CITATION*: Flying E Ranche Ltd. v. Attorney General of Canada, 2022 ONSC 601*
COURT FILE NO.: 05-CV0287428CP
DATE: 20220128

SUPERIOR COURT OF JUSTICE - ONTARIO

RE: FLYING E RANCHE LTD., Plaintiff

AND:

THE ATTORNEY GENERAL OF CANADA on behalf of HER MAJESTY THE QUEEN IN RIGHT OF CANADA as represented by THE MINISTER OF AGRICULTURE, Defendant

BEFORE: Paul B. Schabas J.

COUNSEL: Duncan C. Boswell, Malcolm N. Ruby, Rachel McMillan, Andrew Locatelli, Cameron Pallett, for the Plaintiff

William Knights, Cynthia Koller, Victor Paolone, James Soldatich, Ayesha Laldin, Stewart Phillips, Adam Gilani, John Spencer, Sheila Hepworth, Laurel Irvine, Matthew Sullivan, for the Defendant

HEARD: February 16-19, 22-26; March 1-5, 8-12, 22-26, 29-31; April 6, 8, 9, 19-22; May 6, 17-21, 26, 27, 31; June 2-4, 10, 14-16; August 9-13, 2021

REASONS FOR JUDGMENT

SCHABAS J.

Table of Contents **Paragraph**

Part I – Introduction and summary of findings

[1] In 1986 animal health experts in the United Kingdom ("UK") identified a novel neurological disease that was afflicting cattle in that country, Bovine Spongiform Encephalopathy ("BSE"). The disease was invariably fatal within weeks or a few months of symptoms emerging in animals. As with spongiform encephalopathies in other species, including scrapie in sheep and Creutzfeld Jacob Disease ("CJD") in humans, post-mortem examinations of affected animals showed that brains had spongiform lesions, or sponge-like qualities. Clinical symptoms of BSE include nervous or aggressive behaviour, lack of coordination and loss of the ability to stand up, reduction in milk yield and loss of body weight. BSE quickly became known as "Mad Cow Disease."

[2] The incidence of BSE grew quickly in the UK. By 1988, when it was formally brought to the attention of L'Office Internationale des Epizooties ("OIE"), now known as the World Animal Health Organization, over 2,000 cattle in the UK had been diagnosed with BSE. Although investigation of the cause of BSE was at an early stage in 1988, it was suspected that it may have originated from the scrapie agent in sheep and been transmitted to cattle through feedstuffs containing ruminant-derived protein that were fed to calves beginning in about 1981 or 1982. As a result, in 1988 the UK prohibited the inclusion of ruminant-derived protein in feed for ruminant animals such as cattle (the "UK Feed Ban").[1]

[3] BSE affects the central nervous system of cattle. It has a lengthy incubation period. Cattle afflicted with BSE become symptomatic, on average, at about 5 years of age. The number of cattle diagnosed with BSE continued to grow in the UK, peaking in 1992 when over 37,000 cases were confirmed. Animal health experts in the UK and elsewhere conducted extensive research into the causes of BSE and its transmissibility. By 1990 it was suspected that the rapid increase in cases was due to the slaughtering and rendering of infected but non-syptomatic, or subclinical, cattle whose protein was also included in feed supplements provided to calves prior to the implementation of the UK Feed Ban in 1988. Although there was no evidence of it, horizontal and vertical transmission of the disease was not ruled out as a mode of transmission. The impact of the UK Feed Ban caused the number of BSE cases in the UK to decline rapidly in the later 1990s and early 2000s, dropping to less than 1,000 cases in 2003. However, between 1986 and 2006 at least 180,000 cattle were confirmed as having died of BSE in the UK.

[4] The European Economic Community ("EEC") and countries around the world took steps to prevent BSE from spreading beyond the British Isles, including banning the importation of cattle from the UK and Ireland. The OIE created a special panel of experts and developed recommendations for animal health authorities to follow in order to prevent the spread of the disease.

---

[1] Cattle, sheep, goats, deer, elk, and bison are ruminants. These animals are even-toed and hoofed, chew cud and have four-chambered stomachs.

[5] These efforts proved successful. Although BSE did emerge in several countries, due mostly to infected cattle imported from the UK prior to the implementation of the UK Feed Ban, no country had more than 1,000 confirmed cases other than Ireland and Portugal, and most that were affected had only a handful of cases. BSE has been controlled and cases today are very rare.

[6] This case is about BSE in Canada. Like other countries, Canada took steps to prevent BSE from entering its cattle population. In 1989 the federal Department of Agriculture imposed restrictions on cattle being imported from the UK, and in 1990 Canada banned all further imports of cattle and other ruminants from the UK and the Republic of Ireland. BSE was made a reportable disease. Canada identified that approximately 182 cattle had been imported from the UK and Ireland during the 1980s (the "UK imports"), and placed them in a Monitoring Program. Later, in 1994, following confirmation of BSE in one of the imported cattle, Canada ordered that the imported animals still alive and present in Canada – approximately 67 - should be returned to the UK or be destroyed.

[7] Unlike Britain, but like the United States, Canada did not prohibit the inclusion of ruminant protein in feedstuffs for cattle until 1997, following a recommendation from the World Health Organization ("WHO") made in 1996, after BSE had been linked to a variant of CJD ("vCJD") that had been identified in humans in Britain.

[8] Of the approximately 182 cattle imported into Canada between 1982 and 1990, it was determined in 1994 that approximately 68 had been slaughtered for consumption and rendering. Aside from the 67 still alive in Canada which were ordered destroyed, the balance had been exported to the United States or had died and been destroyed. In 1994, only one of the UK imports was confirmed to have developed BSE, although at least one other animal, which had been slaughtered, had shown signs consistent with the disease. Due to the lengthy incubation period, however, and the lack of a method to test for BSE on live animals, it is likely that some UK imports would have been infected with BSE but not shown clinical signs of the disease before being slaughtered in Canada prior to 1994.

[9] When cattle and other ruminants such as sheep are slaughtered, portions of the animal not fit for human consumption, such as the brain, spinal cord, certain organs and other elements of the central nervous system, are sent to rendering plants where they are heated and ground into meat and bone meal ("MBM"), which is then used in a number of products, including fertilizer and animal feedstuffs. Consequently, prior to 1994, protein from the approximately 68 UK cattle imported between 1982 and 1990 which had been slaughtered in Canada entered the animal feed chain, creating a risk of transmission of BSE to Canadian cattle born prior to the ruminant-to-ruminant feed ban implemented in Canada in 1997 (the "Feed Ban"). Although it is impossible to know with certainty, it is believed that infected protein likely entered the feed chain from a UK import slaughtered and rendered around 1992.

[10] No indigenous Canadian animal was diagnosed with BSE in the 1990s. Indeed, it seemed that Canada had been successful in its efforts to keep BSE from entering the Canadian cattle herd following the import ban in 1990. But in May 2003, almost a decade after the last of the UK imports was destroyed, a cow which had died earlier that year on a farm in Saskatchewan was

found to have had BSE. It was later determined that this cow was fed a "calf-starter" feed containing ruminant protein when it was a calf in 1997, just prior to the enactment of the Feed Ban, and that this was the likely source of BSE in the cow.

[11] Since the May 2003 diagnosis, a small number of other Canadian cattle have been diagnosed with BSE. But it is the consequences of the confirmation of BSE in a Canadian cow in May 2003 that are relevant to this action. The United States of America ("US" or "USA"), which provided over 50% of the market for Canadian cattle and cattle products, immediately closed the border to Canadian cattle and beef products. Many other countries followed. Although over time the borders gradually reopened and trade resumed, the economic impact on Canadian cattle producers and related industries was enormous, and the total cost of the trade embargo been estimated to exceed $8 billion between 2003 and 2008.

[12] This class action, brought on behalf of all Canadian farmers who raised cattle in May 2003 (the "Class"), alleges that the defendant ("Canada") was negligent in keeping BSE out of Canada by failing to implement a ruminant-to-ruminant feed ban in 1990 when it brought in the import ban, or in 1994 when Canada ordered the destruction of the remaining UK imports. It is also alleged that Canada was negligent in failing to adequately monitor and prevent the UK imports from entering the feed chain between 1990 and 1994. The plaintiff seeks damages arising from losses suffered by the Class between 2003 and 2007.

[13] Canada denies that it can be liable in negligence as, it argues, there was not a relationship of sufficient proximity between Canada and the Class, under statute or based on interactions between them, which would give rise to a duty of care. Further, if there was sufficient proximity, Canada submits that there are policy considerations that should prevent the recognition of a duty of care in these circumstances, including that the actions complained of were policy decisions by government. Canada also claims that its actions were reasonable and consistent with scientific knowledge at the time and did not breach the standard of care expected of a reasonable regulator, noting that other similarly situated countries, including the US, did not have a feed ban prior to 1997, and that at all times Canada was in compliance with, or exceeded, OIE guidelines respecting BSE.

[14] Canada also relies on s. 9 of the *Crown Liability and Proceedings Act*, R.S.C., 1985, c. C-50 ("*CLPA*"). Immediately following the border closure in 2003, Canada developed programs that provided financial assistance to cattle producers which, Canada submits, bar the action. The plaintiff only concedes that payments under these programs should be considered to reduce the damage claim, but submits that they do not bar the action.

[15] I have concluded that the action should be dismissed. My Reasons for Judgment ("Reasons") are lengthy, following a long trial involving a great deal of detailed evidence about BSE and Canada's response to it. The following paragraphs provide a brief summary of my conclusions.

[16] First, I find that the action is barred by s. 9 of the *CLPA*. Between 2003 and 2007 Canada provided financial assistance to the Class of close to $2 billion in specific BSE-related programs

authorized under the *Farm Income Protection Act*, S.C. 1991, c. 22 ("*FIPA*"). Canada made cash payments to members of the Class which provided a form of compensation to them arising from the economic losses suffered as a result of the border closure in and following May 2003, which are the same losses for which damages are sought in this action.

[17] Second, applying the "*Anns/Cooper*" test,[2] I find that although damage to the Class was foreseeable by Canada (indeed, Canada was conscious of the potential harm BSE could cause), the statutory framework and the interactions between Canada and the Class do not create a relationship of proximity such that a duty of care should be recognized. The relevant statutes, in particular the *Animal Disease and Protection Act*, R.S.C. 1985, c A-13 ("*ADPA*"), the *Health of Animals Act*, S.C. 1990, c. 21 ("*HAA*"), and the *Feeds Act*, R.S.C., 1985, c. F-9, ("*Feeds Act*"), have broad public purposes and do not create a duty of care between Canada and the cattle-producing industry. Nor was there a "special relationship" between Canada and the Class arising from interactions between them. At various points in the period of the relevant events in the 1990s Canada consulted, and had close contacts with the cattle farming industry, but in doing so it was engaging in its role as a responsible regulator acting in the public interest under its broad statutory mandate. While many steps taken by Canada were directed at the cattle industry, those actions did not create a special relationship with members of the Class.

[18] Third, even if a relationship of sufficient proximity existed, there are policy reasons why a duty of care should not be recognized in this case. The actions impugned by the plaintiff involve policy decisions by government rather than operational negligence. The complaint that Canada failed to enact a feed ban goes to the heart of policy-making decisions. The alleged negligence in failing to keep UK imports out of the feed chain relates to the design of Canada's Monitoring Program which was not intended to keep those animals from being rendered unless they showed clinical signs of BSE. This was a decision as to a course of action, or policy decision, not operational negligence.

[19] In addition, recognizing a duty of care in these circumstances would create conflict with broader statutory obligations, and may require government to prefer one industry group over others. Further, public statutes have provided a great deal of financial assistance to the Class. In addition to payments totaling almost $2 billion arising from BSE-specific programs, I have found that members of the Class received over $2-billion in additional financial support during the 2003-2007 period under general assistance programs, all authorized by *FIPA*. These public law assistance programs offset most of the losses suffered by the Class, and their existence and availability provide an additional policy reason for a court to be reluctant to impose a private law duty of care on government in such circumstances.

[20] Fourth, in my view the defendant did not act unreasonably and breach the standard of care of a reasonable regulator in the circumstances faced between 1990 and 1997, the period during

---

[2] The *Anns/Cooper* test is derived from the decision of the House of Lords in *Anns v. Merton London Borough Council*, [1978] A.C. 728, adopted by the Supreme Court of Canada in *Kamloops v. Nielsen*, [1984] 2 S.C.R. 2, at pp. 10-11, and modified in *Cooper v. Hobart*, 2001 SCC 79, [2001] 3 S.C.R. 537.

which negligence is alleged. BSE was a novel disease, based almost entirely in the UK. Canada considered the risk of BSE entering the Canadian cattle herd arising from the rendering of UK imports and concluded that the risk was low. This was consistent with the views of the UK and international BSE experts at the time. The OIE did not require a feed ban or isolation of the imports. Canada and the United States had an integrated cattle industry at the time, with animals and beef products freely crossing the border, and the United States did not impose a feed ban or take steps to keep its UK imports out of the rendering process and animal feed either. Indeed, the United States had difficulty even tracking its UK imports. When the WHO recommended a feed ban in 1996 Canada and the United States both took steps and enacted a feed ban on the same day in August 1997.

[21] Fifth, and finally, in the event that I am incorrect on liability, I have addressed damages which were the subject of much evidence at the trial, including complex expert evidence. I have concluded that the economic losses suffered by the Class due to the border closure in May 2003, until the end of 2007, are $5.419 billion. However, the defendant made financial assistance payments to the Class during this period, both under BSE-specific programs and general assistance programs authorized under *FIPA*. In my view, Canada should receive credit for $4.256 billion of such payments as offsets to the losses suffered by the Class. This results in losses to the Class of $1.163 billion, which is the amount I would have awarded as damages to the Class had I found the defendant liable in negligence.

Part II - History of the action and related proceedings

[22] This action was commenced in Ontario on 8 April 2005 on behalf of all persons who farmed cattle in Canada as of 20 May 2003. Three similar actions were commenced in the same month in Quebec, Saskatchewan and Alberta. At the time, the representative plaintiff in this action was Mr. Bill Sauer, who operated a farm in Ontario that included cattle. The defendants were Canada, Ridley Inc., the manufacturer of cattle feed alleged to have been consumed by the cow diagnosed with BSE in May 2003, and Ridley's parent company, Ridley Corporation Limited.

[23] In 2006, Regional Senior Justice Winkler, as he then was, dismissed motions to strike brought by Canada and Ridley Inc., as it was not "plain and obvious" that the actions could not succeed, and that an evidentiary record was necessary to decide the matter. Winkler RSJ struck the action against Ridley Corporation Limited: see *Sauer v. Canada (Minister of Agriculture)* (2006), 79 O.R. (3d) 19. The Ontario Court of Appeal dismissed appeals by Canada and Ridley Inc.: see *Sauer v. Canada (Attorney General)*, 2007 ONCA 454, [2007] O.J. No. 2443, leave to appeal refused, [2007] S.C.C.A. No. 454.

[24] Following a contested motion, on 3 September 2008 Lax J. certified the action under the *Class Proceedings Act, 1992*, S.O. 1992, c. 6 ("*CPA*") on behalf of a national class "except in the province of Quebec." Mr. Sauer was approved as the representative plaintiff of the Class: see *Sauer v. Canada (Agriculture)*, [2008] O.J. No. 3419 (Ont. S.C.), leave to appeal dismissed, [2009] O.J. No. 402 (Div. Ct.). At the same time, Lax J. approved a settlement with Ridley Inc., leaving Canada as the sole defendant.

[25] Lax J. defined the Class as follows:

> All persons who as at May 20, 2003 were resident in Canada (except the province of Quebec) and farmed cattle including, but not limited to, cow-calf, backgrounder, purebred, veal, feedlot and dairy producers.
>
> In this class definition, 'person' means any individual, partnership, corporation, cooperative, communal organization, trust, band farm or other association who as at May 20, 2003 was farming cattle within the meaning of the *Income Tax Act*.

[26] In her 3 September 2008 Order, Lax J. stated the Common Issues as follows:

> 1. Does section 9 of the *Crown Liability and Proceedings Act* bar the Class Members' claims against the federal government of Canada?
>
> 2. Were the defendants negligent and if so, when and how?
>
> 3. What is the appropriate apportionment of fault, if any, between the defendants?
>
> 4. Can the amount of compensatory damages, if any, be reasonably determined on an individual basis? If so, how should individual damages be determined?
>
> 5. If the answer to question 4 is no, can the amount of compensatory damages, if any, be determined on an aggregate basis? If so, what is the amount of damages and how should they be distributed?

[27] In 2010 the action in Quebec, *Bernèche c. Canada (Procureur général)*¸ 2007 QCSC 2945, [2007] J.Q. No. 6368, which had been certified in 2007 by Wagner J., as he then was, was suspended and the certification in this action was amended by Strathy J., as he then was, to include Quebec farmers: see *Sauer v. Canada (Attorney General),* 2010 ONSC 4399, [2010] O.J. No. 3381. A Fresh as Amended Statement of Claim was delivered on 9 May 2011, and this action then proceeded as a national class action.

[28] There were several days of discoveries of Canada's deponent on liability issues, Dr. John Kellar, in 2013 and 2014. Mr. Sauer was also examined for two days in April 2013.

[29] In March 2017 Mr. Sauer died. Subsequently, on 30 April 2018 Perell J. substituted Flying E Ranche Ltd. ("Flying E Ranche") as the new representative plaintiff of the Class. Leave was granted to the parties to deliver amended pleadings and a litigation plan was approved by Perell J. A Further Fresh as Amended Statement of Claim was issued on 24 May 2018. A Fresh as Amended Statement of Defence was filed on 2 August 2018, which was further amended on 30 October 2020.

[30] The Common Issues were also amended by Perell J. on 30 April 2018 as follows:

> 1. Does section 9 of the *Crown Liability and Proceedings Act* bar the class members' claim against the government of Canada?
>
> 2. Were the defendants negligent and if so when and how?
>
> 3. Can the amount of compensatory damages, if any, be reasonably determined on an individual basis? If so, how should individual damages be determined?
>
> 4. If the answer to question 4 [*sic*] is no, can the amount of compensatory damages, if any, be determined on an aggregate basis? If so, what is the amount of damages and how should they be distributed?[3]

[31] Additional discoveries of Dr. Kellar were conducted in November 2017 and October 2020. The plaintiff examined Canada's deponent on financial assistance programs and damages, Dr. Douglas Hedley, for three days in September 2018 and for another day in October 2020. Between 2017 and October 2020, the plaintiff examined the principal of Flying E Ranche Ltd., Mr. Lawrence Sears, over several days, and examined three other members of the Class produced to provide information from different sectors of cattle farming.

[32] On 15 March 2019, Perell J. scheduled a 60-day trial to commence on 18 January 2021, having been advised that the trial would take 8 to 12 weeks. Extensive production of documents was made by the government since at least 2016, and expert reports were prepared and exchanged.[4] At a pre-trial conference held in October 2020, Glustein J. was advised that the trial would take up to 7 or 8 months. Following a second pre-trial conference in November 2020, Glustein J. scheduled a 77-day trial. He ordered that the parties follow a "hybrid" approach of presenting some of their evidence-in-chief by way of affidavit with limited direct examination, followed by cross-examination. Much of this procedural history is contained in my Reasons on Motion for Adjournment, reported as *Flying E Ranche Ltd. v. Attorney General of Canada*, 2020 ONSC 8072.

[33] The hybrid approach to the trial was also the subject of discussion by me in my Ruling on the Admissibility of the Expert Reports: *Flying E Ranche Ltd. v. Attorney General of Canada*, 2021 ONSC 1512.

Part III - Trial procedure and presentation of evidence

[34] The trial commenced on 16 February 2021, having been adjourned by me to 1 February 2021 as explained in my Reasons found at 2020 ONSC 8072, cited above, and subsequently adjourned on consent for two additional weeks. The trial proceeded, with breaks, over a total of 55 days, concluding on 13 August 2021.

[35] At the outset of the trial I was provided with a schedule listing the anticipated witnesses. It contemplated 19 days for the plaintiff's case and 55 days for the defendant's case. The plaintiff's

[3] The reference to question 4 is incorrect and should refer to question 3.
[4] The plaintiff had already prepared initial expert reports in 2014, as will be reviewed later in these Reasons.

case was completed in 19 days. However, the defendant's case only took 30 days as many witnesses that were scheduled to be called, several of whom had prepared affidavits, did not testify and I did not read their affidavits.

[36] Due to the COVID-19 pandemic, the entire trial was conducted virtually, using ZOOM, a platform that allowed counsel, the witnesses and the judge, to see and hear one another using their computers. This facilitated the effective hearing of evidence from witnesses in the UK, France, Australia and various parts of Canada. While there were some minor interruptions, the technology worked well and the witnesses were examined and cross-examined by counsel without difficulty.

[37] As a hybrid trial had been ordered, the plaintiff's fact witnesses presented their evidence in-chief largely by way of affidavit, with relatively brief direct questioning. The defendant then had the opportunity to conduct thorough cross-examinations and challenge that evidence. On the other hand, several of the defendant's witnesses did not provide affidavits but instead presented all their evidence orally through examination-in-chief, prior to being cross-examined.

[38] The parties were cognizant of the need for the affidavits to comply with the rules of evidence applicable at a trial, as opposed to a motion or application where affidavits may contain statements of the deponent's "information and belief": see, e.g., r. 39.01(4) and (5) of the *Rules of Civil Procedure*, R.R.O. 1990, Reg. 194. This point was addressed early in the trial in my Ruling on Hearsay Objection to the Sears Affidavit reported as *Flying E Ranche Ltd. v. Attorney General of Canada*, 2021 ONSC 1513.

