the results of (c) an assessment whether a substance specified on the Priority Substances List is toxic or capable of becoming toxic, the Ministers shall apply a weight of evidence approach and the precautionary principle."[48]

'Substance' is broadly defined in the CEPA as "any distinguishable kind of organic or inorganic matter, whether animate or inanimate, and includes (a) any matter that is capable of being dispersed in the environment or of being transformed in the environment into matter that is capable of being so dispersed or that is capable of causing such transformation in the environment."[49] From there, a substance is considered toxic "if it is entering or may enter the environment in a quantity or concentration or under conditions that (a) have or may have an immediate or long-term harmful effect on the environment or its biological diversity; (b) constitute or may constitute a danger to the environment on which life depends; or (c) constitute or may constitute a danger in Canada to human life or health."[50] Note that prior to regulating these substances, they must be added to the List of Toxic Substances – explained in our next section.

Part 5: Framework for Toxic Substances

Part 5 of the CEPA provides the framework for the control of these toxic substances.

Section 66 requires the Minister to "maintain a list to be known as the Domestic Substances List" which is made up of substances that the Minister is satisfied were (a) manufactured in or imported into Canada by any person in a quantity of not less than 100 kg in any one calendar year; or (b) in Canadian commerce or used for commercial manufacturing purposes in Canada, between January 1, 1984 and December 31, 1986.[51] In other words, these are substances that were already in use in Canada, distinguishing them from new substances. Additionally, the Minister must create a list of Non-domestic Substances for the purpose of section 81 which manages the manufacture or import of substances.[52]

Substances that have been added to the domestic substances list are those substances that:[53]

(a) present, to individuals in Canada, the greatest potential for exposure; or

(b) are persistent or bioaccumulative in accordance with the regulations, and inherently toxic to human beings or to non-human organisms, as determined by laboratory or other studies.

[47] CEPA, *supra* note 1, s 2(1)(a).
[48] *Ibid*, s 76.1(c).
[49] *Ibid*, s 3 "substance".
[50] *Ibid*, s 64.
[51] *Ibid*, s 66(1).
[52] *Ibid*, ss 66(2) & 81.
[53] *Ibid*, s 73(1).

Once a substance is properly categorized, the Minister "shall conduct a screening assessment of a substance in order to determine whether the substance is toxic or capable of becoming toxic." [54] Following this assessment, the Minister has three options:[55]

1. take no further action;
2. add the substance to the Priority Substances List which consists of those substances the Minister considers a priority for determination of their toxicity or capability of becoming toxic;[56] or
3. recommend the substance be added to the List of Toxic Substances, and where applicable, propose it for virtual elimination. Substances that are determined to be toxic are recommended for addition to this list and from there a number of actions can kick into place.[57] If a substance is added to this list, it triggers further action including the creation of regulations, pollution plans, or environmental emergency plans to manage and mitigate risk.[58]

CEPA also regulates how and when toxic substances may be discarded or emitted, including the disposal and emission of substances at sea, which is governed by permits and compliance monitoring as well as the management of transportation (fuel and vehicle) emissions.[59]

[54] *Ibid*, s 74.
[55] *Ibid*, s 77(2).
[56] *Ibid*, s 76(1).
[57] *Ibid*, s 90(1).
[58] *Ibid*, ss 91(1), 56(1), 199(1)(a).
[59] *Ibid*, Div 3 & ss 153-155.

Bill S-5: Strengthening Environmental Protection for a Healthier Canada Act: In February 2022, the Senate introduced Bill S-5 *Strengthening Environmental Protection for a Healthier Canada Act* which proposes several amendments to CEPA, 1999. First, is the introduction of a right to a healthy environment requiring the responsible Ministers to develop an implementation framework for the incorporation of this right into the administration of the Act. The second is increased protections for vulnerable populations, including the consideration of cumulative effects which involves the identification of principles and approaches that can be used in administering the Act in such a way so as to avoid adverse effects that disproportionately affect vulnerable populations. The principles of non-regression and intergenerational equity are included as part of these principles. Further, it would set out that Ministers, when conducting and interpreting the results of an assessment or review of a substance's toxicity "shall consider available information on any vulnerable population in relation to the substance and on the cumulative effects that may result from exposure to the substance in combination with exposure to other substances." Finally, the Bill proposes a change to the preamble which would alter the management of toxic substances and cumulative effects reading: "whereas the Government of Canada recognizes the importance of minimizing the risks posed by exposure to toxic substances and the cumulative effects of toxic substances." For example, the Bill would enable the Minister to consider cumulative effects when determining whether a substance is toxic or capable of becoming toxic. Bill S-5 completed Second Reading in the House of Commons on November 3, 2022 and at the time of writing is in front of the Standing Committee on Environment and Sustainable Development.