[39] Following an opening statement, the plaintiff spent several days reading in portions of the transcripts of the examinations for discovery of Dr. Kellar and Dr. Hedley. The plaintiff then led evidence from two fact witnesses: the representative plaintiff Mr. Sears, and Mr. Matthew Taylor, who had worked at the Canadian Cattlemen's Association ("CCA") between 1988 and 1993, and for Agriculture and Agri-Food Canada ("AAFC") as an Industry Liaison between 1993 and 1995. Mr. Sears and Mr. Taylor each swore affidavits which I admitted as part of their evidence, and they were each questioned briefly in-chief before being cross-examined by counsel for the defendant.

[40] I also admitted evidence of Mr. Mel McCrea as part of the plaintiff's case. Mr. McCrea was the owner of the cattle farm where the Canadian cow that tested positive for BSE in 2003 was born. He had sworn an affidavit on the certification motion in 2006, and was cross-examined on that affidavit by counsel for Ridley Inc. Mr. McCrea died in May 2010. My ruling on the admission of Mr. McCrea's evidence from the certification motion is found at *Flying E Ranche Ltd. v. Attorney General of Canada*, 2021 ONSC 1554.

[41] The plaintiff led evidence from three expert witnesses. The first expert was Dr. Samuel Beckett, a veterinary epidemiologist based in Australia. He was qualified as an expert in veterinary epidemiology who specializes in biosecurity and applies risk management principles. Following a ruling by me as to his expertise and the appropriate scope of his evidence, reports by Dr. Beckett were entered as exhibits which, together with a relatively short direct examination, formed his

evidence-in-chief, as discussed in my Ruling on the Admissibility of the Expert Reports found at *Flying E Ranche Ltd. v. Attorney General of Canada*, 2021 ONSC 1512.

[42] The plaintiff called two other expert witnesses. Dr. William Leiss was qualified as an expert in risk management and risk communication. His reports were also admitted as part of his evidence-in-chief. Dr. John Groenewegen was the plaintiff's damages expert. He was qualified as an expert agricultural economist who specializes in commodity market analysis, financial loss and damages in the Canadian agricultural industry. As discussed below dealing with damages, Dr. Groenewegen prepared a number of reports which were made exhibits, and testified at length, in both direct and cross-examination.

[43] In contrast, the defendant presented several witnesses without using the hybrid format.

[44] Three senior veterinarians, Dr. Norman Willis, Dr. William Bulmer and Dr. Kellar, each of whom had important first-hand knowledge of the actions of the government respecting BSE in the later 1980s and 1990s, all gave their direct evidence at length, orally.

[45] Dr. Willis was the Director General of the Animal Health Division, which became the Animal and Plant Health Directorate, Food Production and Inspection Branch ("FPIB"), with Agriculture and Agri-Food Canada ("AAFC", or "Agriculture Canada" or the "Department of Agriculture")[5] during the relevant time in the early 1990s. He was also the Chief Veterinary Officer ("CVO") of Canada and Canada's senior representative at the OIE. Dr. Willis served as President of the OIE from 1997 to 2000.

[46] Dr. Bulmer was the Director of the Animal Health Division from 1987 to 1993 and reported to Dr. Willis.

[47] Dr. Kellar was the Associate Director, Disease Control Section, in the Animal Health Division from 1988 to 1994. He had a background in epidemiology, having previously been, among other things, the Chief of Epidemiology in the Animal Health Division from 1985 to 1987. Dr. Kellar played a central role in Canada's response to BSE between 1990 and 1994. Following the 2003 BSE event, in 2008, Dr. Kellar completed a lengthy report on BSE in Canada and North America.

[48] Dr. Hedley is an agricultural economist who at the time of his retirement from AAFC in 2004 was the Assistant Deputy Minister, Farm Financial Programs Branch. He had been one of three senior public servants with oversight of the AAFC BSE Response Team that was created shortly after the border closed in May 2003. He also testified for the defendant, and gave his direct evidence orally.

[49] The only fact witness for the defendant who utilized the hybrid approach was Mr. Gilles Lavoie, who in 2003 was the Senior Director General of the Operations and Agricultural Industry

---

[5] In these Reasons I refer to the defendant by a number of terms, including "Canada", "Agriculture Canada" "AAFC", the "Department of Agriculture" and the "Department."

Services Directorate in the Market and Industry Services Branch of the AAFC. In May 2003, following the closure of the borders to export of Canadian cattle and beef, Mr. Lavoie was appointed the Executive Team Leader at AAFC charged with developing assistance programs for cattle producers. He reported to Dr. Hedley, among others.

[50] The defendant's four expert witnesses each provided reports which were admitted as part of their evidence-in-chief.

[51] The first of the defendant's expert witnesses was Mr. Michael Presley, who had expertise in the federal regulatory process gained from a long career with the federal government. I permitted him to give expert opinion evidence on that regulatory process, including the development and approval of regulatory proposals. This evidence was relevant to the claim by the plaintiff that Canada's 17-month delay in enacting the ruminant Feed Ban in August 1997, following the WHO's recommendation in February 1996, constituted "gross negligence."

[52] Dr. James Hope was the defendant's second expert witness. His field of specialty is biochemistry and molecular biology. Dr. Hope has worked in the field of Transmissible Spongiform Encephalopathies ("TSEs"), and BSE in particular, for over 30 years in the UK, since the early days of BSE. He was qualified to give expert evidence on the science of TSEs.

[53] Dr. Alejandro Thiermann, a veterinarian who had a long career with the US government dealing with international trade issues involving animal health, including working at the OIE as President of the Terrestrial Code Commission, gave expert evidence on the formulation of international science-based health standards by the OIE, including the standards for BSE set by the OIE. He also described the role of the OIE as it relates to the World Trade Organization ("WTO") and the Sanitary and Phytosanitary Agreement (the "SPS Agreement").

[54] Mr. Robert Low , the defendant's damages expert, presented his evidence through several reports and testimony at trial.

[55] Finally, the defendant read in excerpts from the evidence of the three farmers with different types of cattle operations who were produced for discovery.

[56] The documentary record filed at the trial was large. Through the read-ins alone, the plaintiff entered a bundle of 588 different documents, totalling over 8,400 pages, as an exhibit. The plaintiff also entered 191 other documents spanning several thousand pages bundled into 6 exhibits, including evidence from Federal Court proceedings in 1994, business and public records, documents in possession of the defendant, and scientific articles. These were admitted pursuant to provisions of the *Evidence Act*, R.S.O. 1990, c. E.23, and common law principles of evidence. Their admissibility was addressed in my Ruling on Admissibility of International Public Records, reported as *Flying E Ranche Ltd. v. Attorney General of Canada*, 2021 ONSC 2011.

[57] Approximately 40 additional exhibits were entered through the plaintiff's witnesses, including a range of scientific and government reports and records.

[58] The defendant's case added over 100 more exhibits consisting of several thousand pages. This included over 100 documents bundled into two exhibits entered under the business records exception and the principled exception to the hearsay rule. Several documents were entered as one exhibit as part of the defendant's read-ins: see my Ruling on Defendants' Read-Ins at *Flying E Ranche Ltd. v. Attorney General of Canada*, 2021 ONSC 4301.

[59] In the end, the documentary evidence consisted of over 1,000 documents spanning over 20,000 pages.

[60] The parties provided me with a lengthy (60-page) Agreed Statement of Facts, some of which I have borrowed from in my review of the facts. The parties also prepared a Neutral Chronology, Cast of Characters and Glossary of Acronyms, and extensive written briefs were submitted at the conclusion of the trial, all of which were helpful to me.

Part IV - The issues

[61] The issues for determination are the Common Issues stated by Justice Lax, as revised by Justice Perell. I restate them here, correcting issue 4 to refer to question 3:

> 1. Does section 9 of the *Crown Liability and Proceedings Act* bar the class members' claim against the government of Canada?
>
> 2. Were the defendants negligent and if so, when and how?
>
> 3. Can the amount of compensatory damages, if any, be reasonably determined on an individual basis? If so, how should individual damages be determined?
>
> 4. If the answer to question 3 is no, can the amount of compensatory damages, if any, be determined on an aggregate basis? If so, what is the amount of damages and how should they be distributed?

[62] At the outset of the trial, counsel advised me that the parties' experts on the question of how any damages should be distributed were in agreement on a number of issues. I therefore agreed with their proposal that, should the Court make a damages award on an aggregate basis, the parties would make best efforts within 45 days of my award to agree on a distribution protocol, failing which they would file materials seeking disposition by me of any remaining issues related to distribution. As a result I did not hear any evidence on, and my Reasons do not address, the third Common Issue.

[63] Before addressing the Common Issues directly, I review, largely chronologically, evidence describing the emergence of BSE in the 1980s and 1990s, the developing scientific knowledge of BSE, including its possible origins and manner of transmission, and the British, international and Canadian responses to it up to the implementation of the Canadian Feed Ban in 1997. I then address the impact of the diagnosis of BSE in a Canadian-born cow in 2003, including the domestic and international responses to it. I describe in detail the financial assistance programs which provided relief to cattle farmers between 2003 and 2007. Briefly, I address Canada's investigation of BSE

resulting in a report published in 2008, and the decline of the disease since the early 2000s. This is followed by my discussion of the expert scientific evidence on BSE presented by Dr. Beckett and Dr. Hope.

Part V - The emergence of BSE and Canada's response to it: 1986 - 1996

The emergence of BSE in the United Kingdom: 1986 - 1990

[64] In November 1986, the Central Veterinary Laboratory ("CVL") of the United Kingdom first identified BSE as a new disease affecting cattle. This followed a number of cases seen in cattle, or bovines, since approximately April 1985. The following year, BSE was described in an article in the 31 October 1987 issue of the *Veterinary Record* by Dr. Gerald Wells and others. The article explained that previously healthy cattle would become apprehensive, hyperaesthetic, aggressive, develop incoordination, and have difficulty rising from a lying position. Other signs included weight loss and reduced milk yield. The disease caused a progressive altering of the mental state of the animal. Incoordination would gradually become more pronounced, and there would be displays of kicking and increased nervousness and frenzied behaviour. It was invariably fatal, from about two weeks to up to six months after clinical signs emerged.

[65] Dr. Wells and others concluded that the disease was a novel pathogen belonging to the TSE group of diseases. TSEs are progressive life-terminating diseases that occur in the central nervous system. Other TSEs include scrapie in sheep, transmissible mink encephalopathy, chronic wasting disease in deer and elk, and the rare human form, CJD. Post-mortem examination of the brain in victims of TSEs show lesions or holes resembling a sponge – hence the term spongiform. Encephalopathy refers to damage or disease that affects the brain.

[66] TSEs are now recognized as prion diseases, as the infection is contained in a proteinaceous infectious particle, or prion. The concept of a prion had been identified earlier in the 1980s, although proof of the concept was still being sought in 1987.

[67] Also in 1987, the chief epidemiologist of the UK Ministry of Agriculture, Fisheries and Food ("MAFF"), Dr. John Wilesmith, investigated the new disease and concluded that the likely origin of BSE was linked to consumption, beginning around 1981 or 1982, of ruminant-derived protein or ruminant meat and bone meal ("RMBM")[6] which was incorporated into cattle feed usually fed to calves in their first 6 months as a protein supplement. A link was also made with changes in rendering processes and the manufacturing of MBM in the UK in the early 1980s, including a decline in exposure of MBM to solvents at high temperatures and a decline in the use of super-heated steam which, it was believed, allowed infectivity to survive in MBM.

[68] It was known by 1988 that clinical symptoms of BSE emerged in cattle usually between 2-8 years of age, and on average about five years after cattle became infected. Until symptoms arose, there was no method of discerning whether "preclinical" or "subclinical" (or asymptomatic) cattle were BSE-infected. Confirmation of BSE could only occur after death by examining the animal's

[6] I use RMBM and MBM interchangeably in these Reasons.

brain. The long incubation period for the disease meant that many cattle carried the infectious agent subclinically and never showed signs of the disease before slaughter.

[69] By September 1987 the reported incidence of the disease had grown to 60 new cases per month in the UK. By 1988, over 2,000 cattle were reported infected, which rose to 15,000 cattle by 1990, and over 91,000 cattle by 1993. Most cases were in dairy herds where it was common to raise calves on concentrated feeds from a very early age.

[70] Dr. Wilesmith's findings were reported in an article written by him, Dr. Wells and others in the *Veterinary Record* in 1988. The article identified similarities between BSE and scrapie, a disease which had been recognized for over 200 years. A number of factors were identified that might have led to the emergence of BSE in cattle. These included a dramatic increase in the sheep population in the UK commencing in 1980, a probable increase in the prevalence of scrapie-infected flocks, greater inclusion of sheep and sheep heads in material for rendering which would then have been included in MBM and in feed, and changes in rendering procedures which may have resulted in heating material at lower temperatures and for shorter periods of time such that infectious agents were not destroyed.

[71] In May 1988 an expert working party, which included Dr. Wilesmith as an advisor, was established in the UK under the direction of Sir Richard Southwood to examine and report to the UK Government on the implications of BSE for both animal and human health (the "Southwood Report").

[72] On 14 June 1988 the UK government issued *The Bovine Spongiform Encephalopathy Order 1988*, which made BSE a reportable disease and banned the sale, supply, or use of ruminant-derived protein in feeds for ruminant animals (the "UK Feed Ban"). The UK Feed Ban came into force on 18 July 1988. On 8 August 1988 the UK ordered the compulsory slaughter of BSE-affected cattle. On 30 December 1988, the UK prohibited use of milk from BSE-affected cattle, except for milk fed from dam to calf. A year later, on 31 December 1989, the *Bovine Spongiform Encephalopathy (No. 2) Amendment Order* (SI 1989/2326) came into force making the ruminant UK Feed Ban permanent.

[73] In November 1988 an editorial appeared in the noted medical journal *The Lancet* entitled "BSE and Scrapie: Agents for Change." It stated that "the inadvertent inclusion of scrapie-contaminated meat and bone-meal in compounded cattle food, is the most plausible explanation for the widespread appearance of BSE but remains to be proven." The article also noted that the "failure to detect preclinical cases of BSE poses the biggest threat to disease control and to cattle export earnings in the UK."

[74] The Southwood Report was released in February 1989. It noted the similarities to scrapie and the factors relating to sheep observed by Dr. Wilesmith as a possible explanation for the emergence of BSE in cattle. The Southwood Report also confirmed many of the findings that had been observed by Wilesmith, Wells and others, including: (a) all cases of BSE occurred in adult animals with an age range of 3 to 11 years; (b) the period from infection to the expression of symptoms was 2 to 8 years; (c) death occurred anywhere from 2 weeks to 6 months after symptoms

appeared; (d) the infectious agent was highly resistant to heat deactivation; (e) the most likely source of infection was the incorporation of RMBM from infected animals into feed rations fed to healthy animals; (f) calves appeared to be far more susceptible to contracting the disease than adult animals; (g) there was no evidence of vertical (dam to offspring) or horizontal (bovine to bovine) transmission; and (h) none of the processes used in rendering RMBM in the UK were capable of eliminating the infectious agent.

[75] In June 1989 an international roundtable on BSE was convened to consider the state of knowledge of the disease and discuss the findings of the Southwood Report. This led to the publication, in May 1990, in the *Journal of the American Veterinary Medical Association*, of a number of articles. One, by Dr. Wilesmith, stated two hypotheses for the development of BSE: (1) an increase in exposure of cattle to scrapie from rendered sheep carcasses; and (2) an increase in exposure of cattle to a cattle-adapted scrapie-like agent through rendered cattle carcasses. Dr. Richard Kimberlin, who had been the head of the Neuropathogenesis Unit of the Institute for Animal Health in Edinburgh ("NPU"), and who also became one of the leading experts on BSE, in commenting on the risk to humans, stated that "even if the theoretical risk of BSE is small, the disease has to be treated as though it were a proven risk."

[76] An article by Dr. Richard Marsh reported on mink contracting spongiform encephalopathy in Wisconsin in 1985. However the mink had not been fed any sheep protein but had consumed material from "downer" dairy cows. This suggested that a scrapie-like disease might already have been present in some cattle.

[77] In November 1989 MAFF banned the inclusion of specified bovine offals in human food in the UK (the "SBO Ban"). This included material from the brain, spinal cord, tonsils, spleen, thymus and intestines, considered most likely to be infective, from cattle over 6 months of age.

[78] In June 1990 an article published in *The Veterinary Record* summarizing the position taken by the British Veterinary Association stated that "[c]attle probably became infected with BSE from ingesting scrapie infected material from sheep which was augmented in the later stages by recycling of infected material from cattle." The article noted that "[o]f prime importance is the need for research on rendering processes that will inactivate agents of the BSE type."

[79] Following a recommendation in the Southwood Report, a committee was established to advise, co-ordinate and oversee research work on BSE chaired by Dr. David Tyrrell. One of its members was Dr. Kimberlin. This committee, the Spongiform Encephalopathy Advisory Committee ("SEAC"), often referred to as the Tyrrell Committee, published its final report in July 1990 (the "Tyrrell Report").

[80] The Tyrrell Report repeated the Southwood Report's conclusion that BSE may have originated from scrapie infection in sheep and that transmission was through MBM, likely due to the factors identified by Dr. Wilesmith. However, the Tyrrell Report also noted that "it cannot be ruled out that cattle initially infected by the feed route might have passed the infection on to other cattle, so far unrecognized because infected animals could still be in the incubation period."

[81] The Agriculture Committee of the British House of Commons released a report on BSE on 10 July 1990. It noted that the SBO Ban, implemented in 1989, "allows for the fact, essential to the understanding of BSE, that animals affected with the disease do not manifest clinical signs until it is well advanced: it is therefore likely that sub-clinically affected animals are being sent for slaughter."

[82] Finally, an article by J.G. Collee published in *The Lancet* on 24 November 1990 restated the prevailing view that "[i]t is currently believed that BSE, first recognised in cattle in Britain in 1985-86, is likely to represent an unfortunate transmission of the scrapie agent from processed sheep protein or protein from subclinically affected cattle by the oral route."

L'Office International des Epizooties (OIE)

[83] The OIE, now known as the World Organization for Animal Health but which still uses the acronym "OIE", is an intergovernmental organization that has existed since 1924. It plays an important role in safeguarding world trade by gathering, analyzing and publishing science-based health standards for international trade in animals and animal products. There are approximately 180 member countries, including Canada, the UK and the USA. They use OIE health standards as guidelines for international trade in animals and animal products.

[84] The World Trade Organization ("WTO") is the global organization dealing with the rules of trade among nations, established on 1 January 1995 at the conclusion of the Uruguay Round of Multilateral Trade Negotiations held pursuant to the *General Agreement on Tariffs and Trade* ("GATT"). One of the agreements reached upon the establishment of the WTO, was the SPS Agreement.

[85] The SPS Agreement provides that while member countries may adopt their own measures necessary to protect human, animal, and plant life and health, such measures must not be applied in a manner that would constitute a means of arbitrary or unjustifiable discrimination between member countries or amount to a disguised restriction on international trade.

[86] The OIE is recognized in the SPS Agreement as the international standard-setting organization for the safe trade in animals and animal products. Under the SPS Agreement, WTO members may meet their obligations by applying OIE standards.

[87] Since 1968, the OIE has published the *Terrestrial Animal Health Code* (the "*Terrestrial Code*" or the "*Code*"). The *Code* contains standards aimed at assuring the facilitation of "international trade in animals and animal products through the detailed definition of the minimum health guarantees to be required of trading partners, so as to avoid the risk of spreading animal diseases inherent in such exchanges." It is subject to revision and approval by the International Committee, now known as the World Assembly of Delegates, the governing body of the OIE which meets annually in Paris at the OIE's General Session. Each member country has a representative on the International Committee which is "composed of technical representatives appointed by the participating States." In practice, the representatives are often, as in Canada's case, the Chief Veterinary Officer of the country.

[88] The OIE contains four specialized commissions, or committees, which report to the International Committee. One of those commissions is the Terrestrial Animal Health Standards Commission (the "Code Commission", formerly known as the OIE International Animal Health Code Commission). It was established in 1960 and meets several times a year. The Code Commission works with scientists to prepare draft texts for new articles of the *Terrestrial Code* and to revise existing articles in light of advances in veterinary science. The *Terrestrial Code*, and any amendments to it, only become binding and authoritative when adopted by consensus by the International Committee.

[89] Until 2005 the OIE maintained two lists of animal diseases – List A and List B. The OIE collected data on List A diseases from Member Countries on a monthly basis, and for List B diseases on an annual basis. List A diseases were defined as "[t]ransmissible diseases that have the potential for very serious and rapid spread, irrespective of national borders, that are of serious socio-economic or public health consequence and that are of major importance in the international trade of animals and animal products." List B diseases were defined as "[t]ransmissible diseases that are considered to be of socio-economic and/or public health importance within countries and that are significant in the international trade of animals and animal products." On 1 January 2005, the OIE combined all the diseases previously contained in Lists A and B into a single list, known as the "OIE List."

[90] The *Terrestrial Code* contains notification requirements that member countries must follow if there is an occurrence of a listed disease in their territory. Each listed disease normally has a chapter in the *Terrestrial Code* to assist member countries in the harmonization of disease detection, prevention, and control.

[91] The *Terrestrial Code* also provides that veterinary authorities in member countries must submit to the headquarters of the OIE reports every six months on the absence, presence, and evolution of listed diseases, infections, or infestations, and information of epidemiological significance to other member countries as well as annual reports concerning any other information of significance. The OIE publishes an annual *World Animal Health Report*, which provides a snapshot of the animal health status and disease control methods of each member country from which it has received the required reports.