Provincial Jurisdiction over Toxic Substances

Section 92 of the *Constitution Act, 1867* does not specifically assign the provinces exclusive jurisdiction over toxic substances. However, there is ample room for provincial jurisdiction alongside the aforementioned federal regulatory framework. For example, in the SCC decision of *R v Hydro-Quebec,* the majority found "[t]he use of the federal criminal law power in no way precludes the provinces from exercising their extensive powers under s. 92 to regulate and control the pollution of the environment either independently or in co-operation with federal action."[60] Some of this jurisdiction may be found through provincial control over municipalities, local works and undertakings, all matters of a merely local or private nature, and the section 92A jurisdiction over the development of non-renewable natural resources, forestry, and electrical energy resources.[61]

[60] Hydro-Quebec*, supra* note 4.
[61] *Constitution Act, 1867, supra* note 2, ss 92(8), (10), (16) & 92A.

In the following section we will highlight the *Environmental Protection and Enhancement Act* which is the preeminent statute in Alberta for the management of toxic substances and describe some of the municipal control over toxic substances which flows from these provincial heads of power.

Environmental Protection and Enhancement Act

At the provincial level, the *Environmental Protection and Enhancement Act* ("EPEA") is the Act primarily responsible for the management of toxic substances and pollution prevention in Alberta.[62] The EPEA's purpose provisions include supporting and promoting the protection, enhancement, and wise use of the environment, balanced with human health, economic growth, and prosperity.[63] To do this, the EPEA sets out the environmental assessment process in the province.[64] This process is designed to identify the consequences of certain activities before they occur and to develop plans to mitigate any potential adverse environmental effects. However, for our purposes, the two most relevant parts of the EPEA are part 8 which manages hazardous substances and pesticides and part 9 which focuses on the management of hazardous waste. For the purposes of sections 8 and 9, the EPEA defines a hazardous substance as "a substance or mixture of substances, other than a pesticide, that exhibits characteristics of flammability, corrosivity, reactivity or toxicity,[65] including, without limitation, any substance that is designated as a hazardous substance within the meaning of the regulations."[66]

One management tool available under the EPEA is an environmental protection order. The Act authorizes the Director to issue an environmental protection order if they are of the opinion that any crop, food, feed, animal, plant, water, produce, product, or other matter has been contaminated by a hazardous substance and, in doing so, can order the replacement of the hazardous substance with another substance or can order those involved to take any other measure the Director considers appropriate to protect human life or health or the environment.[67] An emergency environmental protection order is also available if the Director is of the opinion "that an immediate and significant adverse effect may occur, is occurring or has occurred as a result of the manufacture, use, handling, transportation, storage, sale, disposal or application of a hazardous substance."[68] This can initiate emergency measures as is necessary.[69]

The EPEA also includes a number of provisions dealing specifically with hazardous waste.[70] For example, unless done in accordance with the regulation, a person shall not generate hazardous waste; let hazardous waste leave the premises it was generated on; collect hazardous waste; or transport hazardous waste.[71] Additionally, no person shall dispose of hazardous waste except in

[62] EPEA, *supra* note 1.
[63] *Ibid*, s 2.
[64] *Ibid*, Part 2.
[65] In this case toxicity is not defined further.
[66] EPEA, *supra* note 1, s 1(aa).
[67] *Ibid*, s 156(c) & (e).
[68] *Ibid,* s 160.
[69] *Ibid*, s 160.
[70] *Ibid*, Part 9, Div 3.
[71] *Ibid*, s 188(1).

accordance with an approval, code of practice, or registration.[72] There is also a general prohibition against any person releasing a substance in excess of allowable amounts or at an amount that will cause a significant adverse effect.[73]

A number of regulations under the Act further regulate hazardous waste and hazardous recyclables. For example, Alberta Environment and Parks is responsible for ensuring compliance under the *Release Reporting Regulation* which sets requirements for an owner or operator to fulfill immediately after any spill involving hazardous materials occurs and the *Waste Control Regulation* which prescribes the safe management of hazardous waste including registration, storage, and transportation.[74]

Municipal Management

Municipalities are not assigned any jurisdiction in the Constitution. Instead, they derive their jurisdiction and regulatory power from the provinces.[75] In Alberta, this is done primarily through the *Municipal Government Act*.[76] This means that not only are municipalities limited to their assigned powers under their enabling statute, and cannot regulate beyond this scope, but also that they cannot be assigned jurisdiction beyond the scope of the provinces. Despite these limitations, there is a role for municipalities to play in the management of toxic substances, as clarified in the SCC decision of *Spraytech v Hudson (Town).*[77]

Spraytech v Hudson: Municipal Regulation of Toxic Substances

The SCC decision in *Spraytech* clarifies the role municipalities play in the regulation of toxic substances, and environmental matters more generally.[78] As we note above, municipalities, including the Town of Hudson, are creatures of statute and cannot legislate beyond the confines of their enabling legislation. Further, provinces can only assign subjects that fall under their own constitutional jurisdiction to municipalities and therefore "what a municipality can do and what a province can do are intimately related."[79]

In this case, the Town of Hudson passed a bylaw limiting the use of pesticides for aesthetic purposes. The appellants were landscaping and lawn-care companies that used the pesticides in question, pesticides that were legal at the federal and provincial level, but were now limited at the municipal level.[80] The companies made the argument that the municipality did not have jurisdictional authority to regulate pesticides and that the bylaw conflicted with federal and

[72] *Ibid*, s 192.
[73] *Ibid*, s 108.
[74] *Release Reporting Regulation*, Alta Reg 117/1993 [Release Reporting]; *Waste Control Regulation*, Alta Reg 192/1996.
[75] *Constitution Act, 1867, supra* note 2, s 92(8).
[76] *Municipal Government Act*, RSA 2000, c M-26 [MGA].
[77] *114957 Canada Ltee (Spraytech, Societe d'arrosage) v Hudson (Town)*, 2001 SCC 40 [Spraytech].
[78] *Ibid.*
[79] Coleen Thrasher & Jeremy Power, "The Power of Prevention: The Extent of Environmental Authority in the Context of Local Government" (2019) 28:1 Dal J Leg Stud 139 at 142.
[80] Spraytech*, supra* note 77 at paras 5 & 6.

provincial legislation permitting the use of these pesticides. At the Supreme Court, two main issues were identified:[81]

1. did Hudson have the statutory authority to enact the bylaw; and
2. if Hudson had authority to enact it, was the bylaw inoperative due to a conflict with federal or provincial legislation?

In their decision, the Court found the bylaw permissible; however, they limited municipal control to those bylaws that did not displace or frustrate the relevant provincial or federal legislation.[82] The Court relied on a distinction between essential and non-essential pesticides, finding that the bylaw's focus on only non-essential pesticide use allowed the bylaw to fit more properly within a focus on health - a valid bylaw making power under the relevant provincial law.[83]

Carolyn Poutiainen highlights six main takeaways from the decision in *Spraytech v Hudson* that can be applied to future interpretation of municipal laws:[84]

1. the party challenging the bylaw has the burden of proof to show it is *ultra vires*;[85]
2. the principle of subsidiarity may be a useful lens for viewing municipal laws;[86]
3. although they do not confer unlimited power, omnibus provisions can be a valid source of law and can allow municipalities to address emerging or changing local issues;[87]
4. the precautionary principle can be invoked to support a bylaw;[88]
5. a federal or provincial regulatory regime does not automatically invalidate a municipal bylaw;[89] and
6. in general, municipal powers should be interpreted generously.[90]

Application of Spraytech to Alberta

In Alberta, the *Municipal Government Act* ("MGA") sets out the roles and responsibilities for municipalities in the province.[91] Under the MGA, the purposes of a municipality include fostering "the well-being of the environment."[92]

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[81] *Ibid* at para 17.
[82] *Ibid* at para 35.
[83] *Ibid* at paras 27 & 29.
[84] Carolyn Poutiainen, "The Constitutional Implications of the *Hudson* Decision: Lessons for Adapting to the Health Effects of Climate Change in Canada" (2013) 18 Appeal 139 at 154 [Poutiainen].
[85] Spraytech, *supra* note 77 at para 21.
[86] *Ibid* at paras 3 & 10.
[87] *Ibid* at paras 20 & 51.
[88] *Ibid* at para 31.
[89] *Ibid* at paras 34 & 46.
[90] *Ibid* at para 23.
[91] MGA, *supra* note 76.
[92] *Ibid*, s 3(a.1).