The OIE and BSE: 1988 - 1990

[92] The existence of BSE appears to have first been raised at the OIE at its General Session in May 1988. The CVO from the UK at the time, Dr. William Rees, gave a short report about the emergence of BSE in the UK. In his testimony at trial in May 2021, Dr. Thiermann, who was attending his first OIE meeting as a member of the US delegation, specifically recalled the presentation 33 years later.

[93] In the "Report on Disease Status Worldwide in 1988", published in April 1989, the OIE addressed BSE under the heading "Other Diseases." It provided a brief description of the disease, stating it had similarities to scrapie and that studies thus far "indicated that the infected cattle had

been exposed to feedstuffs containing ruminant-derived protein possibly contaminated with scrapie agent." This description remained the same in 1989.

[94] The OIE identified BSE as having first appeared in 1985-1986 in the UK. It noted that Ireland and Oman had also reported BSE. The OIE identified BSE as "[a] new disease not yet entered in List A or List B."

[95] In November 1989 Dr. Wilesmith and another colleague from the CVL, Dr. Ray Bradley, gave a presentation on BSE to the Foot and Mouth and Other Epizootics Commission of the OIE (the "FMD Commission"). That presentation referred to the findings and recommendations of the Southwood Report, and described the steps taken by the UK to control the disease. It also noted that studies were underway in mice and hamsters, as well as with cattle, to determine if there could be maternal transmission, which there was for scrapie, or whether cattle were "dead-end hosts."

[96] In the report of its 28 November – 1 December 1989 meeting, the FMD Commission noted that BSE was "indisputably a new member of the group of diseases known as the sub-acute spongiform encephalopathies caused by unconventional transmissible agents and is the bovine equivalent of scrapie in sheep." The FMD Commission noted that "the epidemiological data support an origin from sheep scrapie and possibly from a bovine strain of scrapie agent existing in a sub-clinical form in cattle."

[97] The report noted that in the UK "clinically-suspected BSE is notifiable", and that "the only tissues containing significant titres of scrapie agent, even in the clinical stage of the disease are central nervous and lymphoreticular tissues, including those of the intestine. No infectivity is detectable in muscle, udder, colostrum or milk." When asked about this report at trial, Dr. Kellar observed that the focus was on "clinically suspected" animals, noting that "everything done in BSE to this point was predicated on clinical expression", and that the focus of the UK presentation was on sheep and scrapie.

[98] The FMD Commission recommended "action for the early detection of BSE" including that "studies should be undertaken to determine the occurrence and incidence of scrapie, the method of disposal of ruminant carcasses and the use of and inclusion rate of ruminant protein in rations fed to ruminants." In addition, "consideration should be given to a) banning the feeding of ruminant protein to ruminants, and b) making suspicion of BSE notifiable." The FMD Commission also recommended that farmers, veterinarians and others be made aware of the clinical signs of BSE, and that pathologists and epidemiologists develop techniques to identify the disease and the source of infection.

[99] With respect to live cattle, the FMD observed:

> Based on the available epidemiological evidence concerning the origin of the disease and on the known low attack rate, provided that in an affected country measures are taken to ban the feeding of ruminant protein to ruminants, the disease is notifiable and that affected cattle are slaughtered and destroyed, it is highly unlikely that animals exported from that country will develop the disease. However,

> should a case occur in this way in an importing country there is no evidence to suggest that this would necessarily lead to the establishment of the disease.

[100] The FMD Commission's recommendations were not requirements of the OIE. As Dr. Thiermann testified, the OIE speaks through its International Committee in the annual meetings each spring.

[101] At the OIE's General Session in May 1990, the recommendation of the Code Commission to add BSE to List B of animal diseases was approved. This required all member countries to notify the OIE of any important epidemiological event relating to BSE. At this meeting the UK provided an update on BSE noting that it had confirmed over 13,000 cases on more than 6,000 farms. The majority (63%) of these farms had only a single case. In explaining the cause, the UK wrote:

> Epidemiological studies indicate that BSE is an extended common source epidemic, most probably caused initially by feeding cattle with compound rations which contained protein material derived from sheep, some of which were infected with scrapie. Subsequently some BSE infected material derived from bovine animals may also have been included in feed for a limited time.
>
> A number of factors have been identified which, in combination, precipitated the emergence of the disease in 1986 following an increase in the exposure of animals to the causal agent in 1981 or 1982. The most significant were an increasing sheep population, a probable increase in the incidence of scrapie, and changes in rendering processes in the 1970's and early 1980's.

[102] The OIE held special meetings on BSE in July and September 1990, which included Drs. Wilesmith, Kimberlin and the new UK CVO, Dr. Keith Meldrum, among others. In the report of the meeting in September 1990, the suspected origins of the disease from scrapie and changes in rendering practices were repeated, although it was also noted that "exposure was further increased from 1985-86 due to the recycling within the cattle population of infected cattle material." The report recommended import restrictions, stating:

> Cattle imported from countries, where BSE is present, and which have taken appropriate measures to deal with the animal health problem, are highly unlikely to develop the discase. However, additional import conditions are recommended to reduce this risk even further. These must include permanent identification to enable tracing back to the herd of origin and exclusion of animals whose dams were confirmed or suspect cases of BSE. Animals from countries with a high incidence of BSE must not have been fed ruminant derived protein. This requirement could be similarly applied to the dams of breeding animals to provide even more reassurance that BSE would not develop in imported animals.

[103] Additionally, a ban was recommended on including specified bovine offals (brain, spinal cord, thymus, tonsils, spleen and intestines) and products derived from them in animal feed and

human food "in countries with a high incidence of the disease." The only country with a "high incidence" of the disease was the UK.

[104] It was not until its General Session in May 1991 that the OIE directed the Code Commission to develop a chapter on BSE, as a "high priority."

Canada's cattle industry

[105] Canada has a large cattle industry. In 1990, the cattle population was approximately 12 million. By the early 2000s, the farmed cattle population in the country was approximately 13 million on about 150,000 farms. According to Statistics Canada, as of 1 January 2003 there were 2.2 million dairy cattle and about 11.3 million beef cattle. Prior to the discovery of BSE in May 2003, the industry was expanding. Cattle is the largest of the Canadian livestock industries.

[106] The sheep population in Canada in the 1990s was approximately 700,000 animals. In contrast, in the UK the sheep population in the early 1990s was approximately 40 million and its total cattle population was about 10 million animals, of which 4 million were adults.

[107] Generally, the Canadian cattle industry consists of four sectors: (a) beef; (b) dairy; (c) veal; and (d) breeding.

[108] The beef sector is the largest, and is predominantly in western Canada. It raises cattle that become beef and beef products. From birth to slaughter, there are four main stages of beef production, which involve the following four business operations:

> (a) Cow-calf operations, which breed and raise cattle until the animals attain an appropriate weight for sale to backgrounders and/or feedlot operators. Producers usually breed animals over the summer months and calving occurs nine months later in the following spring. Between six to nine months of age, calves are weaned. Producers, or farmers, may then keep calves as breeding stock, or they may sell them to a backgrounding operation, feedlot operator, or to another farm as replacement breeding stock. Cow-calf operators must also sell "cull cattle", which are older, no longer productive breeding animals, typically over five years old. Cow-calf operations can range from small hobby farms that raise one or two calves a year, to much larger operations in which hundreds or more than a thousand head of cattle are produced annually;
>
> (b) Backgrounding operations, which take weaned calves, usually over the winter, and feed them to increase their weight to roughly 800 – 900 pounds. Backgrounding operations may be stand-alone businesses that focus on one stage of production, or the operations may be combined with cow-calf, feedlot, or other farming operations;
>
> (c) Feedlot operations, which involve "finishing" the animals by feeding high energy rations to achieve a slaughter weight which, depending on the breed, ranges from 1000 to 1700 pounds. Feedlot operators may custom-feed cattle for clients

who maintain ownership of the cattle. Feedlots can range in capacity from a few hundred to tens of thousands of cattle; and

(d) Packers and renderers, which are the final stage of production. Abattoirs, or slaughterhouses, are where animals are slaughtered and the beef and beef products are sold to domestic and international markets. Portions of the animal not fit for human consumption, such as the brain, skull, bones, spinal cord, certain organs and elements of the central nervous system are sold to rendering plants where they are "cleansed" by heat and pressure, yielding fats (tallow), and ground into phosphate fertiliser, MBM and gelatin. MBM is in the form of a powder, similar to coffee grounds, and can be rich in protein. Renderers would sell MBM to animal feed manufacturers who would include it in their products for farmers.

[109] In the beef sector, animals are usually slaughtered between 12 and 30 months of age. Most are 24 months or less. Cows and bulls retained for breeding may live for several years.

[110] Most of the Canadian dairy sector cattle are located in Ontario and Quebec. About half of dairy animals are milking cattle. Heifer calves born on dairy farms may be used as herd replacements for aging cows culled from the herd, or the animals may be sold to other dairy producers to replace breeding animals. Some are exported. In dairy operations, bull calves may be used for breeding purposes although the vast majority are sold for beef or veal production.

[111] The veal sector is closely connected to the dairy sector and is also concentrated in Ontario and Quebec. On a dairy farm, bull calves are typically sold to veal producers.

[112] Many cattle farms have mixed operations that include more than one of the business sectors. Additionally, many livestock operations (beef/veal/dairy/breeding) also grow crops for sale.

[113] Since at least the later 1970s, the beef, cattle and feed markets in Canada and the US have functioned like a single market. The US market is approximately ten times larger than the Canadian market, and a majority of Canadian cattle, and beef products, are exported to the United States. In early 2003, prior to the discovery of BSE in a Canadian cow, approximately 60% of Canadian cattle and beef production was exported. Of that, 100% of live cattle exports and over 80% of meat product exports, went to the US.

Canada's statutory framework

[114] AAFC is the body within the defendant Government of Canada established pursuant to the *Department of Agriculture and Agri-Food Act*, R.S.C., 1985, c. A-9 (the "*DAAA*"). The powers, duties, and functions of the Minister under the *DAAA* are set out in s. 4 of that Act and relate broadly to the regulation of agriculture, agricultural products and research.

[115] Prior to 1997, the Food Production and Inspection Branch of AAFC ("FPIB") was responsible for production and quality standards, and for inspection of various agri-food products. The FPIB contained, among other things, the Health of Animals Directorate, responsible for

managing animal health. The National Animal Health Program had existed for many years within the FPIB, and was overseen by Dr. Willis, the Director General of the Health of Animals Directorate and Canada's CVO, and by Dr. Gordon Dittberner, Director General of the Veterinary Inspection Directorate. The Program had a number of objectives. One was directed at the prevention, control and eradication of diseases affecting livestock including cattle. Other objectives included ensuring supplies of animal products for export, certification and research, and to ensure safe importation practices.

[116] The FPIB also contained Directorates for food inspection and plant health, among others.

[117] Within the Animal Health Division was a Disease Control Section in which Dr. Kellar was Associate Director. There was also an Import/Export Section led by Dr. Claude Lavigne in 1990.

[118] Until 1 January 1991 the *ADPA* and the *Animal Disease and Protection Regulations*, C.R.C. 1978, c. 296, governed AAFC's regulatory powers over the detection and control of animal diseases. This included, among other things, regulating the importation into Canada of animals, feed, hay, fertilizer, manure or "other things" to prevent the introduction of infectious diseases; and quarantining, segregating or destroying such things when necessary.

[119] The *HAA* and the *Health of Animals Regulations*, C.R.C., c. 296, replaced the *ADPA* in 1991. The long title to the *HAA* describes it as "An Act respecting diseases and toxic substances that may affect animals or that may be transmitted by animals to persons, and respecting the protection of animals."

[120] AAFC also administered the *Feeds Act* and the *Feeds Regulations, 1983*, SOR/83-593, which controlled and regulated the marketing of animal feed, including permissible ingredients and labelling. Schedule IV of the *Feeds Regulations* describes ingredients that are permitted for use in livestock feed. Only those feed ingredients that have been evaluated and approved by the Feed and Fertilizer Division (now the Animal Feed Division) may be used in livestock feed formulations.

[121] In 1997, the FPIB moved, in large part, to a new arms-length agency, the Canadian Food Inspection Agency ("CFIA"), established by the *Canadian Food Inspection Agency Act*, S.C. 1997, c. 6. The Minister of Agriculture is responsible for the overall management and direction of the CFIA and its operations. The CFIA is responsible for the administration and enforcement of the *HAA* and the *Feeds Act*, and their related regulations, among other legislation.

[122] AAFC also administers *FIPA*, which is the statute under which Canada provides financial assistance to the agriculture and agri-food industries.

Canada's knowledge of BSE: 1987 - 1990

[123] Canadian officials became aware of BSE soon after it became known in the UK. Senior veterinarians within the Department of Agriculture, and in particular the Animal Health Division, had close contacts with their counterparts in the UK.

[124] Dr. Bulmer, the Director of the Animal Health Division, recalled hearing about BSE in about 1987. It got his attention because of the economic importance of the Canadian cattle industry and its large export market. He ensured that the Disease Control Section and the Import/Export Section of the Animal Health Division followed developments relating to the new disease.

[125] Dr. Kellar first learned of BSE when visiting Dr. Wilesmith at the CVL in Weybridge, England, in 1987 or 1988. Thereafter, Dr. Kellar communicated frequently with Dr. Wilesmith. Dr. Bulmer confirmed that the department also had frequent contact with Drs. Kimberlin and Bradley. Dr. Willis, Canada's CVO, interacted frequently with his British counterpart, Dr. Meldrum. Dr. Willis also attended OIE sessions as Canada's representative. Dr. Willis confirmed at the trial that Dr. Wilesmith and Dr. Kimberlin were "leading researchers and authoritative voices" on BSE.

[126] Agriculture Canada also maintained close contact with researchers and government officials in Europe and the United States. This included Dr. Will Hueston of the United States Animal and Plant Health Inspection Service ("APHIS") in the US Department of Agriculture ("USDA"). As well, Canada was a member of an informal "quadrilateral group" which included the US, Australia and New Zealand, which met to discuss animal trade issues.

[127] Drs. Willis, Bulmer and Kellar followed and kept up to date with leading scientific publications during this period, including the *Veterinary Record*, the *Canadian Veterinary Journal*, *The Lancet*, the *OIE Scientific and Technical Review*, the *Journal of the American Veterinary Medical Association*, and others. Dr. Bulmer stated that it was a standing order for officials in his department to review articles dealing with diseases that could have an impact on Canada. He also acknowledged, as did Dr. James Hope, a leading British expert on BSE and Canada's expert witness at trial, that once an article is published in one of these scientific journals it becomes common knowledge.

[128] Dr. Kellar was familiar with the reports from the UK during this period, including the Southwood Report and the Tyrrell Report. He also followed the information coming from the OIE.

[129] There were also visits to Canada by the British experts. On 3 April 1989 Dr. Meldrum visited Canada and discussed BSE with Agriculture Canada officials. According to notes of his presentation, Dr. Meldrum linked BSE to scrapie and discussed the problem of the amount of heat needed in rendering to kill the scrapie agent. Dr. Meldrum discussed cattle offals, and a ban on ruminant offal in baby foods that had been imposed in the UK at that time.

[130] Ten months later, in February 1990, in a letter to Dr. Willis written on a "personal basis", Dr. Meldrum enclosed a copy of the Southwood Report. Dr. Meldrum noted that "[t]he majority of [the UK's] findings have now been published in the Veterinary Record." He confirmed that epidemiological investigations concluded that cattle "were most probably exposed to the agent of scrapie via commercial cattle feedstuffs which contained meat and bone meal derived from sheep." Dr. Meldrum also explained that certain bovine offals "are the tissues in which the infectious agent is most likely to be present in cattle which are infected but have not yet developed clinical symptoms." He informed Dr. Willis of the recently introduced ban on SBO from cattle more than

6 months old in human food. Dr. Meldrum wrote that "the action is based on our understanding of scrapie in sheep." He concluded his letter as follows:

> BSE is, of course, still a very new disease. Our actions have been firmly based on scientific evidence and advice, but a great deal of research is necessary and is being undertaken, for example, to determine whether the agent is absent in a variety of bovine tissues, to study the agent at a molecular level, to develop a diagnostic test, to determine whether maternal transmission can occur, and to confirm that embryo transfer carries no risk of transmission of BSE. The results will inevitably take years to obtain, but will be published when available.

[131] Articles about BSE also appeared in Canadian journals. In September 1989 scientists at the Ontario Veterinary College in Guelph, Ontario, wrote an article in the *Canadian Veterinary Journal* briefly summarizing what was known about BSE. They suggested the imposition of an import ban on cattle and sheep from the UK, and that "serious consideration should be given by Agriculture Canada to preventing incorporation of ruminant-derived rendered products into any animal foods."

[132] Although not published until 1990, Dr. Kimberlin submitted an article to the *Canadian Journal of Veterinary Research* on 5 June 1989, "Transmissible Encephalopathies in Animals", which discussed the "prion hypothesis." This theory, then quite new but now generally accepted, is that scrapie, BSE, CJD and other transmissible encephalopathies are caused by an abnormal infectious protein, known as a prion, which is resistant to inactivation processes such as high temperature, high pressure, and other rendering techniques that ordinarily destroy bacteria and viruses, and which can replicate itself. TSEs, Dr. Kimberlin noted, have long incubation periods (often several years) and occur only in the central nervous system. Dr. Kimberlin, who around this time was succeeded as head of the of Neuropathogenesis Unit in Edinburgh ("NPU") by Dr. Hope, wrote that "the transmission of scrapie to cattle (to give BSE) is clearly associated with the ingestion of contaminated feed."

[133] Drs. Bulmer and Kellar were both questioned extensively on their state of knowledge of BSE as of 1990, and of the conclusions in the scientific studies published to that point. They acknowledged that Canada was aware of the two hypotheses stated by Dr. Wilesmith in his May 1990 article that BSE stemmed from increased exposure of cattle to scrapie from sheep carcasses, and from increased exposure of cattle to a cattle-adapted scrapie-like agent through rendered cattle carcasses. Dr. Kellar also acknowledged the concern, known at the time, that due to the long incubation period animals could be subclinically, or preclinically, infected with BSE and that infected material could be recycled from cattle.

[134] Dr. Kellar, a veterinary epidemiologist familiar with studying the causes and patterns of diseases, agreed that epidemiologists must look at all methods of transmission when trying to prevent entry, or spread, of a disease. He agreed that Agriculture Canada knew of and followed epidemiological principles, and that in dealing with a disease such as BSE which has a long period of undetectable subclinical infection, Canada needed to pursue a conservative, precautionary, approach.

[135] At trial, Dr. Kellar also agreed that by 1990 Canada was aware of and had concerns about the cattle imported from the UK that may have been exposed to contaminated feed, as there was a risk of them infecting the Canadian herd through recycling in the feed chain. At that time, as the disease was continuing to spread in the UK, the UK could not verify that any of the 182 imports to Canada between 1982 and 1990 had not been exposed to contaminated feed.

[136] On the other hand, there was also much that was unknown in 1990 about what was then a novel disease, including whether the source was scrapie or a novel, bovine BSE strain, whether the infection could be transmitted vertically (maternally) or horizontally, and the amount of infectious agent that was necessary to pass the disease along, as Dr. Meldrum had noted in his letter to Dr. Willis of 14 February 1990.

[137] Dr. Meldrum wrote to Dr. Willis again in October 1990. He reported that BSE had been transmitted to pigs by injecting large quantities of infected brain material, and that the SBO Ban was being extended to pigs.

[138] In November 1990 Dr. Wilesmith came to Canada and spoke at AAFC offices in Nepean, Ontario. The meeting was chaired by Dr. Kellar and was intended to give researchers and field staff direct exposure to the current knowledge of BSE in the UK. Notes of that lecture indicate that Dr. Wilesmith confirmed that it was an "extended common source epidemic" and the "only common factor was feedstuffs containing meat and bone meal" which had been banned in the UK. The notes also indicate that Dr. Wilesmith made reference to the belief that an increase in the incidence of BSE may have been "caused by recycled affected cattle from the original outbreak." By this time the UK had over 19,000 confirmed cases in over 9,000 herds. This amounted to about one animal in every 250 cows each year with BSE. It was predicted that the incidence should peak in 1991 and decrease to low levels by 1996.

[139] Dr. Kellar testified that he was somewhat skeptical of the recycling hypothesis, noting that the increased incidence might also be due to the disease becoming notifiable and the opportunity to obtain compensation offered under British legislation. At this time, as Dr. Kellar testified, the focus was on clinical animals which it was believed had a much higher level of BSE prions and would be more likely to transmit infection than subclinical animals which might be incubating the disease.

[140] Following Dr. Wilesmith's talk in November 1990, Dr. Kellar and Dr. Wilesmith had lunch during which Dr. Wilesmith apparently told Dr. Kellar that a feed ban in Canada would be a political rather than a scientific gesture, "addressing apparent risk instead of science addressing real risk." Dr. Kellar's evidence was that, having considered the knowledge at the time, he was "satisfied that [BSE] was a UK problem, not a Canadian problem. All we had of the UK was about 180 animals that had been imported over a period of about 10 or 12 years."

Canada's response to BSE: 1988 – 1990

Certification and permit requirements in 1988

[141] The practice of feeding MBM to animals in the UK dates back to at least 1926, when the material was recognized in feed legislation. The practice was followed in many other countries including Canada and the United States. However, it appears from the evidence that considerably less MBM was included in feed in North America compared to the UK due to the availability of soybean and other vegetable proteins in Canada and the United States.