Further, the MGA enables a municipality to pass bylaws "for municipal purposes" including for the "safety, health and welfare of people and the protection of people and property."[93] This suggests "[a] generous view of municipal authority" which may be relied upon if municipalities move forward with similar plans to ban cosmetic pesticides on public and private property.[94]

Cooperation between the Provinces and the Federal Government

In some cases, the overlap of provincial and federal jurisdiction has led to cooperation between both levels of government. We highlight two examples of this cooperation below.

CEPA: Equivalency Agreements

Equivalency agreements under the CEPA are one way the provincial and federal governments can work in cooperation to manage toxic substances.[95] A cooperative agreement can be instituted if an instrument which achieves the same environmental outcome as a CEPA regulation exists at the provincial level.[96] As a result, the provincial instrument will apply instead of the federal regulation.[97] Regulations made under a number of CEPA provisions are eligible including section 93(1) respecting toxic substances.[98]

In order to apply, the provincial law must be 'equivalent' which means it serves the same purpose and has the same effect, or "the level of protection of the environment is equivalent."[99]

There are two equivalency agreements in Alberta. The first is "An Agreement on the Equivalency of Federal and Alberta Regulations for the Control of Toxic Substances in Alberta."[100] This equivalency agreement recognized Alberta regulations as substitutes for the following federal regulations:

- *Pulp and Paper Mill Effluent Chlorinated Dioxins and Furans Regulations,* SOR/92-267 (all sections);

[93] *Ibid*, s 7(a).
[94] See for example: City of Edmonton, "Council Report: Elimination of Cosmetic Pesticide – Community Outreach, Public Education, Operational and Enforcement Resources" (8 Aug 2022) City Operations CO01215 online: https://pub-edmonton.escribemeetings.com/filestream.ashx?DocumentId=155841; Poutiainen, *supra* note 84 at 155.
[95] CEPA, *supra* note 1, s 10.
[96] *Ibid*, s 10(3).
[97] *Ibid*, s 10(3).
[98] *Ibid*, s 93(1).
[99] Environment Canada, "Equivalency Agreements under the *Canadian Environmental Protection Act, 1999*" online: https://www.ec.gc.ca/lcpe-cepa/1FE509F3-044D-4D17-90FF-5A7B36DB8CCF/fs_fi-equiv.cfm.pdf.
[100] CEPA Equivalency Agreement, "An Agreement on the Equivalency of Federal and Alberta Regulations for the Control of Toxic Substances in Alberta" (28 Dec 1994) online: https://www.canada.ca/en/environment-climate-change/services/canadian-environmental-protection-act-registry/agreements/equivalency/canada-alberta-control-toxic-substances.html.

- *Pulp and Paper Mill Defoamer and Wood Chips Regulations,* SOR/92-268 (sections 4(1), 6(2), 6(3)(b), 7 & 9);
- *Secondary Lead Smelter Release Regulations,* SOR/91-155 (all sections); and
- the now repealed *Vinyl Chloride Release Regulations, 1992.*

It was enabled by the Alberta Equivalency Order.[101]

The second is the "Equivalency Agreement of Federal and Alberta Regulations Respecting the Release of Methane from the Oil and Gas Sector in Alberta, 2020".[102] This Agreement means that sections of the CEPA *Regulations Respecting Reduction in the Release of Methane and Certain Volatile Organic Compounds (Upstream Oil and Gas Sector),* SOR/2018-66 will not apply in Alberta. Instead, the *Methane Emission Reduction Regulation,* Alta Reg 244/2018 applies.

In both cases, the use of an equivalency agreement does not transfer jurisdiction away from the federal government.

The Transport of Dangerous Goods

The transportation of dangerous goods is another area of environmental management that has seen cooperation between the provincial and federal governments.