[142] In 1978, as a result of concerns surrounding foot and mouth disease, Canada prohibited the import of MBM without a permit from all countries except the USA. Imports from other countries had to be specifically permitted by the Minister and could only be issued for countries designated free from any reportable disease or other serious epizootic disease. In 1988, following the emergence of BSE in the UK, Canada completely banned the import of MBM from all countries except the US. It is an agreed fact that Canada did not import RMBM from the UK after 1978.

[143] As in many countries, Canadian cattle producers sometimes imported cattle from the UK and elsewhere with the objective of improving or enhancing their breeding stock. Since the 1960s, cattle imported to Canada from the UK and Europe have been subject to extensive testing and often lengthy quarantines. Import conditions depended on, among other things, Canada's knowledge of the conditions that prevailed in the country of origin, and Canada's knowledge of, and previous dealings with, the veterinary administration of the exporting country.

[144] As a result of the emergence of BSE in the UK, in 1988 Canada placed additional import conditions on cattle from the UK. Canada required that cattle be accompanied by a health certificate issued by a MAFF veterinarian stating, among other things, that no BSE had been diagnosed in the herd of origin during the 36 months immediately prior to the date of import. In addition, all UK imports were subject to testing and quarantine on arrival in accordance with the *ADPA* and the *ADPA Regulations*.

[145] Dr. Bulmer agreed that the rationale for the certification requirement was the increased risk of BSE if an animal came from a herd that had been exposed to contaminated feed, and that Canada wished to manage that risk. However, he also agreed that, despite the long incubation period of BSE, there was no follow-up by Canada with the UK to find out if BSE developed in those herds of origin after the imports had come to Canada.

Import Ban - 1990

[146] By the beginning of 1990, the situation in the UK had worsened and many countries had banned importation of cattle from the UK. These countries included members of the EEC, the United States, Australia, New Zealand and Israel.

[147] A memo from Dr. Lavigne to the Minister in January 1990 stated that "[t]he risk of importing an animal incubating the disease is extremely low." The memo also advised the Minister that the "risk of transmitting the disease to Canadian cattle [was] non-existent", a statement Dr. Bulmer agreed in cross-examination was not correct, saying that "it would have been better to say

it's a very low risk." Nevertheless, on 9 February 1990 the Animal Health Division of the Department of Agriculture determined that it would no longer issue import permits for cattle from the UK and Ireland. AAFC has the authority to refuse import permits for animals from a country where a serious communicable disease exists, which was the situation in the UK and Ireland.

[148] A few months later, on 24 May 1990, Canada extended the import ban to all ruminants from the UK and Ireland. In a telex informing the Canadian High Commission in London of this expansion of the ban, Dr. Lavigne stated that this step was being taken due to "the need to protect the health of Canadian livestock and to preserve imported [*sic*] export markets." Dr. Lavigne noted the "lack of definitive scientific knowledge of all possible means of transmission of the disease", and the possibility of transmission between species.

[149] In June 1990, the import ban was extended to bovine serum from the UK.

[150] While the documentation indicates that the decision to impose an import ban was taken at the departmental level, the impetus for the ban appears to have come from the Minister in January 1990. Dr. Willis testified that the Minister would have been involved in a decision of this magnitude as it raised trade concerns.

Monitoring Program created - 1990

[151] A memorandum to the Minister on 9 February 1990 informed him of the import ban. It also stated that 182 cattle had entered Canada from the UK and Ireland since 1982 (168 from the UK)[7], and that they would "be monitored for eight years following entry into Canada to ensure that no evidence of the disease develops." This followed from the concern that cattle from the UK might be infected but still be in the incubation period, and therefore did not show symptoms of BSE.

[152] The Monitoring Program was initiated by Dr. W.J. McElheran on 9 April 1990. Dr. McElheran was the Chief, Animal Imports and Quarantine, in the Animal Health Division. In a memorandum sent to all Regional Directors of Animal Health, Dr. McElheran provided a list of the UK imports and asked that they be identified, tagged, and kept under surveillance.

[153] In a follow-up memorandum to the Regional Directors on 29 May 1990, Dr. McElheran requested information on each animal including the name of the importer and current owner, date of birth and eartag identification, the animal's current location and health status if still alive or, if the animal died, was slaughtered or exported, the date when that occurred. The memorandum also required "that animals be checked semi-annually and a report identifying each cow be forwarded … until the animal has spent eight years in Canada."

[154] The Monitoring Program did not quarantine animals or require that they not be sold, slaughtered or exported. As Dr. Kellar testified, the purpose was only to monitor the cattle for clinical signs of BSE, not to keep them out of the food or animal feed chain. Dr. Bulmer agreed that "the monitoring program was there to detect BSE if it showed up in any of those cattle."

[7] The precise number of imports and what happened to them varies slightly in the documents and evidence.

However, Dr. Willis, the Director General of the Animal Health Directorate and Canada's CVO, testified at trial that his understanding of the purpose of the Monitoring Program was to keep the UK cattle out of the feed chain.

Reportable disease - 1990

[155] On 3 April 1990 the Health of Animals Directorate of AAFC decided that BSE should be made reportable under the *ADPA* (subsequently the *HAA*). This came into effect by Regulation 90-162 on 21 November 1990.

[156] When a disease is designated as reportable, the *HAA* requires that any person who owns or has the possession, care, or control of an animal, is to report to the nearest veterinary inspector the presence of a reportable disease or any fact indicating its presence in or around the animal. The obligation arises immediately after the person becomes aware of the presence or fact indicating its presence. The *HAA* requires a veterinarian or analyst of animal specimens to report to a veterinary inspector any suspicion that an animal is affected or contaminated by a reportable disease.

[157] Veterinarians and others involved in the cattle industry were advised that BSE had been made a reportable disease. AAFC's Animal Health Division prepared an Animal Health Directive, AHD-91-01, dated 7 January 1991, which set out the procedure to be followed if a suspect case of BSE was reported. It directed that staff, practicing veterinarians, provincial laboratory personnel, and other interested parties were to be advised of this order.

The Mirabel Cattle

[158] Although Canada had said it would honour existing permits when the import ban was announced, in March 1990 MAFF found a suspected case of BSE on a UK farm from which a bull had been shipped to Canada. The imported bull was still in post-arrival quarantine in Canada at Mirabel Airport, together with 13 other cattle from the UK (the "Mirabel cattle").

[159] AAFC decided that neither the bull nor the 13 other animals still in quarantine at Mirabel Airport could enter Canada. The animals were incinerated in order to eliminate any risk of transmission of BSE and the farmers were paid compensation pursuant to s. 12 of the *ADPA*.

[160] The UK called Canada's action "draconian and irrational", noting that the animal from the UK herd with the recent diagnosis had been isolated from the clinical animal. Further, as there was no indication that BSE was laterally, or horizontally, transmitted, refusing entry of the other 13 animals at Mirabel Airport was, said the UK, "unjustifiable."

[161] As Dr. Bulmer acknowledged at trial, the destruction of the Mirabel cattle was part of a "zero risk approach" based on "suspicion." Similarly, Dr. Kellar agreed that Canada was exercising the "precautionary principle" with the Mirabel cattle. The Southwood Report had not ruled out modes of transmission other than feed, such as horizontal transmission or from detritus, and there was, Dr. Kellar said, a need to be "extra cautious." Dr. Bulmer and Dr. Willis both noted the need to maintain Canada's animal health status and international reputation. As one memo at the time put it, there was a need to maintain and "protect Canada's lucrative export markets."

Again, as Dr. Bulmer's evidence confirmed, "the Department was trying to take all steps necessary to keep this disease out of the Canadian cattle population."

Consultation and stakeholder meetings: 1989 - 1990

[162] The 9 February 1990 memorandum advising the Minister of the import ban and the creation of the Monitoring Program also stated that "the Canadian cattle industry will be advised through the established consultation process."

[163] Since at least the 1970s, AAFC had consulted regularly with industry associations and stakeholders in the agriculture and food sector. One mechanism for such communication was the Canadian Animal Health Consultative Committee on Cattle ("CAHCCC"), which had been set up in the 1970s to consult on a response to brucellosis. The CAHCCC included, among others, representatives of the CCA, Canadian Dairy Breeds, Holstein Association of Canada, and the Beef Breeds Council. It met at least annually, usually in the fall "once the harvest was in."

[164] Mr. Taylor, who had worked for both the CCA and in the Department of Agriculture during this period, stated that "the primary source of BSE information to CCA members and cattle farmers in general came from AAFC officials who made presentations at CAHCCC meetings." Dr. Kellar described the "pyramidal structure" of the CAHCCC as the principal means of disseminating information to the cattle industry.

[165] Mr. Taylor stated that industry organizations such as the CCA did not have veterinarians or scientists on staff, and looked to Agriculture Canada for knowledge and expertise regarding animal diseases, including BSE. Dr. Bulmer agreed that cattle industry stakeholders relied on the government to take the right actions to control and prevent animal diseases. On the other hand, Mr. Taylor also agreed that the CCA had a large membership and would retain outside experts when it thought it needed them.

[166] Even before the import ban, in November 1989, Dr. Maria Koller, who worked with Dr. Kellar in the Animal Disease Control section, gave a presentation on BSE at a CAHCCC meeting, noting its symptoms, highlighting that the disease had a long incubation period, that an unconventional transmissible agent caused the disease, and that feed was the likely source of infection. It does not appear that Dr. Koller mentioned the possibility that the disease was being recycled through cattle, noting instead that "with Canada's sheep population being so small compared to that of the British Isles, the disease will probably never be seen here." She also noted, incorrectly, that the reported case of TSE in mink in the US came from raw sheep offal when, in fact, the mink had been fed "downer cattle."

[167] Also in November 1989, Dr. Kellar spoke at a meeting of the National Renderers Association, which included rendering industry representatives from the UK and the USA, as well as representatives from the USDA and several other countries. The notes of the meeting disclose a tension between renderers and the sheep industry due to the concern over BSE potentially originating from sheep. At that time Dr. Kellar drew a distinction between the UK situation and the "minimal risk associated with sheep in this country relative to their exceedingly small numbers

and the much reduced prevalence of scrapie." He committed to consulting with the rendering industry if it is "forced to make a decision in this regard." In his testimony at trial, Dr. Kellar described his in-depth knowledge of the rendering industry and its techniques which, in his view, were effective in eliminating much of the risk of infectious matter being included in animal feed. He also noted that, in comparison to the UK, "we fed virtually no meat and bonemeal to the great majority of Canadian cattle."

[168] In a letter to a rendering company in Vancouver in May 1990 Dr. Kellar discussed why Canada believed there was "virtually no risk of BSE occurring in the Canadian situation." He stated:

> If we accept the hypothesis that meat meal from "scrapied sheep", processed at low temperatures and fed to cattle caused the outbreak, then the following facts offer protection to the Canadian herd:
>
> > (1) The ratio of sheep to cattle in the UK is seventy-five times that seen in Canada. As a result, Canada hasn't anywhere near the volume of sheep, which might possibly carry scrapie, entering its abattoirs or rendering plants.
> >
> > (2) Scrapie in the U.K. is uncontrolled. In Canada it is a notifiable disease and infected flocks are depopulated with compensation following investigation to determine which animals are at risk of spreading the disease. This again keeps the level of scrapie that might find its way into abattoirs or directly to rendering plants extremely low.
> >
> > (3) We are advised that least cost formulations employed in cattle supplement derivations virtually exclude meat meal. In the UK, meat meal did, until recently banned, find continuous use in calf and ruminant rations. As a result, Canadian cattle are exposed to infinitely less meal than the U.K cattle which are now exhibiting BSE. <u>In summary, we have less sheep, less scrapie and less exposure of our cattle to the hypothetically implicated products</u>.[Emphasis added.]

The 18 June 1990 Meeting

[169] On 18 June 1990 Dr. Bulmer chaired a meeting on BSE for a broad range of stakeholders, including organizations representing producers of dairy and beef cattle (including the CCA), sheep and goats, abattoirs, renderers and feed producers. Veterinary organizations, provincial officials and a representative of the USDA also attended. The meeting was called after the rendering industry had raised concerns that, due to the link with scrapie, the continued acceptance of sheep material at their plants could contaminate their operations and jeopardize their markets.

[170] The objective of the meeting was to review and share background knowledge regarding BSE and the situation around the world, explain Agriculture Canada's position and response to

BSE, and to seek input from stakeholders to identify issues and decide on next steps in addressing the new disease.

[171] Dr. Koller made a presentation similar to the one she had given to the CAHCCC in November 1989 reviewing the current knowledge of the disease. Although the slide presentation did not mention the recycling cattle, participants were provided with a package of material that included the articles which arose from the international roundtable held in June 1989. This included Dr. Wilesmith's paper stating his two hypotheses of the cause of BSE: exposure of cattle to scrapie through rendered sheep carcasses, and an increase in exposure to a cattle-adapted scrapie-like agent through rendered cattle carcasses. Also included was the UK update provided to the OIE General Meeting in May 1990, which referred to the possibility that "some BSE infected material derived from bovine animals may also have been included in feed for a limited time."

[172] The recycling point appears to have been recognized during the meeting, as the Minutes indicate that a representative of the Canadian Sheep Council raised the issue, asking whether cattle were "at risk of getting BSE from cattle; can cattle offal be the culprit?" The Minutes then contain a passage in parentheses, stating: "(Note: After the disease appeared in cattle and before the ruminant offal ban, there was a window of time in the UK where cattle could have been receiving the agent from two sources: scrapied sheep and BSE cattle, but there is no evidence that infected cattle are the primary source)." It is not clear if this was stated at the meeting, or added as a note to the Minutes afterwards.

[173] Dr. Kellar presented Agriculture Canada's position. He set out what were described as the "three pillars" of Canada's position: (i) BSE does not exist here; (ii) BSE cannot enter Canada; and (iii) BSE will not develop in Canada. As Dr. Kellar acknowledged at the trial, the rationale for the second pillar was due to "movement restrictions for animals and products", including the ruminant import bans from the UK and Ireland, and the Monitoring Program. The three pillars were repeated in consultative documents over the next few years. According to Dr. Willis, these were "talking points" rather than a policy, and were intended to reassure the industry that Canada was taking steps to try to prevent BSE from entering and developing in Canada.

[174] The focus of the 18 June 1990 meeting was on the potential for the development of BSE in Canada as it had originated in the UK, which Agriculture Canada viewed as extremely unlikely. As a summary document prepared by Dr. Koller and distributed at the meeting stated:

> The factors believed necessary for the transmission of the infection from sheep to cattle (a large sheep population where infection with scrapie is common resulting in large amounts of infected material going to rendering plants, a continuous low temperature rendering process and the widespread incorporation of rendered animal origin protein supplements in calf feeds) exist in the United Kingdom but not in Canada. Unlike the United Kingdom, Canada has a scrapie control program which maintains this disease at a low sporadic level in our small sheep population. While many rendering systems in the United Kingdom use a low temperature process, the temperature processes of registered rendering plants in Canada have been reviewed for this concern and low temperature processes are not used. The manufacturers of

> the calf and cow feeds used in Canada incorporate virtually no animal proteins into their products. [Emphasis added.]

[175] Dr. Kellar's presentation also addressed the risk of BSE emerging in Canada in the same way that it was thought to have emerged in Britain. Prior to the meeting, he had done an informal qualitative assessment of the risk of BSE developing in Canada as compared to the UK based on sheep to cattle ratios, the degree of MBM used in ruminant feed and scrapie distribution. He estimated that the risk was 1/30,000 that of the UK, although this number was reduced to 1/10,000 in other documents. This calculation was based on a number of considerations, including the much smaller sheep population in Canada compared to the UK (approximately 700,000 versus about 40 million), the much larger ratio of sheep to cattle in the UK, and the very low incidence of scrapie in Canada compared to its prevalence in the UK.

[176] The Minutes of the 18 June 1990 meeting indicate that there were presentations by food safety and feeds personnel at Agriculture Canada, representatives of feed, rendering, and producers' associations, as well as provincial government representatives and the USDA.

[177] A representative of the Canadian Feed Industry Association, which represented 95% of livestock feed manufacturers, spoke at the meeting. He noted that only small amounts of animal protein were used in ruminant feeds; a small market share may have 5-10% animal protein, or MBM, in their supplements, and that "premixes" may have less than 0.5% in their final product. No MBM was included in milk replacer feed. He also noted that MBM can include protein from cattle, swine, sheep and goat.

[178] The rendering industry described its processes, receiving between 25% and 40% of the weight of slaughtered sheep and cattle, about 25% of which is reduced through heat and other techniques to protein, which is sold mostly to feed producers. The rendering industry is therefore subject to the demands of the feed industry. It expressed concern that the temperature and pressure believed necessary to sterilize for BSE would "denature the protein, destroying the value of the product." About 100,000 tons of animal protein were produced each year. In his evidence, Dr. Kellar commented on the different rendering techniques in Canada compared to the UK, and that given the "handful" of UK imports, there would be a "tremendous dilutive effect."

[179] The CCA is reported as having indicated that it wanted the ban on the importation of live ruminants to remain in place, but otherwise stated that it was "important that all stakeholders work together to resolve the concerns rather than lay blame at anyone's feet."

[180] Mr. Taylor, who was with the CCA in 1990, testified at trial that the beef industry was not interested in a feed ban at that time, as it would have imposed additional costs on beef producers which would have put them at a disadvantage with their US competitors and upset the integrated market. Mr. Taylor agreed that the industry was "strongly opposed" to it in 1990, and would have remained opposed for the same reasons until the call for a ban by the WHO in 1996 and both Canada and the United States imposed them at the same time.

[181] The Minutes of the 18 June 1990 meeting contain a list of "recommendations for consideration" arising from the discussions. The recommendations were grouped under each of the three pillars as recommendations to "support" the position stated in that pillar. Dr. Bulmer described these as joint recommendations of both industry and Canada. The recommendations could not be attributed to specific stakeholders because, according to Dr. Kellar, the process was "one of a consensual contribution of these items to the flip charts and their triage into the three pillars of Canada's position." Handwritten notes by Dr. Bulmer on the Minutes reflect that many of the recommendations were already in effect or in the process of being implemented. However, for some he wrote "park", to be set aside for consideration later.

[182] One of the "Recommendations for Consideration to Support the Position that BSE will not Develop in Canada" was to discontinue the inclusion of RMBM in ruminant feeds. The Minutes noted that "[i]n the current situation stopping ruminant to ruminant feeding could be done quietly with minimal impact because only 5% of red meat meal goes to ruminant feeds? This would, however, destroy development of the market for 'by-pass proteins'." The recommendation then asked "What is current market share of ruminant offal to ruminant feed?" Next to this Dr. Bulmer wrote "Park."

[183] At a meeting 10 days later, on 28 June 1990 involving representatives of the rendering, sheep and feed industries, it was agreed that sheep offal and "animal protein" could continue to be used in animal feed.

[184] Minutes of an internal meeting of the FPIB held on 23 July 1990 indicate that the Health of Animals Directorate was continuing to focus on scrapie as the issue of concern, stating that "BSE cannot occur in Canada because there is no risk of scrapie transmission from Canadian meat and bone meal originating from government inspected facilities and Agriculture Canada is prepared to work with all of the involved industry sectors to certify that fact."

Subsequent meetings and positions taken: 1990 - 1992

[185] In November 1990 a meeting of the CAHCCC was held. Although a "BSE Update" was on the agenda, it was not reached at the meeting. However, a handout prepared by Dr. Koller was distributed, largely restating what was provided in June 1990. It also made reference to "active surveillance being instituted." The handout contained the following:

> Statement by Agriculture Canada on the issue is:
>
> "There is no risk of scrapie transmission from Canadian meat and bone meal originating from government inspected facilities and Ag Can is prepared to work with all of the involved industry to verify that fact in the very near future."

[186] As was the case with the presentation in June 1990, there was no specific mention of the potential risk of infection from recycled cattle carcasses.

[187] At the end of January 1991, Dr. Koller gave a presentation on BSE to the Ontario Veterinary Medical Association. Her written presentation, which had been reviewed by Dr. Kellar,

repeated the view that BSE originated from scrapie-infected sheep and that in light of the low level of scrapie in Canada and different rendering conditions, "the factors necessary to produce an infective dose of scrapie agent and transmit it to cattle, do not exist in Canada."

[188] The consultations with industry were reported to the Minister of Agriculture. In a paper initially drafted in September 1991 and finalized in November 1991, AAFC's position on BSE was set out for the Minister. It noted that there were several cases of BSE in Oman, Switzerland and France. The paper described the suspected origin in scrapie and stated that "relative to all the animal tissues that enter the rendering process, scrapie infected material is present at a rate approximately 1,000,000 time higher in the United Kingdom than in Canada." The paper noted the relatively small sheep population in Canada and the very low incidence of scrapie in just a handful of flocks.

[189] The paper also noted that Canada had different rendering processes than the UK, and the use of MBM in animal rations differed as it was considerably higher in the UK, particularly among UK dairy cattle. Accordingly, the paper observed that any infectious material that might be destined for MBM would be diluted significantly. As the paper stated: "beyond the very small amounts of infected material that go to rendering and the further reduction during the rendering process, any infectious agent that survives in meat and bone meal in Canada, is further diluted by a low level of incorporation into ruminant rations."

[190] Based on this focus on scrapie, the "issue in Canada" stated for the Minister was not BSE in cattle but "one in which the rendering industry, as it seeks to preserve and expand markets for meat and bone meal, may cease its recycling of sheep offal." If that occurred, the paper stated that "most abattoirs will discontinue killing sheep" which would have repercussions for the sheep-rearing industry. It reported to the Minister that consultations had been held with industry and a "consensus" was reached to continue to permit sheep offal and animal proteins in animal feeds. The paper made no reference to the risk of BSE transmission through the recycling of cattle that might be infected.