At the federal level, the *Transportation of Dangerous Goods Act, 1992* sets out the regulatory framework for the transport of dangerous goods and applies to goods being handled, offered for transport, or transported by road, rail, air, or water.[103] For the purposes of the Act, a dangerous good is defined as "a product, substance, or organism included by its nature or by the regulations in any of the classes listed in the schedule."[104] Scheduled items are set out in the accompanying *Transportation of Dangerous Goods Regulations*.[105] Section 4 of the federal law also enables the Minister to enter into an agreement with one or more provincial governments with respect to the administration of this Act.[106]

Dangerous goods that are transported within Alberta are regulated by the *Dangerous Goods Transportation and Handling Act* which provides for safety in the handling and transporting of dangerous goods, defined by reference, again, to the regulations.[107] Notably, those regulations

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[101] *Alberta Equivalency Order,* SOR/94-752.
[102] CEPA Equivalency Agreement, "Equivalency Agreement of Federal and Alberta Regulations Respecting the Release of Methane from the Oil and Gas Sector in Alberta, 2020" (2020) online: https://www.canada.ca/en/environment-climate-change/services/canadian-environmental-protection-act-registry/agreements/equivalency/canada-alberta-methane-oil-gas.html.
[103] See exceptions set out in *Transportation of Dangerous Goods Act, 1992*, SC 1992, c 34, s 3(3) & (4) [Transportation of Dangerous Goods Act]; Canadian Centre for Occupational Health and Safety, "Transportation of Dangerous Goods (TDG) – Overview" online: https://www.ccohs.ca/oshanswers/legisl/tdg/tdg_overview.html#:~:text=The%20purpose%20of%20the%20Transportation,TDG%20also%20establishes%20safety%20requirements..
[104] Transportation of Dangerous Goods Act*, supra* note 103, s 2.
[105] *Transportation of Dangerous Goods Regulations,* SOR/2001-286 [Dangerous Goods Regulations].
[106] *Transportation of Dangerous Goods Act, supra* note 103, s 4.
[107] *Dangerous Goods Transportation and Handing Act*, RSA 2000, c D-4.

referred to in the Alberta Act mirror the federal regulations under the federal Act. Safe handling and transportation of dangerous goods, including waste, is accomplished under the Act by designating and classifying those goods and prescribing the safety requirements for each class. Regulations also provide guidelines for appropriate documentation, insurance, and certain prohibitions.

The federal *Transportation of Dangerous Goods Regulations* are also referenced in the provincial *Environmental Protection and Enhancement Act*.[108] The EPEA requires anyone who "releases or causes or permits the release of a substance into the environment that has caused, is causing or may cause an adverse effect" to report the release.[109] The details of what must be reported, when, and how to report are set out in the accompanying *Release Reporting Regulation*.[110] However, the Regulations again mirror requirements set out in the federal regime. Specifically, section 1 of the Schedule sets out the reportable levels for certain substance through reference to the federal *Transportation of Dangerous Goods Regulations*.[111]

A New Battleground: Plastic Rapt

Over the last few years, a focus on toxic substances has often been a focus on plastic. In the following section we outline two steps taken at the federal level to regulate plastics as a toxic substance and the accompanying provincial response.

Microbeads

The first step was the addition of plastic microbeads to the Schedule 1 list of Toxic Substances under the CEPA.[112] This designation initiated the passage of the *Microbeads in Toiletries Regulation* in June 2017.[113] This Regulation prohibits the manufacture, import, or sale of products containing microbeads due to their impact on the marine environment.[114] Microbeads, for the purposes of the Regulation, are defined as those plastic microbeads listed in section 133 of the Schedule 1 List (the List of Toxic Substances).[115] The Regulation also includes a section regulating the laboratory analysis for the presence of microbeads, connecting their control with the management of toxic substances – federal jurisdiction as confirmed by *R v Hydro-Quebec*.[116]

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[108] Dangerous Goods Regulations*, supra* note 105.
[109] EPEA, *supra* note 1, s 110(1).
[110] Release Reporting*, supra* note 74.
[111] *Ibid*, Sched.
[112] CEPA, *supra* note 1, Sched 1 s 133.
[113] *Microbeads in Toiletries Regulations,* SOR/2017-111 [Microbeads].
[114] *Ibid*, s 3; Environment and Climate Change Canada, "Microbeads – A Science Summary" (July 2015) at 4.2 online: http://www.ec.gc.ca/ese-ees/default.asp?lang=En&n=adda4c5f-1.
[115] Microbeads*, supra* note 113, s 1.
[116] *Ibid*, ss 5(1) & (2).