[191] The report of the CAHCCC meeting of 17 October 1991 does not mention BSE, although there was a presentation on the development of risk analysis approaches to importation of animals and animal products.

[192] In December 1991, Dr. Wayne Stadder, Chief of Import/Export of Animal Products and By-Products wrote a memo titled "Emerging disease trends." It referred to BSE and its likely origins in scrapie, but also stated that "[l]ater in the outbreak this was augmented by BSE affected cattle." The memo reviewed the import restrictions in place and stated that the basis for them "is to preclude the importation of potentially infected tissues which during processing would be discarded and enter the animal food chain through the rendering process."

[193] In November 1993 the CAHCC met.[8] BSE was not specifically on the agenda, although minutes of the meeting indicate that Dr. Kellar reported that it was on the decline in the UK.

USDA position: 1990 - 1991

[194] In November 1990 APHIS published a Fact Sheet on BSE. Like Canada, at this time no BSE cases had been seen in the United States. In describing the history and background of BSE, the Fact Sheet stated that "some scientists" believed that BSE emerged in the UK from the feeding of bone meal or animal protein from the carcasses of scrapie-infected sheep, likely due to a "significant increase" in the UK sheep population beginning in 1980, "with a possible increase in the prevalence of scrapie-infected flocks; the greater inclusion of sheep heads in material for rendering; the greater inclusion of sheep in material for rendering, stemming from a reduction in the number of knackers' [deadstock] yards; and… changes in the rendering process." It was noted that the infectious agent was termed a "prion" which is "unusually resistant to heat and normal sterilization processes."

[195] The paper noted that 462[9] cattle had been imported to the USA from Great Britain between 1981 and 1989 when the US import ban was implemented. As of October 1990, however, only "279 of those animals had been accounted for", unlike the much more comprehensive tracing of UK imports in Canada.

[196] In January 1991 APHIS published a "Qualitative Analysis of BSE Risk Factors in the United States." Like AAFC, the American regulators looked at the origins of BSE in the UK and compared it to the risk of a similar development of BSE from scrapie in the USA. The APHIS analysis considered differences in the relative sizes of the cattle and sheep populations, observing that, compared to the United States, "[t]he United Kingdom has 4 times as many sheep and 3 times as many mature sheep on a land mass smaller than the State of Oregon." The ratio of sheep to cattle was 32 times greater in the UK. It also noted the prevalence of scrapie and farmed sheep in the UK, compared to the US. The report also observed that much more sheep material was used in MBM in the UK than the US, and that, overall, there is much more MBM generally in UK feed than in the US. Noting the differences in sheep population, limited incidence of scrapie in the US, and "an abundance of plant based proteins" in the US such as soybean that is used in feed and differences in rendering processes, it concluded that there were large differences in the risk factors which "greatly reduce the potential risk at the national level." As Dr. Kellar said at trial of this document: "It's the Canadian context all over again," and it did not cause him or AAFC to revise their approach.

[197] The following month, in February 1991, APHIS published another report titled "Risk Analysis of Introducing BSE in the United States." It largely repeats and summarizes information

[8] The third "C" was dropped to reflect the inclusion of producers of livestock other than cattle in the consultation process.

[9] The Agreed Statement of Facts puts the number higher, at approximately 499 animals.

from the January 1991 paper in concluding there is a low risk of BSE developing in the US. Neither document mentions the concern about recycling of BSE in cattle.

Canada's amendment of the Feeds Regulations *in 1990*

[198] In January 1990 Canada passed amendments to Schedule IV of the *Feeds Regulations* to permit certain "Animal Meat By-Products Fresh" to be included in animal feed: SOR/90-73. Meat by-products are the non-rendered, clean parts, other than meat, derived from mammals slaughtered for meat production. Although the Regulation does not say so, the evidence was that this "fresh meat" was only fed to mink and foxes, not to cattle.

[199] The addition of "Animal Meat By-Products Fresh" to Schedule IV of the *Feeds Regulations* was first proposed on 18 November 1985. The addition was approved as a feed ingredient from at least 19 December 1986. A feed ingredient, once reviewed and approved as safe and efficacious, and added to Schedule IV of the *Feeds Regulations*, is not reviewed again unless there is doubt as to its safety, or improper use is suspected.

[200] Rendered MBM, including RMBM, had been permitted in feed in Canada, the US and elsewhere for many years and continued to be permitted in the 1990 Regulation. However, any single ingredient added to Schedule IV after the promulgation of the *Feeds Regulations* would have undergone a safety and efficacy assessment before being approved. The nature of the assessment and the type of information required for registration would depend on the particular ingredient and the potential risks that might be associated with that ingredient.

[201] As the inclusion of "Animal Meat By-Products Fresh" was approved in 1986, BSE and the continued inclusion of RMBM would not have been considered at that time. Although by 1990 scientific evidence, of which Dr. Kellar and others were aware, was emerging that transmission of BSE occurred through RMBM in feed, Canada conducted no review or safety assessment of the inclusion of RMBM prior to amending the Regulation in 1990.

[202] Canada's regulatory expert, Mr. Presley, agreed that the amendments passed in 1990 were "substantive changes" that were required to be "critically reviewed" for "a full assessment of their impact by the Treasury Board Secretariat, and were not mere "housekeeping" changes.

Surveillance program: 1991 – 1992

[203] In 1991 a proposed protocol for BSE surveillance was circulated by AAFC to Animal Health Division staff for comments. This led, in 1992, to the implementation of a national BSE surveillance program. Unlike the Monitoring Program which involved tracking the UK imports and monitoring them for clinical signs of BSE, the surveillance program addressed the preservation of tissue and testing to be done on any animal that exhibited signs of BSE. As Dr. Kellar noted, the clinical signs for BSE are the same as those for bovine rabies which "we saw every second day in Canada" and required testing; the protocol in the surveillance program required further testing if there was a negative diagnosis of rabies.

Science on BSE continues to evolve: 1991 - 1993

[204] Dr. Wilesmith, Dr. Kimberlin and others in the UK and elsewhere continued to study BSE and its transmission, and reported on it in veterinary and scientific publications which were followed by Dr. Kellar and others at AAFC.

[205] In December 1991, Dr. Wilesmith published an article on the epidemiology of BSE which continued to articulate the sheep scrapie hypothesis. He observed that the greater incidence of BSE in dairy herds in the UK due to their reliance on concentrate feed meant that the "risk of animals becoming infected in beef suckler herds is remarkably small." Dr. Kellar found this significant as 75% of the UK imports to Canada were beef cattle, not dairy. Almost all BSE cases in the UK were in dairy cattle, not beef, due to the greater use of protein feed supplements in dairy herds.

[206] In the same month, Dr. Wilesmith, Dr. Hueston and others published a "Comparison of bovine spongiform encephalopathy risk factors in the United States and Great Britain." After refering to the potential for transmission from imported cattle carrying BSE, and noting that there had been approximately 459 cattle imported from the UK to the US in the previous ten years, the paper stated that "[t]he potential risk of BSE attributable to imported cattle appears to be small."

[207] Two months later, in February 1992, Dr. Wilesmith, Dr. Hueston and others published a paper containing "epidemiological observations" about BSE in Northern Ireland. Of 304 cattle imported from Britain between 1981 and 1984, four animals had developed BSE, most likely from feed consumed before moving to Northern Ireland. The paper concluded that, while the imported animals "cannot be disregarded completely as a possible source of infection…given the small number of animals it is unlikely that they could have provided sufficient exposure through meat and bone meal" to be a source of infection. Dr. Kellar took comfort from this as well, noting that Northern Ireland had a cattle population "likely not even 10% of that in Canada" but with numbers of imports that entered slaughter likely 5 times as high.

[208] The OIE published a lengthy paper by Dr. Kimberlin in May 1992. Dr. Kellar agreed this work was the "definitive" statement of the science of BSE at that time, incorporating the findings of Wilesmith, Wells and Bradley, among others. It was a "guiding light" to the OIE, Dr. Kellar said.

[209] In his paper, Dr. Kimberlin reviewed the likely source of BSE from scrapie. He also discussed the recycling of infection in cattle, noting that a "driving force" of the epidemic in the UK was that cases were "amplified by the subsequent recycling, via meat-and-bone meal, of infected cattle material within the cattle population. … Given the length of BSE incubation periods, recycling would have established the pattern of the epidemic long before BSE was even recognised." Dr. Kimberlin noted that the evidence suggested that the average dose of infective material was "extremely low" and that the "main effect of recycling" was to increase the number of batches of MBM to a threshold sufficient to infect.

[210] With respect to trade in live cattle and reducing risk from imports, Dr. Kimberlin stated:

> The most effective approach is a complete ban on the feeding of all ruminant protein to ruminants, as originally introduced and maintained in Britain [footnotes omitted]. This would prevent the feed-borne spread of infection to cattle from both native flocks and imported sheep. It would also prevent the recycling of infection from imported adult British cattle which may have been infected, but were too young to show clinical signs of BSE at the time of slaughter.

[211] However, Dr. Kimberlin also stated that "[u]nless large numbers of animals are imported, the statistical probability is quite small" that BSE will enter the country, and the risk of infection of other animals through the feed chain "would be quite small because of extensive dilution with uninfected material." Dr. Kellar testified at the trial that this described the Canadian situation, and therefore he concluded there was "no BSE risk."

[212] Earlier in Dr. Kimberlin's paper he noted the economic implications of a feed ban, observing that the UK Feed Ban in 1988 "had an immediate impact on the rendering industry in terms of reduced exports and domestic sales of meat-and-bone meal." He also noted another effect was "to increase the costs to abattoirs of animal waste disposal." These economic implications of a feed ban had been raised in Canada at the 18 June 1990 meeting. For example, if sheep offals were excluded from rendering, costs would increase for slaughterhouses which would have to dispose of the tissues without compensation, reducing the price of sheep and causing renderers to seek other sources of protein.

OIE developments: 1991 - 1992

[213] The Code Commission drafted a chapter on BSE which was adopted by the OIE in 1992. The chapter recommended restrictions on trade in MBM containing ruminant protein from countries with a "high incidence" of BSE, stating it should not be traded for use in ruminant feed. Dr. Thiermann explained that this provision was aimed at reducing the spread of BSE in Europe.

[214] Further, if importing cattle from countries with a high incidence of BSE, the *Terrestrial Code* stated that the exporting country should certify that the feeding of RMBM derived from specific tissues[10] of ruminants over 6 months old has been banned, and that the animals exported were born after the ban was introduced. The only "high incidence" country was the UK, which by then had reported over 85,000 cases. The chapter also contained recommendations that BSE be made notifiable by countries with a low incidence and that any affected cattle be "completely destroyed."

[215] The *Code* contained no recommendation relating to the feeding of MBM to cattle for countries that were not categorized as high incidence. By this time many, but not all, European countries had RMBM feed bans for ruminants.

[216] In commenting on an earlier draft of the chapter in late 1991, Dr. Willis had proposed changes to be more restrictive of trade in MBM, prohibiting it from any country with any incidence

[10] The tissues included the brain, eyes, skull and spinal cord.

of BSE. Dr. Willis testified that Canada was particularly concerned about the danger posed by Specified Risk Materials ("SRM"), which were largely the same as SBO material,[11] and was being "extra careful" and taking a "zero risk" approach. This was demonstrated in early April 1993 when Dr. Willis wrote to his UK counterpart, Dr. Meldrum, explaining that Canada was not prepared to import Volostrum, a concentrated milk product, from the UK because no tests existed to provide "conclusive proof" it was free of BSE. This was despite the fact that the *Terrestrial Code* did not restrict trade in milk products.

[217] Drs. Willis and Kellar, among others, attended the General Session of the OIE in May 1992 when the chapter in the *Terrestrial Code* was approved. Dr. Kellar testified that Dr. Kimberlin's May 1992 paper was distributed at the meeting. Dr. Kimberlin also made a detailed presentation on BSE which Dr. Kellar attended. Dr. Kimberlin addressed the risk of BSE developing in a country, noting the need for the presence of four factors: a large sheep population relative to cattle, a sufficient prevalence of scrapie, the use of substantial quantities of RMBM in cattle feed, and rendering conditions that did not destroy infectivity which, Dr. Kimberlin said, will depend on the extent of the initial contamination.

[218] With respect to introducing BSE from another country, Dr. Kimberlin said the "greatest risk" was from the importation of contaminated feeds or feed ingredients. Addressing the risk from live cattle, Dr. Kimberlin continued:

> In most situations, the consequences of importing an infected animal would be minimal. If there are no natural routes for the spread of infection from cattle to cattle, the only risk from imported livestock would be after slaughter when infected material might enter the animal feed chain. The chances of this infecting other cattle would be small because of extensive dilution with uninfected material.

[219] This was also reflected in the Records of the General Session which, in summarizing Dr. Kimberlin's presentation, stated:

> Analysis of the main BSE risk factors indicates why other countries are most unlikely to experience an epidemic of BSE similar to that which has occurred in the UK. The presence of scrapie in a country does not automatically entail a risk of BSE. The greatest risk is from the use of contaminated meat and bone meal in cattle feeds.
>
> The risk of introducing BSE by importing live cattle for breeding is statistically small. There is no evidence that BSE is contagious. Concerning the epidemiology

[11] The Agreed Statement of Facts states that SRM "consist of certain organs or tissues in cattle in which prions concentrate. SRM includes the skull, brain, trigeminal ganglia (nerves attached to the brain), eyes, tonsils, spinal cord, dorsal root ganglia (nerves attached to the spinal cord) of cattle aged 30 months or older, and the distal ileum (portion of the small intestine) of cattle of all ages."

> of BSE, the major uncertainty remaining is whether or not the infection can be transmitted maternally.

[220] Dr. Willis described this as the accepted view at the time. As Dr. Kellar noted, Canada had already banned the importation of RMBM from the UK, and from every other country except the USA. With respect to dilution, he noted that only about 60 UK animals amongst a "massive population" had entered the feed chain in Canada.

Monitoring Program: 1991 – 1993

[221] The Monitoring Program for the UK imports began in 1990. It required Canada to conduct semi-annual checks to identify, locate, and determine the health status of the imported cattle. If an animal had died or been exported, inspectors were to determine when that occurred. No additional instructions were provided. Unless an animal was showing clinical signs of BSE, there were no restrictions to prevent any UK imports from being slaughtered, rendered and entering the feed chain.

[222] Most animals were quickly accounted for, although some were not located or visited until 1991. Canada was aware that of the 182 cattle imported from the UK between 1982 and 1990, fourteen had been exported on to the United States. As is apparent, the UK imports lived much longer than most cattle as they were imported for breeding purposes.

[223] Not all animals were monitored every 6 months. This is shown in inspection reports where the interval between inspections is longer. As one memo to managers of the animal health programs dated 11 September 1993, stated, "[i]t has been some time since reports have been received on imported British cattle which were identified and examined for evidence of BSE." The memo went on to ask inspectors to "locate and examine the cattle identified in your region and report their status" by 31 October 1993.

[224] In October 1993, responsibility for the Monitoring Program shifted from the Import/Export Division to the Disease Control section of Animal Health led by Dr. Kellar. Dr. Kellar said he initiated this change due to the "duration" of the presence of the UK imports, which accounts for the memo sent out in September 1993 referred to above. At this time, as Dr. Kellar stated in an affidavit sworn a few months later, in March 1994, there was concern that the risk of BSE from the UK imports in Canada was greater than originally thought due to the continued rise in cases in the UK, research suggesting transmission could be by routes other than feed, including maternal and horizontal transmission, and studies of transmission to other species.

The Jerram cow – November 1992

[225] In November 1992 a monitoring inspection at a farm in Alberta owned by Mr. Walter Jerram noted that a UK import which had died earlier in the fall had been carrying its head to one side and had a drooping ear (the "Jerram cow"). However, the report said that this was due to a "suspected" traumatic injury to its head. There are notes on the report suggesting there was some further discussion of this in February 1993. No follow-up steps were taken to see if the animal had

entered the feed chain; however, it appears likely that the animal was slaughtered and rendered as it went to an auction market.

[226] This report was not brought to anyone's attention in Ottawa at the time. Following the BSE diagnosis of a UK import in December 1993, Dr. Barry Stemshorn, who had succeeded Dr. Bulmer as Director of Animal Health, saw the inspector's report and wrote on it that it was "suggestive of BSE."

[227] Dr. Kellar only became aware of the Jerram cow in 2003 when he reviewed information on all the UK imports, and his "ears pricked up." As I review later, following the May 2003 event, AAFC conducted a review of all the UK imports and assessed them for risk based on herd of origin in the UK. The Jerram cow was one of seven animals assigned the highest risk level, equivalent to being in a birth cohort[12] that included an animal that had developed BSE.

[228] Dr. Kellar agreed that Mr. Jerram and the auction market did not comply with the *HAA*, as they failed to report the animal at the time it was sold for slaughter. The Jerram cow is the only known UK import that showed symptoms consistent with BSE that was slaughtered and rendered.

The DePalme cow event – December 1993

[229] On 21 November 1993 Mr. Ray DePalme found one of his cows unable to rise in the field on his farm in Alberta. It was a purebred cow imported from the UK in 1987, and had not previously shown any central nervous system symptoms. Mr. DePalme contacted an inspector with AAFC. The cow was euthanized and samples of the brain were taken for testing (the "DePalme cow").

[230] On 29 November 1993 the Animal Health Laboratory of Alberta Agriculture reported a preliminary diagnosis of BSE in the DePalme cow. The tissues were then transported to AAFC's Animal Disease Research Institute ("ADRI") in Nepean, Ontario. On 3 December 1993, scientists at the ADRI laboratory made a provisional diagnosis that the DePalme cow was infected with BSE.

[231] On 7 December 1993 the CVL in the UK, designated by the OIE as the international reference laboratory for BSE, confirmed that the DePalme cow was infected with BSE. The following day, Canada notified the OIE, which announced the case on 10 December 1993.

[232] Canada contacted officials with MAFF in the UK to obtain current information on BSE in the herd of origin of the DePalme cow, and for all other UK imports. On 15 December 1993, MAFF advised Canada that BSE had been diagnosed in the herd of origin of the DePalme cow after it was exported to Canada. This led to the conclusion that the BSE originated from feed consumed before the cow left the UK. Canada was also aware that Mr. DePalme had purchased 6 UK cattle, of which 3 remained alive, one had been sold, and one had been slaughtered.

[12] Animals in the same herd born within 12 months of one another.

Destruction orders following the DePalme cow event

[233] The UK imports that were still alive in December 1993 were placed under quarantine pursuant to the *HAA* and its regulations. On 16 December 1993 Dr. Willis agreed with the decision of Drs. Stemshorn and Kellar to kill, sample, and destroy the UK imports that were still alive. The following day, Dr. Kellar advised all Regional Directors General to arrange for removal for destruction, with compensation, of all remaining monitored cattle imported from the UK.

[234] Steps were taken to review the status of all the UK imports. As of December 1993, of the 183 cattle imported since 1982, approximately 67 remained alive and in Canada, all in good health. Of the other 116, it appears that 68 had been slaughtered and rendered in Canada and the remaining animals had either been exported to the US or had died from other causes and had not entered the feed chain.[13]

[235] In December 1993 Dr. Koller prepared a classification of the UK imports, ranking them by the various degrees of risk that they would develop clinical BSE. Dr. Koller's classification used a database that tracked the UK imports based on, among other things, their herd of origin to determine whether any other cases of BSE had been found in that herd.

[236] Of the 68 UK imports that had been slaughtered and rendered in Canada, 58 were traced to UK farms that had never reported a case of BSE. Of the remaining 10 cattle, 9 (including members of the DePalme cow's birth cohort) had originated from UK farms where at least one case of BSE had been diagnosed in cattle born on the farm, after the export to Canada. The farm of origin was not identified for one animal and was assumed to have been infected with BSE. One of the herds had two cases in 1989, but all the other clinical cases appear to have occurred in 1990 or later, mostly in 1992 and 1993. Almost all listed animals were born before the 1988 UK Feed Ban.

[237] As the UK could not confirm that any of the imported animals were not exposed to contaminated feed, Dr. Koller concluded that all of the UK imports must be suspected of exposure. Further, as dam to offspring transmission could not be ruled out, the progeny of the UK imports were also suspect.

[238] In a memorandum to the Minister dated 4 January 1994, the departmental position was stated as follows:

> Extreme caution in the selection of BSE control measures is warranted by the limited scientific knowledge about the disease, the impact on Canadian livestock were it to become established in Canada, and the reaction of trading partners. Therefore, all animals that may have been exposed to the BSE agent through contaminated feed or by direct contact with BSE-affected animals must be eliminated. This will protect the health status and profitability of the Canadian cattle

[13] Again, the exact numbers vary slightly in different memoranda and reports over the period.

> population and access to important international markets for livestock, meat and meat products, semen and embryos.

[239] In early 1994 all of the surviving UK cattle were ordered to be returned to the UK or euthanized pursuant to the *HAA* and its regulations. The Department also ordered the destruction of all cattle at the DePalme farm and the progeny of the DePalme cow. Compensation was paid pursuant to the *HAA*.

[240] When destroyed, tissues from the UK imports were tested and found to be negative for BSE, including members of the DePalme cow's birth cohort. The brain tissues were preserved and re-tested in 2003 using more sensitive testing procedures. They were again found to be negative for BSE.

[241] The evidence from Dr. Kellar and others on behalf of the defendant was that Canada took a "zero risk" approach in ordering the destruction of the remaining UK animals, and in ordering the destruction of herd mates of the DePalme cow. Dr. Kellar admitted that the "mere suspicion" that an animal had been exposed to the BSE agent in the UK was the basis for Canada destroying the UK imports and that Canada was exercising a "precautionary approach." He confirmed that preserving the health status of Canada's cattle population was "vital to protect Canada's lucrative export markets."

Oxford dead stock

[242] An example of this zero-risk approach was seen in how Canada dealt with the by-products of one of the UK imports. In January 1994 it was learned that one of the UK imports had recently died following surgery at a farm in southwestern Ontario and been sent for rendering. The rendered material became part of over 20 tonnes of MBM that had been produced but not yet shipped. Canada ordered that the entire shipment be destroyed and buried pursuant to the *HAA* because the "by-products are suspected of being contaminated by the disease Bovine Spongiform Encephalopathy, or of having been in contact with or in close proximity to other animal products or animal by-products that were or are suspected of having been contaminated by the disease Bovine Spongiform Encephalopathy."

The 1994 Federal Court proceedings

[243] Some of the owners of UK imports, including Mr. Jerram, sought judicial review in the Federal Court of Canada of the AAFC's destruction orders in an effort to preserve their imports. Those applications were eventually dismissed. However, the evidence led by Canada in opposing those applications, through Dr. Kellar, is informative.

[244] In his affidavit sworn on 1 March 1994, in the proceeding brought by Mr. Gordon Kohl (FCC-T0133-94), Dr. Kellar reviewed the policies of AAFC, including those contained in the National Animal Health Program.

[245] After reviewing the history of scrapie, in discussing the emergence of BSE in the UK, Dr. Kellar referred to the recycling of the scrapie agent:

> Between 1985 (when cattle started to die of BSE) and 1988 (when the use of contaminated feeds was banned by the animal health authorities in the UK), cattle feeds were contaminated with both the scrapie agent in the tissues of infected sheep and the 'recycled' scrapie agent in the tissues of cattle infected with BSE, with the result that this was the period of heaviest contamination of cattle feeds with the disease agent.

[246] Dr. Kellar described the recycling issue at his examination for discovery, stating:

> The "recycling" would refer to cattle that had themselves consumed meat and bone meal contaminated with sheep scrapie, which then incubated and spread within the cattle to the point at which they themselves clinically experienced BSE and transmitted the disease when they were grounded to meat and bone meal.

[247] This answer reflected the view held by BSE experts that cattle incubating the disease but showing no symptoms were less infectious than those in which the disease had progressed "to the point at which they themselves clinically experienced the disease" or, as Dr. Kellar acknowledged in cross-examination, were close to showing symptoms. This is consistent with the nature of BSE and other TSEs as progressive "slow infections" of the central nervous system, as reviewed in detail by Dr. Hope.

[248] In his affidavit in March 1994, Dr. Kellar used the analogy of an iceberg in which only a small portion of it is visible. So too with BSE, in which the incubation period is lengthy and there is no way to know, in a live animal, if it carries the infectious prion. This was critical to the government's justification of the need to destroy the remaining UK cattle, none of which could be confirmed not to be infected with BSE but which did not have symptoms of BSE either. In addition, as horizontal transmission could still not be ruled out, Dr. Kellar stated that all the remaining UK imports posed a threat to the Canadian herd and needed to be destroyed. Analogizing to the introduction of scrapie in Canada in the 1930s and 1940s, Dr. Kellar stated that "[i]t was precisely the failure to take such precautions more than fifty years ago that led to scrapie becoming established in the Canadian sheep population."

[249] Later in his affidavit, Dr. Kellar noted that other countries that experienced BSE in imports from the UK destroyed animals in the affected herds, including Denmark, France and Ireland. Canada was therefore being proactive in avoiding the risk of transmission by going further and destroying all UK imports.

[250] Dr. Kellar also referred to the fact that 11 of the 72 herds from which UK cattle had been exported had confirmed cases of BSE. This 15% infection rate among herds was, Dr. Kellar noted, "more than 40% higher than the rate for beef herds in general in the United Kingdom." Dr. Kellar continued: "This indicates an increased risk of BSE in animals exported to Canada as opposed to the average beef herd in the United Kingdom."

[251] Canada filed a large amount of material in Mr. Kohl's Federal Court proceeding which was also included in the record at this trial. Among those documents was a Foreign Animal Disease

Report from APHIS dated Winter 1993. Its discussion of BSE shows that the Americans continued to have the same approach to the risk of BSE developing as was taken in Canada, focussing on its origins in scrapie and how different the circumstances were in North America for the scrapie agent to infect cattle. No mention was made of the risk from UK imports.

[252] Mr. Kohl was successful in the Federal Court (Trial Division), but the decision was overturned on appeal. In upholding the order to destroy Mr. Kohl's bull, Marceau J.A. summed up the state of knowledge about BSE at that time (*Kohl v. Canada (Department of Agriculture)*, 1995 CarswellNat 1315 (F.C.A.), at para. 21):

> I do not feel I have to go through the whole of the evidence here, but I wish to underline anew a few aspects of the facts stated above. The first case of BSE was discovered in the United Kingdom in 1986, so the disease had only been known for seven years when the decision was made. While it is widely accepted that the disease is transmitted through contaminated animal protein in feed, it is not known exactly what type of infectious agent is at work. It is not a bacteria or a virus. There is no way to detect the presence of the disease before the onset of symptoms, even by use of a post-mortem examination. The experts agree that the incubation period is recognized as being between two and eight years, but nowhere has it been established that there could not be a longer incubation period. No bull living in the United Kingdom at the time when contaminated feed was in circulation may be definitely clear from suspicion, however low may be the risk that it be contaminated.

[253] Canada's evidence in the judicial review applications did not address the risk posed by the UK cattle already slaughtered which had entered the Canadian feed chain nor, it seems, was that issue raised by anyone.

Communication and consultations following the DePalme cow event

[254] AAFC engaged in communications with stakeholders and the public following the news of the DePalme cow.

[255] On 11 December 1993 Dr. Kellar, as principal spokesperson on these issues at AAFC, was interviewed on the CBC Radio program "Quirks and Quarks." At that time, no decision on destruction had been made. In the interview, Dr. Kellar said that some of the UK cattle had entered the food chain "as they have in the United States and other nations." He also stated that "scientific experts told us that these animals did not represent a transmission threat, unless they were showing the clinical signs of the disease." No mention was made of the UK research warning of subclinical infectivity.

[256] A list of Questions and Answers ("Q&As") was prepared by the Animal Health Division earlier in 1993, which had been either written or reviewed by Dr. Kellar. One of those Q&As was about imports entering the food chain, as follows:

> Q. If the animals that already died or were destroyed got into livestock feed, could they spread the disease?
>
> A. Control of this disease is based on keeping infected animals out of the feed chain. The animals that already died showed no signs of the disease. *World experts say they do not represent a threat to the feed system*. That is why Canada, the United States and the other nations which imported cattle from the UK in the 1980's are monitoring these animals. We won't allow them into the feed system if they are found to have BSE. [Emphasis added.]

[257] In direct examination at trial, in regard to the italicized phrase, Dr. Kellar said that "[t]he point being that animals concurrent with expression of clinical signs were the ones that you had to be concerned about, and these animals hadn't displayed such signs." This was surprising given that international experts had stated that subclinical animals were a threat, albeit a low risk. Dr. Willis, when taken to this excerpt, said immediately that it was incorrect.

[258] Also included in the Q&As was the following:

> Q. Why didn't you kill all the imports in 1990?
>
> A. Canada collaborates closely with the OIE, an organization of 120 member nations, whose goal is to minimize the distribution of animal disease around the world. World experts on animal diseases establish for the OIE guidelines for the safe handling of such events as the outbreak of BSE in the United Kingdom.
>
> Their recommendations to the international community were that these imports need not be killed, but rather be monitored for the presence of the disease. Recall that this disease in the U.K. was spread in feed. If there is spread animal to animal or from cows to their calves it would appear to be extremely limited. So we have a disease which is readily controlled without the need for actions as drastic as killing all imports.

[259] In this context, Dr. Kellar noted that "Canada subscribed to and followed the guidelines of the OIE." Dr. Kellar said he was unaware of any country that killed its imports.

[260] Drs. Kellar and Koller prepared a paper dated 17 December 1993 titled "Canada's understanding of BSE and our position with respect to the disease." In discussing the origin of BSE and its potential modes of transmission, there was again no explicit mention of the risk of recycling of cattle; however, the paper did refer to feed containing material of "ruminant origin" and noted that "beyond the very small amounts of infected material that go to rendering and the further reduction during the rendering process, any infectious agent that survives in meat and bone meal in Canada, is further diluted by a low level of incorporation into ruminant rations."

[261] The three pillars of the Department's position, first articulated in June 1990, were restated in the paper. However, a qualification was added to the second pillar, that BSE will not enter

Canada, "(notwithstanding the recognition that one or more of the UK imports under surveillance will develop the disease as a result of exposure prior to importation)."

[262] Canada also consulted with cattle producer organizations. In early January 1994, the CCA, Beef Breeds Council, Dairy Farmers of Canada and Canadian Meat Council endorsed Canada's actions to destroy the UK imports, destroy the DePalme herd, and trace the offspring of the UK imports. No mention was made, however, of other UK imports that had been rendered and gone into the feed chain, or of the recycling risk they posed. The Assistant Deputy Minister kept industry organizations informed about the status of destruction of the remaining UK imports, the direct offspring from the DePalme cow, and the offspring of UK imports whose farm of origin had been determined to have BSE.

[263] Agriculture Canada also worked closely with cattle industry representatives on providing compensation to cattle owners affected by the required destruction of cattle. Mr. Taylor, who was then in an industry liaison role with AAFC, attended meetings and corresponded with the "Industry Compensation Development Committee" ("ICDC"). The ICDC was comprised of members of the CCA, Canadian Beef Breeds Council, Canadian Dairy Breeds, Canadian Livestock Exporters Association, and the Canadian Association of Animal Breeders.

[264] A report prepared by Mr. Taylor to Drs. Stemshorn, Kellar and Lavigne of a meeting with stakeholders on January 10, 1994, provides some insight into the detailed level of information conveyed. For example, it states that "uncertainties of the science were noted", that "the primary mode of transmission was via feed", although "alternate modes could not be ruled out." It considered the options to address the issue, including "kill, sample and incinerate", "monitor" and "review", and that a consensus was reached to depopulate the UK animals as quickly as possible. There was discussion of the OIE chapter on BSE and the desire to remain "BSE free" due to trade concerns. It was also noted that the "US has yet to take action on its own BSE problem."

International response and contact following the DePalme cow: 1993 - 1994

[265] In his capacity as CVO and Canada's official delegate to the OIE, Dr. Willis reported the DePalme cow event and the decision to destroy the remaining imports to the OIE.

[266] On 9-10 December 1993 a four-person team from the US visited Canada to observe and evaluate the actions taken by Canada with respect to the discovery of the DePalme cow. The team included Dr. Linda Detwiler, who was one of two contact persons listed on the APHIS Fact Sheet published in November 1990. Based on the team's evaluation of Canada's response, the US decided not to take any further action relative to the movement of animals or products from Canada to the US. In a letter to Dr. Willis from the USDA after the visit, it was stated that "[m]embers of the team were most impressed with your openness as well as your thorough investigation and subsequent actions to eliminate any potential threat from the disease."

[267] On 9 December 1993 Mexico imposed an emergency ban on the importation of cattle and beef products from Canada. The ban was lifted one week later. Several other countries, including

Taiwan, Argentina and Japan, imposed limited bans or restrictions on Canadian cattle and beef imports.

[268] Dr. Stemshorn authored a memorandum dated 4 January 1994 highlighting the negative trade implications for Canada if it became classified as a BSE country. He noted that Denmark had a BSE case in a UK import in 1992 and destroyed the index herd but did not destroy the 600-800 other UK imports.[14]

[269] Although an action item was listed on various tracking documents developed at AAFC in December 1993 to review the "adequacy of rendering controls and merits of a ban on ruminant offal", it appears that there was no follow-up on this as it was noted as "not an issue."

[270] The USDA also prepared an "Update on North American Response" to BSE following the announcement of the DePalme cow. This summary, which appears to be a document drafted in consultation with Canada as Drs. Kellar and Hueston are listed as the contacts for more information, described the origins of BSE in scrapie-infected MBM in the UK, and noted that by 1993 there were over 115,000 cases of BSE in the UK. It stated that Britain banned the feeding of RMBM to ruminants which had been effective in slowing down the number of new cases after 1992. As with Canadian documents at this time, the "Update" stated that BSE was unlikely to develop in the US due to differences in the sheep and cattle populations, as the UK had "four times the number of sheep and one-tenth the number of cattle as the US, all on a land area the size of Oregon." No mention was made of the risk from recycled cattle, and there was no suggestion of instituting an MBM feed ban in North America.

[271] A follow-up with the USDA in January 1994 disclosed that APHIS did not take any additional steps with the UK imports located in the United States other than to continue to keep them under surveillance of some kind. Among the reasons given to Dr. Stemshorn for the lack of action by the US was that the US legislation required that the disease be "communicable" in order to require removal or destruction of animals. In contrast, Canada could act on the basis of suspicion.

[272] Another difference between Canada and the United States was that, as Dr. Kellar stated, government jurisdiction over agriculture is less centralized in the US, as more authority over agriculture lies with the individual states compared to the Canadian provinces. This may also help to explain why it was difficult to trace many of the UK imports in the US.

[273] Canada continued to maintain close communication with the Americans. In a memorandum written by Dr. Koller to a counterpart at USDA/APHIS in April 1994, copied to Dr. Kellar, the impact of the DePalme cow was reviewed, noting the limited trade suspension by the Asian markets. Dr. Koller emphasized, however, that "a domestic case and an imported case present vastly different consequences." Had BSE been detected in a Canadian-born animal, she wrote, the

[14] By the end of 1993 all European countries which had a case of BSE, except Portugal, had placed a ban on feeding ruminant protein to ruminants. On 27 June 1994 the European Commission directed that all member states implement a ban on feeding mammalian protein to ruminants, which would then have been enacted by the member states.

"repercussions would have been serious" and that "even a second case in an imported animal would have had more significant trade repercussions." She continued:

> No industries in Canada have been negatively impacted by the case thus far. Our case has prompted us to commence a review of the rendering process in Canada to verify our assessment that BSE cannot occur in native-born cattle. This study, together with your FDA's initiative to review the feeding of animal-derived proteins to animals, may result in significant negative impacts on the packing plant, rendering, and feed manufacturing industries in North American and the sheep farming industry in Canada.

[274] Canada also reached out to other trading partners and counterparts in other countries including Mexico, Australia, New Zealand and Japan to share information on the DePalme cow and the Canadian situation.

[275] On 14 December 1993 Dr. Kellar wrote a lengthy letter to Dr. Jack Haslam, Veterinary Counsellor at the Australian Embassy in Washington, D.C., reporting on the DePalme cow and Canada's steps respecting BSE, including the Monitoring Program and surveillance. With respect to UK imports that had died prior to December 1993, Dr. Kellar wrote:

> Following expert scientific advice from OIE and elsewhere, we have made no attempt to restrict these animals from routine slaughter in Canada and the U.S.A. Their offal was rendered in plants in Canada and the U.S.A., depending on market forces of the day.

[276] Dr. Kellar also noted that the amount of RMBM in feed varied due to the availability of vegetable equivalents such as soybeans. He wrote that Canadian animal feeds contained limited amounts of RMBM: approximately 0.5%-0.75% in dairy feed and between 0.06% and 2.4% in beef feed. Australia raised no concerns about Canada's position; indeed on 22 December 1993 Dr. Haslam wrote to Dr. Willis in which he complimented Canada on the timeliness and quality of the information provided on the "recent BSE incident" and said that Australia "considers Canada to be free of BSE and sees no reason why the incident should affect trade between our two countries."

[277] Several months later, Dr. Haslam wrote to Dr. Willis on 30 August 1994 attaching a paper summarizing Australia's position on BSE. That paper confirmed that Australia did not have a ban on feeding ruminant protein to ruminants; however, it was noted that Australia had no scrapie and that "only a small proportion of cattle are ever fed feeds containing protein of animal origin."

[278] Australia had banned UK imports in December 1988. The paper from Dr. Haslam reported that all imports prior to the emergence of BSE had been "traced", although one animal that was unaccountable was presumed to have been slaughtered. The paper states that the "traced animals" "are subject to life-long quarantine surveillance involving official registration, notification of movement or change of ownership, notification of clinical abnormality, veterinary post-mortem and laboratory examination of the brains of mortalities, and periodic official veterinary examination."

[279] There is no indication in the Australian paper of how many UK animals were imported, or of how many animals were slaughtered and entered food and feed chain, or of how many were still alive and subject to quarantine surveillance in 1994. Nor is there any indication of when the quarantine program began. More information on Australia was provided by the plaintiff's expert, Dr. Beckett, which I discuss later in these Reasons.

OIE Developments after 1993

[280] The OIE *Terrestrial Code* chapter for BSE did not change significantly in 1993 and 1994. In 1995 it was amended to include minimum requirements for surveillance, which Canada had been meeting since at least 1991. Dr. Willis explained that this change reflected the OIE's concern that countries might not be reporting BSE cases because they had not been diligent in looking for them. Despite the discovery of a UK import with BSE in December 1993, Canada was not, under the *Code*, a country with a high, or even low, incidence of BSE. As the DePalme cow was a UK import which had been destroyed, Canada remained "BSE free." Further, as by this time it was known that some UK cattle born after the UK Feed Ban had developed BSE, the OIE changed the requirement for the export of UK cattle to be limited to animals born at least three years after the ban.[15] It also prohibited trade in ruminant protein from countries with a low incidence of BSE.

[281] The 1996 BSE chapter in the *Terrestrial Code* stated that if importing from a country with a low incidence of BSE, the exporting country should certify that it has banned feeding MBM to ruminants and that the ban is "effectively enforced." However, the OIE *Code* still did not require all countries to have a ruminant to ruminant feed ban. In 1996 Canada continued to be considered free of BSE.

[282] Only in 1997, following the recommendation of the WHO in 1996, was the *Terrestrial Code* amended to state that to be considered free of BSE, a country needed to have, and effectively enforce, a ban on feeding RMBM to ruminants. As will be discussed below, Canada implemented such a ban in August, 1997. As countries were expected to comply with *Code* provisions within the calendar year, Canada maintained compliance with the OIE *Code*.

[283] The 1997 *Code* also added risk assessment obligations which were expanded upon in subsequent years.

[284] Dr. Thiermann, a former president of the Code Commission who testified for Canada, was complimentary of Canada's compliance with OIE requirements and its prompt reporting of BSE in the DePalme cow in 1993, and again in 2003 when a Canadian-born cow was found to have BSE. He stated that "the situation in Canada was not one of non-compliance but rather one of great efficiency in the implementation of new measures and their transparency in reporting."

[285] Dr. Thiermann testified that "[t]he efficiency of the Canadian surveillance and testing program, and the transparency in their searching and reporting, may be the reason why Canada finds itself among the very few non-EU countries reporting native BSE cases, notwithstanding that

[15] These animals, known as "BABs", for "born after the ban", are discussed in my review of Dr. Hope's evidence.

the risks of BSE were known to exist throughout the Americas." Indeed, Dr. Thiermann referred to at least one other country in the Americas that failed to disclose a case of BSE for many months.

[286] Dr. Thiermann also commented proudly on the role of the OIE in controlling and virtually eradicating BSE. As I discuss below dealing with the aftermath of BSE, the UK reported a total of over 182,000 cases of BSE up to 2006. However, elsewhere only approximately 5,500 cases have been confirmed with just 60 outside Europe and the UK. BSE declined dramatically in the UK after 1993. Since 2006 there have been less than 200 cases worldwide and virtually none today. Much of this success, Dr. Thiermann believes, was due to the adoption of OIE standards by member countries.

Risk analysis and the APHRAN Reports

[287] In the 1980s and early 1990s, the concepts of risk analysis and risk assessment were beginning to be used as tools by government in addressing animal diseases and trade in animals and animal products.

[288] The plaintiff called Dr. Leiss, an Emeritus Professor in the School of Policy Studies at Queen's University, who was qualified as an expert in risk management and risk communication, though not in risk assessment as had been sought by the plaintiff. Nevertheless, Dr. Leiss provided background information on risk analysis and the development of a risk analysis approach within the federal government in the 1980s and 1990s. Dr. Leiss was a consultant to the government on these issues at the time.

[289] In the late 1980s Canadian government officials began publishing articles in academic and professional journals about risk assessment and risk management. By the early 1990s Dr. Kellar, Dr. W. Bruce McNab and Dr. Randall S. Morley, all in the Animal and Plant Health Directorate, were, in Dr. Leiss's opinion, "fully conversant with the extensive literature on risk assessment and management", including "technical methodologies used in both qualitative and quantitative risk assessment; the applications already undertaken using these techniques interchangeably for animal disease control; the importance of understanding and representing the inevitable uncertainties in risk assessment; and, finally, the great importance of transparency in risk decision-making and the use of effective risk communication to involve interested parties and the public."

[290] This is not disputed by Canada. Dr. Bulmer acknowledged that Canada was considering risk assessment and risk management as early as 1988, and that in December 1989 a risk assessment process was adopted within Agriculture Canada. As he put it, "[r]isk assessment is done all the time, but it wouldn't necessarily be a formalized quantitative risk assessment." In 1990 Dr. Kellar performed an informal qualitative risk assessment of BSE developing in Canada, and there is evidence that the Animal Health Division had been using risk assessments by then in other contexts. Although Agriculture Canada conducted no formal risk assessment in 1989 or 1990 relating to the imported UK animals, Dr. Bulmer nevertheless said that "to say no risk assessment was done is wrong."