Plastic Manufactured Items

The second step was the addition of 'plastic manufactured items' to the Schedule 1 list of Toxic Substances.[117] In support of this determination, the federal government released the 'Science Assessment of Plastic Pollution' (the "Science Assessment") in October 2020.[118] The Science Assessment provided evidence of the toxicity of plastics – at both the macro and micro level – including impacts on human and environmental health.[119] For example, the study looked at potential effects from oral exposure, inhalation, and biofilms on human health.[120] It concluded that the known human health effects from ingesting microplastics are limited but suggests the importance of further research.[121] On the other hand, evidence is cited regarding the harm to environmental health from both macroplastics (entanglement of animals in macroplastics such as plastic rope and netting in the water or ingestion) and microplastics (ingestion and effects on gene expression and individual organism death).[122]

In light of these findings, it seems that the inclusion of plastics in the Schedule 1 List of Toxic Substances would properly fall within the definition of a toxic substance in the CEPA. As a reminder, section 64 of the CEPA defines toxic substances as: [123]

> "a substance is toxic if it is entering or may enter the environment in a quantity or concentration or under conditions that (a) have or may have an immediate or long-term harmful effect on the environment or its biological diversity; (b) constitute or may constitute a danger to the environment on which life depends; or (c) constitute or may constitute a danger in Canada to human life or health."

The CEPA defines 'substance' as:[124]

> "any distinguishable kind of organic or inorganic matter, whether animate or inanimate, and includes (a) any matter that is capable of being dispersed in the environment or of being transformed in the environment into matter that is capable of being so dispersed or that is capable of causing such transformations in the environment, (b) any element or free radical, (c) any combination of elements of a particular molecular identity that occurs in nature or as a result of a chemical reaction, and (d) complex combinations of different molecules that originate in nature or are the result of chemical reactions but that could not practicably be formed by simply combining individual constituents, and, except for the purposes of sections 66, 80 to 89 and 104 to 115, includes (e) any mixture that is a combination of substances and does not itself produce

[117] CEPA, *supra* note 1, Sched 1 s 163.
[118] Environment and Climate Change Canada & Health Canada, "Science Assessment of Plastic Pollution" (October 2020) *Government of Canada* [Science Assessment].
[119] *Ibid*.
[120] *Ibid* at 64-72.
[121] *Ibid* at 81.
[122] *Ibid* at 50-57.
[123] CEPA, *supra* note 1.
[124] *Ibid*, s 3(1).

> a substance that is different from the substances that were combined, (f) any manufactured item that is formed into a specific physical shape or design during manufacture and has, for its final use, a function or functions dependent in whole or in part on its shape or design, and (g) any animate matter that is, or any complex mixtures of different molecules that are, contained in effluents, emissions or wastes that result from any work, undertaking or activity."

From there, the *Single-use Plastics Prohibition Regulations* was released in June 2022.[125] This Regulation includes prohibitions on the manufacture, import, and sale of certain single use plastic products including single-use plastic ring carriers, single-use plastic straws, single-use plastic checkout bags, single-use plastic cutlery, single-use plastic foodservice ware use, or single-use plastic stir sticks.[126] The decision to include these particular items is based in part on the accompanying Technical Guidelines document which sets out the specific materials that fall under the Regulations' guidelines including polystyrene or polyethylene.[127] The purpose of the Regulations, as stated by the federal government, is to "address pollution, meet its target of zero plastic waste by 2030, and help reduce greenhouse gas emissions."[128] They are also based on the Science Assessment which found that "plastic is polluting our rivers, lakes and oceans, harming wildlife, and generating microplastics in the water we use and drink."[129]

The Regulations, with certain exceptions, come into force "on the day that, in the sixth month after the month in which they are registered, has the same calendar number as the day on which they are registered."[130] This is intended to give businesses and Canadians time to phase out their existing stock of materials and transition to alternatives.[131]

The Constitutionality of the Single-use Plastics Prohibition Regulations

In the SCC decision of *R v Hydro-Quebec* (discussed above), the Court held that there is "no doubt that the protection of a clean environment is a public purpose within Rand J.'s formulation in the *Margarine Reference* … sufficient to support a criminal prohibition" or "to put it another way, pollution is an 'evil' that Parliament can legitimately seek to suppress."[132] The Court concluded "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