[291] In 1990 the OIE Regional Commission for the Americas began to examine risk assessment as part of the approach required under the WTO to develop standards and assessment tools for determining acceptable risks in trade. Australia, New Zealand, the USA and Canada formed what was called the "quadrilateral group" to discuss the future of trade in animals, and risk assessment was a topic of discussion at the group's first meeting. Dr. Willis volunteered Canada to lead in establishing a risk assessment process with the goal of introducing it to the international community. This idea was put to the OIE General Session in 1991, and the Code Commission was then charged with drafting a chapter on risk assessment.

[292] In May 1993 four chapters dealing with import risk analysis were adopted by the OIE and incorporated into the *Terrestrial Code*. The aim of these chapters was to provide objective and defensible methods of assessing risks, rather than taking zero-risk approaches which could inhibit trade without adequate justification. Dr. Kellar himself authored a paper published by the OIE on "the application of risk analysis to international trade in animals and animal products" in 1993.

[293] During the same period, the federal government was developing its own approach to risk analysis within AAFC. Dr. Morley, of the Animal Health Division, had developed expertise in the area and other experts had spoken to, and worked with, the FPIB at AAFC to develop a risk-based approach to their work. AAFC established the Animal and Plant Health Risk Assessment Network ("APHRAN"), led by Dr. McNab. Dr. Willis described Dr. McNab as "an epidemiologist that I had developed – I had sent away for training and so forth." Dr. Willis stated that he had "full confidence" in Dr. McNab's abilities.

[294] Following the discovery of the DePalme cow in January 1994, Dr. McNab wrote a memo on "Risk Points re: BSE." The memo described risk as being a function of probability and impact, noting that experiencing one clinical case of BSE "does not necessarily mean that only one of the UK imports is infected." He also noted that even though there was an extremely low probability of horizontal transmission, "when that low probability is combined with the severe impact, the idea of not slaughtering herd mates of clinical cases presents an unacceptable risk."

[295] In May 1994 Dr. Morley, who was in the APHRAN group, prepared a quantitative risk assessment relating to past importations of cattle into Canada from France, Switzerland, and the UK. This report became known as "APHRAN 1994a." In preparing this risk assessment, Dr. Morley followed OIE Guidelines published in September 1992, which included a quantitative risk assessment model. Dr. Morley had also been involved in the development of the OIE risk assessment chapter, working with Dr. Willis.

[296] The APHRAN 1994a review concluded that risks associated with BSE for imported French and Swiss cattle "appears to be very low." It reviewed the "probability of entry" from the imports and and rated it as "0/10." The review then went on to find that the "probability of exposure", "probability of disease outbreak" and "spread potential" were "N", or "negligible".

[297] With respect to the "probability of entry" of BSE into Canada from the cattle imported from the UK between 1982 and 1989, however, it rated that as "10/10", or a certainty. This was the conclusion for the full 182 cattle, which was confirmed by the DePalme cow diagnosed in

December 1993. The report also found that it was a virtual certainty that BSE would be found among the remaining 67 cattle as well – something that was not borne out by the tests on the tissues of those animals after they were destroyed. Despite the likelihood of entry of BSE through a UK import, which by this time had been established, the report nevertheless went on to rate the "probability of exposure", "probability of disease outbreak" and "spread potential" to be "N", or negligible.

[298] Under the heading "Economic Impact", which was rated H, or "high", APHRAN 1994a stated that "further cases of BSE would likely prompt a trade embargo against Canadian exports of cattle, beef and dairy products for an indefinite period of time by some or all of importing countries; cattle exports in 1992 amounted to $934 million (U.S.$) and that of beef $305 million (U.S.$); dairy exports in 1989 amounted to about $176 million (Can $) (Dairy Farmers of Canada 1990)." The report also noted other impacts including loss of animals and production to individual producers, eradication and herd depopulation costs, domestic consumption of beef and dairy products could diminish considerably, and changes might be needed in rendering policies, among other things.

[299] In light of the severe economic implications that would flow as "further cases of BSE would likely prompt a trade embargo", the report's "summary of risk & uncertainty" attached an overall rating of "H", or "high" to the "importation of 183 cattle from the U.K." The report went on to observe in its concluding paragraph that it did not take into account "the fact that as the animals age the risk of developing disease diminishes considerably", although it notes that Dr. Hueston's view was that "this would not have much effect on the magnitude of the risk of developing the disease in the UK importations."

[300] The evidence about the APHRAN 1994a report requires some clarification. It was interpreted by Dr. Leiss as suggesting there was a very high likelihood "that BSE infectivity had crossed into the indigenous Canadian herd through the rendering process." But this is not what the report said nor, as Dr. Hope's evidence addresses, was such an assessment possible at that time. Rather, APHRAN 1994a focused on the risk of the disease emerging in the imports, and concluded that it was a virtual certainty that some of the UK imports that entered Canada carried the BSE infection, and that at least one of the surviving UK imports in 1994 would have carried the infection. To the extent, if at all, that the authors of the report considered the risk that BSE could survive the rendering process, or survive in a sufficient quantity to transmit infection through animal feed, APHRAN 1994a stated that the "probability of exposure", "disease outbreak" and "spread potential" were negligible. This point was acknowledged by Dr. Beckett but was not addressed by Dr. Leiss who assumed, unreasonably in my view, that this meant that there was a high probability that "BSE had crossed into the indigenous herd."

[301] Similar terms were used in a 2001 Australian risk assessment prepared by Dr. Beckett. In reviewing that document, Dr. Beckett agreed that the "probability of entry" considered whether the infection was in the country because at least one infected animal had entered, but that an "exposure assessment" looked at the "pathways that have to happen before it can expose the national herd."

[302] APHRAN 1994a was not circulated widely within the Department of Agriculture. Dr. Willis said he did not recall ever hearing that there was a "99.94 [sic] percent" chance of infectivity. When asked in cross-examination what he would have done if he had such information, he said he "would have initiated some action." Dr. Willis also said that had he been told there was a 100% chance that there was infection in the feed chain – which is not what the report said - he would have "sought the best advice from the experts that I could have as to how to deal with the solution, whatever that solution happened to be." However, Dr. Willis did not agree that he would have imposed a feed ban as he "would not have jumped to one solution." As Dr. Willis said, when it was suggested, incorrectly, that APHRAN 1994a meant there was a certainty of infection in animal feed in Canada:

> Our belief, and my belief at the time, was we did not have the disease here. We had eliminated everything that brought it in by destroying the affected cow, by her herdmates, her offspring, by the other imports. To my knowledge, we had done everything to eliminate the disease and that Canada was free of BSE, met every standard that existed, OIE and otherwise. We had met all those standards. We did not have the disease, in my belief, and therefore there was no reason to take action. If you tell me now there was 100 percent proof that we had disease, then you're flooring me because that's not what I -- I understood to be the truth at the time. We believed we were free of BSE, so there was no need to do more.

[303] In the UK, which was responding to an epidemic, a feed ban had been instituted because feed from scrapie-infected sheep had been identified as the likely common source of BSE and there was a concern that recycled cattle tissue that contained the infection likely augmented spread of the disease. The certainty that feed was contaminated in the UK did not exist in Canada, and was not established by the APHRAN 1994a report; indeed it rated the risk as "negligible."

[304] The plaintiff makes much of the fact that Dr. Willis was not aware, or could not recall, APHRAN 1994a. However, a memo from Dr. Stemshorn to Dr. Willis, dated 28 October 1994, refers to the finding that the probability of infection in cattle from the UK was 0.999, which came from APHRAN 1994a. When asked about this document, Dr. Willis noted that the handwritten direction on the bottom of the memo came from his successor, Dr. Baker. Thus, while Dr. Willis may not have seen it, his successor did.

[305] APHRAN 1994a was not shared with the cattle, beef and rendering industries. Mr. Taylor, who was at Agriculture Canada between 1993 and 1995 through an exchange program with the CCA, was not made aware of the report either. He felt that industry ought to have been made aware of it in order to make "informed decisions." Mr. Taylor testified that he did not recall being asked by anyone at Agriculture Canada to convey to the cattle industry the risk that UK cattle suspected of being infected had been rendered and entered the feed chain, although he said it was "clear there was a risk" as they were depopulated following the DePalme cow event.

[306] A draft of APHRAN 1994a appears to have been provided to Dr. Hueston in the United States who responded to Dr. Morley that "with the cumulative risk model we discussed … you again see an extremely slim chance of NOT seeing a case of BSE." It is not clear what models are

being referred to by Dr. Hueston, but the conclusions of APHRAN 1994a support the inference that Dr. Hueston was referring to additional cases among the UK imports, a point I will return to when addressing the standard of care under Common Issue #2. There is no evidence that Dr. Hueston took any action when he faced the same risk of BSE among UK imports in the United States. Indeed, the limited evidence I have on the US situation suggests that UK imports remaining in the United States were not ordered destroyed until at least August 1997, when the US feed ban was implemented, if then.

Knowledge of BSE transmission: 1993 - 1996

[307] In December 1993 Dr. Wilesmith published an article in the *Archives of Virology* in which he stated that the BSE epidemic "has been entirely from the food borne source, meat and bone meal." Although the initial cause was likely from exposure to scrapie-infected sheep, Dr. Wilesmith stated that this "was then enhanced, by infected material, from pre-clinical, BSE-infected cattle in the same vehicle. In other words, an epidemic from the cattle source has been superimposed on the epidemic from the original sheep source."

[308] On 2 December 1993, an international symposium on TSEs was held in Berlin. A memo from Dr. Detwiler of APHIS summarizing points made at the symposium was provided to Canada. Dr. Bradley, of the CVL in the UK, spoke at the symposium and noted that "[a]ll countries (except for Portugal) having a case of BSE have placed a ban on the feeding of ruminant proteins to ruminants." As Dr. Thiermann observed, as of 1993 many European countries "had implemented feed bans as protective measures."

[309] Canada had its own direct contact with Dr. Bradley. On 24 June 1993 Dr. Bradley wrote to Dr. Tom Dukes at the ADRI about an article apparently relating to the US situation. In the letter he wrote:

> The writing is on the wall for any country without a ruminant feed ban and which has a chink in the armour. The chink can be imported cattle, imported feed, the presence of scrapie or BSE or sub-clinical forms of these diseases. Our experience should be (but regrettably is not always) a salutary reminder of lurking disasters.

[310] When questioned on this letter at trial, Dr. Kellar said that "these are warnings that Bradley and Wilesmith essentially had given all the membership of the OIE in the late fall, early winter of 1989, so there was nothing new here."

[311] Dr. Kellar also corresponded with Dr. Bradley. He sent Dr. Bradley the paper he and Dr. Koller had prepared in December 1993 on Canada's understanding of BSE at that time. Dr. Bradley responded with comments in July 1995, many of which, Dr. Keller agreed, were "fairly ruthless." Dr. Bradley took issue with the statements in the document that "Canada is free of BSE" and that scrapie-infected feed was the sole cause of the disease, observing that "[t]he origin of BSE is not proven to be scrapie; it could be an agent in cattle that occurs everywhere cattle are kept."

[312] Dr. Bradley queried the statement that "beyond the very small amounts of infected material that go to rendering and the further reduction during the rendering process, any infectious agent

that survives in meat and bone meal in Canada, is further diluted by a low level of incorporation into ruminant rations." He asked what evidence there was to support this conclusion and wrote: "an infectious dose is an infectious dose!" Further, after discussing rendering procedures, Dr. Bradley said that "a ruminant feed ban would also be an important protection."

[313] At the end of the document, Dr. Bradley agreed that risks from "scrapie/sheep seem to be minimal," but he was "not convinced that recycling of infection between cattle via feed (MBM) could not occur."

[314] Dr. Kellar responded on 29 September 1995, noting that the document commented on was almost two years old and required revision. Among other things he observed that "the dilution factor is a viable variable" and that, while he respected Dr. Bradley's position, "the jury is still out here and in the USA around this."

[315] Dr. Bradley responded to Dr. Kellar several months later, on 8 February 1996. He took specific issue with the statement in the paper on dilution, asserting that "[t]his is Russian roulette!" Dr. Bradley stated that "[i]t is believed that infection occurs in packets and therefore does not get 'diluted' in the normal sense."

[316] When questioned on his reaction to Dr. Bradley's comments, Dr. Kellar stated, with a tone of some bitterness, that in September 1995 Dr. Bradley was privy to the interim results of ongoing "attack rate" studies by Dr. Wells and others at the CVL which suggested that one gram of infectious matter could be enough to transmit BSE. But this information was not shared with Canada or others, who were operating on the view that larger amounts of infectious material were needed to transmit infection, which is why the focus had been on identifying clinical animals which would have a larger infectious load.

[317] The interim finding that just 1 gram of infective material could transmit the infection was first made by the CVL in September 1994, but was not published at the time. Perhaps a reason for this was that the finding came as a surprise to many, including Wells, Kimberlin and Bradley, according to the UK's BSE Inquiry report published in 2000.[16] While references to the results were made in publications beginning in August 1996 following confirmation of the data in February 1996, as of 2000 the actual results had still not been published and it appears were only published in their entirety by Dr. Wells in 2007.

[318] The publication of some "interim results" in August 1996 appeared in the journal *Nature* in an article titled "Transmission dynamics and epidemiology of BSE in British cattle." It contained a reference to "interim results" of "recent experimental studies" involving oral dosing of cattle, including doses of 1 gram which had resulted in transmission. The lead author was R.M. Anderson, but among the many other authors of the article were Drs. Wilesmith and Wells.

---

[16] Following the emergence of vCJD in March 1996, the UK government appointed a BSE Inquiry Committee to review the history of BSE and the emergence of vCJD and to comment on the adequacy of the response to BSE. In 2000, the BSE Inquiry delivered a 16-volume report, portions of which have been entered as exhibits at this trial.

[319] Dr. Kellar saw the *Nature* article at the time, but acknowledged that he did not appreciate the significance of those results, noting that this was not the main point of the paper. Immediately after referring to those interim results, which were contained in a section on "incubation period", the authors wrote: "The degrees to which animals at different stages of the incubation period are infectious to cattle through contaminated feed, to offspring born to infected dams, and to humans thorough contaminated food are key questions." Dr. Kellar was first told details of the attack rate studies by Dr. Bradley "in complete confidence" in 1998. In any event, by August 1996 the WHO had recommended a feed ban and Canada was acting on that recommendation. Indeed, the WHO recommendation to ban feeding RMBM to ruminants, which I discuss below, was made in early April 1996, not long after Dr. Bradley's letter of 8 February 1996.

[320] Dr. Kellar also did not accept the "packet theory" referred to by Dr. Bradley, which had been put forward during this period in an effort to explain why only a small number of animals in a herd had BSE, yet the disease spread across many herds. This theory hypothesized that infectious doses were concentrated in packets randomly within feed, rather than diluted throughout the MBM and other material that makes up animal feed. The packet theory was also doubted by others, including the UK BSE Inquiry in 2000 which heard from the rendering and compounding industries that feed was "ground and mixed to a high level of homogeneity." The defendant's expert witness on BSE, Dr. Hope, had no contemporary recollection of the packet theory. He said it is "plausible" and "represents an imaginative rationalization of what was known of the epidemiology of BSE at that time (1994)."

[321] Dr. Hope confirmed that the amount of infectious dose needed to transmit BSE was a very challenging question at the time, and remains so. Studies at the NPU showed that BSE infectivity levels varied in different tissues and did not necessarily transmit the disease to others. The mode of transmission also needed to be addressed, as the attack rate studies involved inserting infectious tissue orally to animals, begging the question whether infective material that had been rendered and included in MBM would have the same effect. I discuss these attack rate studies and the knowledge of them below in my review of the expert evidence of Dr. Beckett and Dr. Hope.

WHO meetings and recommendations: 1995 - 1996

[322] The WHO is the directing and coordinating authority for public health within the United Nations system. The WHO is responsible for providing leadership on global public health matters, shaping the public health research agenda, setting norms and standards, articulating evidence-based policy options, providing technical support to countries and monitoring and assessing human health trends.

[323] In 1991, 1993, and 1995, the WHO held consultations on public health issues related to human and animal TSEs. The WHO wished to ensure that its policies on human health concerns reflected current knowledge of BSE.

[324] Dr. Kellar attended a meeting on BSE hosted by the WHO in May 1995. At that time, risk to human health from BSE continued to be regarded as highly unlikely. The participants reviewed the existing state of knowledge on spongiform encephalopathies, and evaluated pathways of

transmission and associated hazards. The report of the meeting reiterated that the basic measure for the control of the disease, where the disease was present, consisted of eliminating the exposure of cattle to the agent through feed. However, as the report stated, "[e]xposure depends on the amount of a given bovine tissue, the infectivity titre of the tissue and any reduction in titre achieved during manufacture or preparation." In BSE-free countries where the relevant risk factors were present (e.g. use of ruminant protein in ruminant feed, occurrence of scrapie, size of sheep population relative to that of cattle), it was stated that "consideration be given to excluding from ruminant feed selected tissues which might contain high titres of the agent."

[325] Drs. Bradley, Wilesmith, Kimberlin and others from the UK also attended the WHO meeting, as did Dr. Hueston from the USDA. Dr. Kellar said he was asked by several people about Canada's feeding practices, which he shared.

[326] In Dr. Kellar's report of the meeting, reference is made to Dr. Wells' studies, underway at the time, "to determine the temporal and spatial development of infectivity and pathology following oral exposure of calves to a single, large (100g) dose of affected cattle brain homogenate." However, there was no disclosure or, according to Dr. Kellar, discussion of the studies or results involving low doses that were surprising Wells, Kimberlin and Bradley at the time.

[327] In Dr. Hope's expert report he wrote that by early 1996 "the general consensus was that BSE had been beaten" as numbers declined dramatically in the UK. However, at a consultation organized by the WHO in Geneva on 2-3 April 1996, when a group of international experts again reviewed the public health issues related to BSE and considered the emergence of a novel variant of CJD in humans that had been announced in the UK in March 1996. The experts noted that although there was no definite link between BSE and the newly recognized variant of CJD, known as "vCJD", the circumstantial evidence suggested that exposure to BSE was the most likely hypothesis. Among other measures designed to reduce exposure of humans to the BSE agent, the consultation recommended that all countries should ban the use of ruminant tissues in ruminant feed.

[328] One month later, however, in May 1996, a WHO scientific consultation on human and animal spongiform encephalopathies concluded, among other things, that the clinical and neuropathological features of the newly recognized vCJD did not provide information that could be used to prove the possible link between it and BSE. The consultation advised that further research was needed, as well as a system for worldwide surveillance for CJD. As I note below, only a small number of cases – just over 200 - of vCJD have been confirmed in humans.

Canada's implementation of a feed ban: 1996 – 1997

[329] Following the WHO recommendation issued on 3 April 1996 that all countries should ban the use of ruminant tissues in ruminant feed, the CFIA initiated consultations with stakeholders who would be affected by such a ban.

[330] On 3 April 1996 the Canadian Beef Breeds Council, the CCA and other national associations had a conference call on the topic with Agriculture Minister Ralph Goodale and other government officials. Following the conference call, Canada prepared an Action Plan with input from the conference call participants. Canada consulted the CCA, Dairy Farmers of Canada, and other stakeholders on several occasions in 1996.

[331] On 29 March 1997, Canada published in the *Canada Gazette Part I*, for a sixty-day comment period, proposed regulations to restrict the feeding of rendered ruminant-derived protein to ruminants. Canada also made the proposed regulations accessible through the CFIA website, and provided copies to foreign countries.

[332] On 5 June 1997 the US Food and Drug Administration published a rule entitled *Substances Prohibited from Use in Animal Food or Feed; Animal Proteins Prohibited in Ruminant Feed Ban.* This rule came into effect on 4 August 1997, the same day that Canada's ruminant animal feed ban came into effect through *Regulations Amending the Health of Animals Regulations,* SOR/ 97-362 (the "Feed Ban").

[333] As the plaintiff's expert, Dr. Beckett, noted, Canada's Feed Ban requirements "exceeded the international guidelines set out in the OIE's Terrestrial Animal Health Code for a country such as Canada, that had not experienced an indigenous case of BSE." It included a ban on feed containing any protein that originated from a mammal, other than a porcine or equine. The US ban did not go quite so far, still permitting mammalian protein in feed for non-ruminants.

[334] After the Feed Ban took effect, CFIA inspectors were trained in conducting compliance inspections, and were provided with guidance documents, including the Mammalian to Ruminant (BSE) Compliance Guide. Nevertheless, feed with MBM likely continued to be fed for a period of time since, as Dr. Kellar later wrote, "[i]t is estimated that it would have taken four to six months for the existing feed to work its way through the commercial segment of the feed system."

[335] Under the *Health of Animals Regulations,* Part XIV, the CFIA conducted inspections of feed mills, rendering plants and farms, kept track of annual data on compliance, and conducted follow-up inspections to monitor corrective action in response to the reporting of non-compliance. The CFIA's inspection activities sought to verify compliance with manufacturing controls, documentation, record keeping, and labelling requirements as specified by the Regulations. The CFIA undertook several initiatives to raise awareness and promote compliance with the Feed Ban across all regulated sectors by various means, including brochures, notices, and providing feedback to stakeholders, as well as updates on domestic and international developments on BSE.

Part VI - The Canadian BSE event and the closure of the border to exports: 2003 - 2007

[336] Over five years after the Feed Ban was enacted by Canada, on 31 January 2003 an Angus beef cow that was unable to rise was delivered to an abattoir in the Peace River District of Northern Alberta. Alberta Agriculture, Food and Rural Development ("AAFRD") condemned the cow as unfit for human consumption. The animal's head was removed for testing under the BSE surveillance program.