[125] *Single-use Plastics Prohibition Regulations,* SOR/2022-138 [Single-use Plastics Regulation] as a regulation under the *Canadian Environmental Protection Act, 1999,* SC 1999, c 33.
[126] Definitions are included in *ibid*, s 1.
[127] Environment and Climate Change Canada, "*Singe-use Plastics Prohibition Regulations* – Technical guidelines" (22 June 2022) *Government of Canada* online: https://www.canada.ca/en/environment-climate-change/services/managing-reducing-waste/reduce-plastic-waste/single-use-plastic-technical-guidance.html#toc51.
[128] Environment and Natural Resources Canada, "Single-use Plastics Prohibition Regulations – Overview" (22 June 2022) *Government of Canada* online: https://www.canada.ca/en/environment-climate-change/services/managing-reducing-waste/reduce-plastic-waste/single-use-plastic-overview.html [Single-use Plastics Overview]
[129] *Ibid* citing Science Assessment, *supra* note 118.
[130] Single-use Plastics Regulation*,* supra note 125, ss 13(1) – (5).
[131] Single-use Plastics Overview, *supra* note 128.
[132] Hydro-Quebec*, supra* note 4 at para 123.

into the environment of certain toxic substances."[133] Today, the test for a valid exercise of the criminal law power requires a "prohibition, penalty and a typically criminal purpose" of which protection of the environment is a valid example.[134] In the following section, we consider whether the federal *Single-use Plastics Prohibition Regulations,* passed under the CEPA, would properly fall within this criminal law power.

As these regulations focus on prohibiting plastics from entering into our environment, rather than cleaning them up, *R v Hydro-Quebec* is a relevant precedent. William Lahey argues the CEPA "superseded legislation which settled for after-the-fact remediation of the harm that could be caused by toxic chemicals. In contrast, it established a comprehensive preventive program which recognized not only the environmental concern but also the economic importance of chemicals."[135] William Lahey argued this was a focus of Justice La Forest in *Hydro-Quebec.*[136] This is an important consideration because since the first publication of this Regulation, there have been challenges filed against the *Single-use Plastics Prohibition Regulations* and associated designation of these single-use plastic items as toxic.

The first action was a notice of application for judicial review filed by the Responsible Plastic Use Coalition opposing the federal government's decision to add "plastic manufactured items" to Schedule 1, the List of Toxic Substances under the CEPA. They asked the Court for the following:[137]

(1) an order 'quashing' the decision;

(2) an order prohibiting the addition of any substance to Schedule 1, unless it meets both the test for "toxicity" and the definition of "substance"; and

(3) an order requiring the establishment of a Board of Review in order to have a proper and meaningful review to determine whether there is science to support this decision.

Alberta has filed to intervene in the matter challenging the federal government's Regulations. The province is arguing "that the federal government's decision to label plastic as a 'toxic substance' is an unconstitutional intrusion into provincial jurisdiction."[138] This matter was heard by the Federal Court on March 7 through 9; however, no decision has been released.

The group later filed a second notice of application for judicial review on July 15, 2022.[139] In this case, they seek judicial review of three decisions: [140]

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[133] *Ibid* at para 130.
[134] Brenda Heelan Powell, "Environmental Assessment & the Canadian Constitution: Substitution and Equivalency" (2014) *Environmental Law Centre* at 18.
[135] William Lahey, "Justice Gerard v. La Forest and the Uncertain Greening of Canadian Public Law" (2013) 54:2 Can Bus LJ 223 at 235.
[136] *Ibid* at 235.
[137] Responsible Plastic Use Coalition, "Notice of Application – Summary" (1 Jun 2021) online: https://rpuc.ca/notice-of-application-summary/.
[138] News Release, "Standing up for Alberta's economic interests" (8 Sep 2022) *Government of Alberta* online: https://www.alberta.ca/release.cfm?xID=845392762C639-ADF1-2E66-726E447B83E68644.
[139] *Petro Plastics Corporation Ltd. v Attorney General of Canada,* Federal Court Notice of Application No. T-1468-22 (15 Jul 2022) online: https://environmentaldefence.ca/wp-content/uploads/2022/07/T-1468-22_Notice-of-Application_July-15_2022_20220715151302.pdf.
[140] *Ibid* at 3.

(1) the publication of a draft version of the Regulations proposing a ban on 'Single-Use Plastics';
(2) the decision to refuse to establish a Board of Review under Section 333 of the CEPA to reconsider the Draft; and
(3) the publication and enactment of the *Single-Use Plastics Prohibition Regulation*.

Specifically, they seek a finding that the ban on Single-Use Plastics is *ultra vires* Parliament's jurisdiction under section 91 of the Constitution.[141]

The Applicants argue the ban is unconstitutional and *ultra vires* CEPA; however, they acknowledge Part 5 of the CEPA as legitimate federal jurisdiction to regulate toxic substances under their criminal law power.[142] As such, they are not questioning the constitutionality of the CEPA itself, instead arguing that the "Ministers have not established that the [single-use plastics] are toxic" and "[a]ccordingly, the Ban cannot be justified as an exercise of the criminal law power conferred upon Parliament."[143] This is notable because they do not purport to argue that the decision in *R v Hydro-Quebec* was incorrect but rather to distinguish from that decision through the argument that the assignment of toxicity was incorrect.

The second matter has yet to be heard by the court.

In light of these challenges, we reiterate the CEPA's requirement that "[w]hen the Ministers are conducting and interpreting the results of (c) an assessment whether a substance specified on the Priority Substances List is toxic or capable of becoming toxic, the Ministers shall apply a weight of evidence approach and the precautionary principle."[144] The precautionary principle is defined in the preamble of CEPA as the principle "that, where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation" suggests that a generous approach should be taken with regard to toxic substance designations.[145] However, the use, or lack thereof, of the precautionary principle is not helpful in determining constitutional validity.

In *Hydro-Quebec,* the SCC held that because the provisions setting out the parameters of what can be considered a toxic substance are *intra vires* the jurisdiction of Parliament, one arm of attack may be that "action went beyond the authority granted by those provisions" or that the substance "did not pose a significant danger to the environment or to human life or health" which would mean that action taken to prohibit it would be unjustified.[146] This is the argument made with regard to single use plastics. In the *Hydro-Quebec* decision, the Court provides a sample of studies at both the national and international level regarding the toxicity of the substance at hand, finding that those studies were sufficient to justify the government's action under the provisions available to them. The Court went on to highlight other jurisdictions that have regulated the toxicity of the substance at issue, using this as a persuasive argument of its

[141] *Ibid* at 4.
[142] *Ibid* at 5.
[143] *Ibid* at 6.
[144] CEPA, *supra* note 1, s 76.1(c).
[145] *Ibid*, preamble.
[146] Hydro-Quebec*, supra* note 4 at para 157.

toxicity.[147] If the federal government is able to demonstrate similar studies and jurisdictional comparisons to support the types of single-use plastics that they are prohibiting under the impugned plastic provisions, it is likely that they could be upheld as *intra vires* the federal criminal law power.

FINAL THOUGHTS

Toxic substances have little regard for borders and, as such, require a cooperative approach to their management. Both the federal and provincial levels of government can point to their constitutional powers to suggest some degree of control over these substances and any subsequent pollution. For the federal government, this looks like provisions in section 91 of the *Constitution Act, 1867* including the POGG power, navigation and shipping, seacoast and inland fisheries, and the criminal law.[148] At the provincial level, this can be situated in section 92 and the provincial control over municipalities, local works and undertakings, all matters of a merely local or private nature, and the section 92A jurisdiction over the development of non-renewable natural resources, forestry, and electrical energy resources.[149] As we have seen, this jurisdiction has led to a regulatory framework at both levels of government.

The role of the federal government in managing toxic substances has a relatively recent history, filling gaps in provincial oversight, including certain aspects of pollution management offshore, management of interprovincial transportation and, more recently in the overall regulation of toxic substances under the criminal law. As this federal role has increased, the potential conflict with provincial jurisdiction has also increased. Going forward, our management of toxic substances will likely change, particularly as our scientific understanding is advanced. We can see how the idea of 'toxic' has changed with the federal Scientific Assessment on Plastic Pollution which has contributed to decisions to designate certain plastic products as toxic substances, a decision that is now facing litigation from the provinces and plastic producers[150] Going forward, our approaches to the management of toxic substances, whether provincial or federal, should continue to apply the precautionary principle and focus on pollution prevention.

[147] *Ibid* at para 158.
[148] *Constitution Act, 1867, supra* note 2, ss 91, 91(10), (12) & (27).
[149] *Ibid*, ss 92(8), (10), (16) & 92A.
[150] Science Assessment, *supra* note 118.