[337] On 16 May 2003 AAFRD tested the cow's brain and notified the CFIA of preliminary test results indicating possible BSE. The brain tissue was sent to the CFIA's Centre for Animal Health in Winnipeg, and on 18 May 2003 the CFIA's results also detected the presence of BSE. The CFIA sent samples to the BSE World Reference Laboratory at the CVL in Weybridge, UK for further assessment.

[338] Also on 18 May 2003 the CFIA quarantined the farm of the cow under the provisions of the *HAA* and commenced an investigation to determine where the cow was born, its movements between herds, and how its remains were processed. Investigators also began tracking the movements of other livestock from the same farm.

[339] On 20 May 2003 the CVL in the UK confirmed that the cow was positive for BSE. The CFIA then notified its trading partners, the OIE, industry associations, and other industry partners. The same day, the United States, Mexico, and thirty-two other countries banned importation of Canadian cattle and beef products. At that time, most of Canada's cattle and beef industry output was being exported.

[340] A subsequent CFIA investigation determined that the cow had been born in northern Saskatchewan in March 1997. The animal was first owned by Mr. McCrea, and I will therefore refer to it as the "McCrea cow". It is not disputed in this action that the likely source of the BSE infection was feed containing MBM fed to the animal when it was a calf prior to the implementation of the Feed Ban in August 1997. This was recognized as the likely source right away as Dr. Willis, when meeting with Asian trading partners in 2003, acknowledged that "rendering and feeding practices prior to the Feed Ban could have allowed low level transmission of BSE."

[341] The discovery of the McCrea cow had an immediate and enormous impact on the Canadian cattle industry. As a Report by the Standing Committee on Agriculture and Agri-Food wrote in 2004:

> On 20 May 2003, a single case of bovine spongiform encephalopathy (BSE) was detected in Alberta. This discovery set off a series of events that devastated Canadian cattlemen and other livestock producers and that continue to do so. The immediate closing of borders across the industrialized world to Canadian cattle and beef products sent cattle prices spiralling downward, led to the building of record levels of cattle inventories, dramatically raised feed costs, drained cattlemen's cash positions and completely eliminated any chance for profitability in 2003, with little prospects for recovery in the immediate and foreseeable future. The devastation did not stop at cattlemen and other livestock producers.

[342] Prior to the BSE diagnosis of the McCrea cow, the Canadian and US cattle markets were essentially one market, with cattle and beef crossing the border without permits. Canadian exports of 20,000 live cattle per week ceased. Domestic slaughter dropped from 70,000 to 30,000 head per week. With the export market gone, prices for cattle dropped by up to 70% in the summer of 2003. Processors reduced slaughter rates due to the build-up of beef inventory, and cattle farmers delayed

marketing of animals hoping that the border would reopen. According to Statistics Canada, cash receipts for cattle and calves dropped from $7.68 billion in 2002 to $5.16 billion in 2003 and to 5.09 billion in 2004.

[343] Trade gradually resumed. Boneless beef products from cattle less than 30 months of age were permitted to be exported to the United States beginning in September 2003 and other beef products from animals less than 30 months old were permitted in April 2004.

[344] On 31 October 2003 the USDA published a notice in the US Federal Register proposing that Canadian cattle less than 30 months of age be allowed to enter the US market. However, before the 60-day public comment period ended, it was announced on 23 December 2003 that a cow in Washington State had tested positive for BSE (the "Washington cow").[17] The following day, Canada announced interim import restrictions on US beef, except for US boneless beef from cattle aged less than 30 months, live cattle destined for immediate slaughter, dairy products, semen, embryos, and protein-free tallow.

[345] The discovery of the Washington cow also resulted in many other countries prohibiting or restricting importation of US beef products. This had an impact on demand for live cattle in the US, especially due to the loss of markets in Asia. This continued through to 2007, and depressed US prices for cattle.

[346] The proposal to reopen the US border to live Canadian cattle under 30 months was opposed by US cattle interests. The US only began permitting the importing of live cattle under 30 months of age from Canada on 18 July 2005, and the United States border was only reopened to all live animals born after 1 March 1999 in November 2007.

Part VII - Canada's response: regulatory controls

[347] As part of the CFIA's response to the discovery of BSE in the McCrea cow in May 2003, 15 premises were quarantined, 25 herds were investigated, and over 2,700 cattle were culled. Among those culled, more than 2,000 animals that were 24 months or older were tested and found negative for BSE.

[348] In June 2003 an international panel on BSE recommended the complete removal of bovine SRM, or specified risk materials, from the human and animal food chains. Canada responded in July 2003 by amending the federal *Food and Drug Regulations*, C.R.C., c.870, and the *Health of Animals Regulations* to define and ban SRM from human food.

[349] In January 2004 Canada announced that it would increase its BSE surveillance testing to at least 8,000 cattle during the first year and to 30,000 per year in subsequent years to calculate the

[17] Subsequent investigation disclosed that the Washington cow was born in Canada and that the likely source of BSE was the consumption of contaminated feed when a calf in Canada prior to the implementation of the Feed Ban.

prevalence of BSE in Canadian adult cattle. The level and design of this enhanced program accorded with guidelines recommended by the OIE.

[350] In 2004 the CFIA launched a program to provide payments to producers, veterinarians and dead stock collectors to assist in covering a portion of the veterinary examination fees and carcass disposal costs when a sample was submitted for testing under the national BSE surveillance program.

[351] On 11 December 2004 the CFIA pre-published a detailed feed ban enhancement regulatory proposal in the *Canada Gazette Part I*, for a seventy-five day public review and comment period. On 12 July 2007 a full SRM ban for animal feed, pet food, and fertilizer came into force through the promulgation of the *Regulations Amending Certain Regulations Administered and Enforced by the Canadian Food Inspection Agency*, SOR/2006-147.

[352] Under this enhanced feed ban, producers could no longer feed any animal products containing SRM to livestock. Abattoirs were required to properly identify and manage SRM to ensure that SRM was removed from the feed system. Permits were also required to handle, transport, or dispose of SRM. This system enabled continuous control over SRM, so that it could not enter the animal feed system.

Part VIII - Canada's response to BSE: Financial assistance programs 2003 - 2007

The BSE Response Team

[353] When news of the McCrea cow was received in May 2003, senior officials at the Farm Financial Programs Branch of AAFC met to consider how Canada should respond to the border closure and resulting challenges to the cattle and beef industry. A BSE Response Team was established. Other departments were also involved, including Foreign Affairs and International Trade, which was attempting to get the border reopened and was addressing tariff rate quotas affecting the importation of beef from other countries so that there would be a larger domestic market for Canadian beef. There was daily consultation with the cattle industry, including through the Beef Industry Roundtable, which was led by the CCA and included other major stakeholders.

[354] As I have noted, the border closure to the export of cattle and beef had an immediate and dramatic impact in Canada. Prior to the border closure, approximately 60% of cattle and beef production was produced for export. Almost all live cattle exports were to the United States, and approximately 80% of beef exports also went to the United States, with most of the rest going to Asia. Approximately 20,000 cattle were being exported and 70,000 animals were being slaughtered for domestic and export markets each week. Following the loss of export markets, slaughter rates dropped to approximately 30,000 animals per week, creating a severe backlog in the cattle production chain. The price for fed cattle also dropped dramatically given the reduced demand and excess supply.

[355] Canada called two witnesses to discuss the actions of the BSE Response Team, Dr. Douglas Hedley and Mr. Gilles Lavoie.

[356] Dr. Hedley holds a Ph.D. in agricultural economics and has had a distinguished career in Canada and abroad. He worked for 26 years in the Department of Agriculture and Agri-Food in the field of agriculture policy analysis and programming. When Dr. Hedley retired in 2004 he was the Assistant Deputy Minister, Farm Financial Programs Branch, which was responsible for the design and delivery of business risk management programs. He described them as programs that deal with the shared risk between producers and governments. Dr. Hedley was also one of three senior public servants who formed the "Board of Directors" of the BSE Response Team. He demonstrated a thorough and detailed knowledge of the purposes and operation of the farm assistance programs that mitigated losses producers suffered between May 2003 and the end of 2007 following the discovery of the McCrea cow.

[357] Mr. Lavoie is a retired federal public servant who studied economic sciences at the University of Montreal. He also had an impressive career working first for the government of Quebec and, from 1979 until his retirement in 2006, with the federal government. This included two years in Brussels as part of the Canadian Mission to the European Community. For ten years, from 1982 to 1993, he was the Director General of the Farm Financial Programs Directorate, which was responsible for the administration of support programs under a range of federal legislation. This included the development and implementation of income support programs established following the enactment of *FIPA*. Mr. Lavoie was the Executive Team Leader on the BSE Response Team, developing and implementing the suite of programs responding to the border closure in 2003, including programs that involved direct payments to producers. He also had a detailed knowledge of these programs.

[358] The BSE Response Team's mandate was, according to Dr. Hedley, to understand and determine the extent of the problem, and to "design and launch programs that assist producers in the industry to mitigate the impacts of the BSE crisis in Canada." At the same time, the BSE Response Team had to consider what existing assistance programs were available to cattle producers. As I discuss below, Canada has, for decades, had a range of standing programs, generally available to farmers, to assist them with income losses, whatever the cause.

[359] Dr. Hedley and Mr. Lavoie described the challenges the BSE Response Team had to address due to the impact of the border closure on an industry that could not simply shut down. An exchange in the examination for discovery of Dr. Hedley summed it up nicely:

> Q: Yes. I take it the overall policy here was trying to manage the national herd to figure out and make sure you don't get an overabundance in a certain age group or how you get it going through the herd. I remember reading one document saying cows aren't like cans of soup; you can't just stockpile it on the shelf. Once they're born, they start on the lifecycle and you have to manage that through and that was the aim of these programs. Is that fair?
>
> A: <u>There's only two ways to store cattle and beef. One is on the hoof and the other is in the freezer</u>. Okay? You've got them through a slaughter plant. We didn't have enough capacity, so you store them on the hoof, and you do that by slowing down

> cattle in the system. And in fed animals and in cull cows they tended to be re-bred. [Emphasis added.]

[360] Most pressing in the short term was that feedlot operators had fed cattle ready for processing. But the price for live cattle had dropped significantly causing producers to hold back cattle. It was critical to keep the supply chain moving and find ways to bring those cattle to the market. Consumer confidence also had to be maintained and, should the border remain closed, the impact on herds and producers over time had to be considered.

[361] Another challenge was the practical impact on cattle farming if there was a limited market for existing animals over a longer period of time. In the autumn, when calves are weaned, more animals are sent to slaughter, including calves for veal and older animals. However, at least in 2003, there were too many animals available and ordinarily destined for slaughter than there was slaughter capacity in Canada, so slaughter capacity had to be increased. Further, keeping animals alive longer had costs, and impacted on the age and genetic make-up of animals in herds. Both beef and dairy cattle farming had to be addressed. There was uncertainty as to when the border might reopen.

[362] The BSE Response Team, therefore, developed specific programs that provided assistance in the form of payments to producers for animals that had to be slaughtered at low prices, and payments that incentivized producers to slow the rate at which animals were sold for slaughter in an attempt to maintain prices.

[363] Between 2003 and 2007 Canada made cash payments of approximately $2 billion to cattle farmers through the BSE Recovery Program. In addition, Canada made payments to cattle farmers of approximately $3 billion under generally available programs during the same period. Those programs are reviewed below. There is no dispute that these payments were made, but there is limited agreement on what amounts should be credited to the defendant to offset the losses claimed by the Class.

[364] An internal report, "Evaluation of AAFC's Responses to the BSE Crisis", prepared by AAFC's Office of Audit and Evaluation (the "OAE Report") in August 2008, concluded that the BSE Recovery programs were "a reasonable response by governments in the face of high levels of uncertainty about the border re-opening. Alternative responses such as a price floor or mass cull would have involved significant public image risks and/or much higher costs and would not have been justified in the event of an early re-opening." The OAE Report noted that there was high uptake of the programs by farmers, and that the "financial assistance provided under these programs was perceived as helpful by producers, although not sufficient by itself to enable producers to weather the crisis."

[365] According to the OAE Report, "[o]ver the period from 2003 to 2007, the government investment of $2.2 billion in response to the BSE crisis is estimated to have averted $3.1 billion in losses by producers and processors." The $2.2 billion figure is larger than the sum of the BSE Recovery Program payments I consider below, which total $1.942 billion, as the OAE Report included indirect investments in other BSE-related programs. The OAE Report did not, however,

consider generally available programs that producers could also, and did, draw upon to reduce their losses.

Farm assistance programs – background and statutory context

[366] Support for agriculture by government in Canada is as old as the country itself. Much of the history of that support is reviewed in a paper written by Dr. Hedley in 2015, which was entered as an exhibit by the plaintiff: "The Evolution of Agricultural Support Policy in Canada", CASES Fellows Paper, 2015-1.

[367] Soon after Canada was established in 1867, immigration policies were adopted to attract immigrants to the vast arable lands in western Canada. The well-known Crows' Nest Pass Agreement of 1897 prevented railways from imposing excessive charges on grain movements. In the first half of the twentieth century, among other things, federal legislation was passed to provide enhanced credit to farmers. The Canadian Wheat Board was established in 1935 as a mechanism to provide support by ensuring a degree of price stability. During the Second World War, the federal government provided agricultural price supports for various commodities and took other steps to address the marketing of farm production.

[368] In 1958, the federal government passed the *Agricultural Stabilization Act*, 1957-59 (Can.), c. 22 (now R.S.C. 1970, c. A-9) ("*ASA*"), which provided, for the first time, direct payments, or subsidies, to producers for nine specific commodities caused by low prices. One of those commodities was cattle. The preamble to the *ASA* described it as being "for the purpose of stabilizing the prices of agricultural commodities in order to assist the industry of agriculture to realize fair returns for its labour and investment, and to maintain a fair relationship between prices received by farmers and the costs of goods and services that they buy, thus to provide farmers with a fair share of the national income." This was followed in 1959 by the passage of the *Crop Insurance Act*, 1959 (Can), c. 42, which provided federal funding to operate subsidized crop insurance programs. These Acts were in addition to legislation dealing specifically with grain and wheat production.

[369] In the 1960s and 1970s, dairy and poultry production was moved into supply management systems which provided a different kind of stability to those producers: *Farm Products Marketing Agencies Act, 1972*, 1970-71-72 (Can.), c. 65. For other commodities, including cattle, the *ASA* and other legislation provided additional support and sought to address more equitably the financial commitment of the provinces and the supports provided across the country.

[370] In the 1980s, a number of events affected agriculture, including drought, high interest rates, trade embargoes, inter-provincial competition, and external pressures arising from the Canada-USA Free Trade Agreement and the Uruguay Round of negotiations which led, in 1995, to the establishment of the WTO. At that time, Canada moved away from commodity-based support programs and a range of *ad hoc* programs to broader "whole farm" programs. These broader programs were less likely to be susceptible to complaints under the WTO subsidy rules relating to specific commodities and provided farmers with more flexibility to make crop choices based on market factors rather than government assistance programs.

[371] In 1991, *FIPA* was passed, which allowed for the implementation of a new series of generally available safety-net programs in collaboration with the provinces. These included revenue and crop insurance, as well as net income stabilization programs. An important element of these generally available and standing programs is that they are "whole farm" programs, not linked to or subsidizing particular commodities or designed to address a specific event. Rather, such programs exist to provide assistance and protection against income loss, and to stabilize income, whatever the cause.

[372] In addition, *FIPA* provided legislative authority for special measures, or *ad hoc* programs, under s. 12 of the Act. As Mr. Lavoie explained, s. 12 enabled the Minister to offer special assistance when producers faced unforeseen circumstances. Section 12(1) states:

> Where the Minister is of the opinion that exceptional circumstances exist that require that action be taken outside the scope of a program established under an agreement, the Minister may implement such procedures or other special measures as the Minister considers necessary to determine the appropriate action to be taken to remedy those circumstances, including the appointment of a committee, to be known as a Special Measures Committee, which shall consist of members representing Canada, the provinces concerned, producers and any other group of persons that the Minister considers appropriate.

[373] The reference in s. 12 to an agreement refers to agreements with the provinces, as many assistance programs were funded by both federal and provincial governments. Under s. 12(5) of *FIPA*, the Governor in Council could "authorize the Minister to enter into an agreement with one or more provinces, or to take any other appropriate action, that the Governor in Council deems to be necessary for the purpose of assisting producers of agricultural products following the implementation of any procedures or other special measures pursuant to subsection (1)."

[374] The passage of *FIPA* in 1991, and the continued existence of other legislation dealing with grain and marketing programs for products under supply management, as well as the ability of AAFC to exercise discretionary powers under s. 5 of the *DAAA*, led Dr. Hedley to comment in his 2015 paper, at p. 26, as follows:

> With this package of instruments, the federal government felt for the first time in several years that there was a defensible set of programs domestically and internationally. Domestically, governments could deflect requests for *ad hoc* or special interest group funding by pointing to equitable programs available to all (who wanted access). The added fiscal burden in the provinces sat heavily on some, Saskatchewan in particular. However, the principle of cost sharing between federal and provincial governments had been clearly established across the on-going programs. The original expectation was that with prescribed cost sharing in programs, provinces would be less willing to lead the calls for additional assistance from the federal government. From an international perspective, the NISA program as "whole farm" fit some but not all of the criteria in Annex II of the WTO for a "green" program, exempt from countervail. Subsidy levels were falling in line with

> expectations in the WTO, and there were upper limits on "amber" subsidies for all countries providing some protection from continuously rising subsidies by other competitors.

[375] These programs remained in place through the 1990s and were adjusted somewhat in the early 2000s. A Net Income Stabilization Account ("NISA") program, established in the early 1990s, was terminated at the end of 2002, but was replaced by the Canadian Agricultural Income Stabilization Program ("CAIS"), which addressed federal and provincial cost sharing. Other generally available programs followed.

[376] CAIS and its successor programs also contained anti-stacking provisions that limited coverage from all assistance programs to 70% of previous margins in order to comply with WTO rules. Thus, producers always absorbed at least 30% of their margin losses.

[377] Canada's support for these programs reflects the importance of agriculture to the Canadian economy and the fact that farming is a very risky business, vulnerable to bad weather including frost and drought, disease, pests, floods, competition domestically and internationally, currency fluctuations and trade issues, among other things.

[378] Cattle farming is subject to all of these risks. For example, as Mr. Lavoie explained, in 2002 there was a severe drought in western Canada which reduced the supply of hay and grain. This increased feed costs for cattle producers and reduced the amount that feedlot operators might be willing to pay for cattle. As a result, many cattle producers decided to sell their cows to the United States during that year.

[379] Mr. Lavoie also noted that many cattle producers have diverse farming operations which may produce grains and hay, raise other livestock and engage in egg, poultry and dairy farming in order to protect against price fluctuations for a particular commodity. This is supported by the evidence of Mr. Sears and Mr. McCrea, both of whom engaged in mixed farming.

[380] At trial, Dr. Hedley summarized the "three lines of defence" to dealing with risk in agriculture. The first line of defence is the responsibility of the producer to manage and bear some of the risk. The second line of defence is standing and generally available stabilization programs established by the government in place on a continuing basis to address income fluctuations due to market and production risks. The third line of defence is "*ad hoc* or one-off programs" which address emergencies and unexpected events. As much as possible, AAFC preferred to answer unexpected challenges by using existing programs and resources. Dr. Hedley emphasized that the standing programs come first, and that *ad hoc* programs must be designed so that they do not weaken the standing programs. One of the ways this is achieved is that assistance obtained from special or *ad hoc* programs is considered when assessing the amount a producer is entitled to receive under a standing program. This also ensures that producers are not overcompensated or receive too much support.

Generally available and standing programs

Net Income Stabilization Accounts Program ("NISA")

[381] *FIPA* authorized the establishment of NISA which was set up in the early 1990s. According to Dr. Hedley, there were concerns at the time that producers were not putting cash aside to take care of downturns and NISA provided an incentive to save. This was a long-term standing program.

[382] Two funds were created. Fund 1 consisted of the producer's deposits. Fund 2 contained matching funds from the federal and provincial governments up to 3% of eligible net sales of the producer. Fund 2 was also where all interest earned was deposited, for both Fund 1 and Fund 2.

[383] Farmers could withdraw funds, if they wished, when their annual net income was below the preceding five-year average, or if household income was below $35,000, subject to prescribed limits. Funds withdrawn from Fund 1 were not subject to tax, as the deposits were made in after-tax dollars; however, withdrawals from Fund 2 were taxable, although they were treated as investment income, not farm income. Dr. Hedley explained that the intention was to have both funds be treated as after-tax dollars, but the Department of Finance strongly objected. To make up for this, the federal government paid a 3% bonus interest on deposits.

[384] The NISA program was discontinued at the end of 2002. Holders of NISA accounts were permitted to withdraw their funds at any time over the following five years, regardless of net income, subject to the requirement that any withdrawal had to be for at least 20% of the balance, at the end of which period all funds remaining would be paid out.

[385] As of 20 May 2003, when the border closed, NISA balances were over $4 billion, about $1.7 billion of which was in accounts held by some 79,230 producers with cattle. It is agreed that the NISA wind-down payments available from Fund 2 on 20 May 2003, to farmers with cattle, was $894,433,335. Canada's position is that this amount should be an offset to losses suffered due to BSE, a position I do not accept, for reasons discussed later dealing with damages.[18]

Canadian Agricultural Industry Support Program ("CAIS")

[386] CAIS was a standing program that began in 2003 and continued until 2006. Funded by the federal government and the provinces, its objective was to help protect producers against income losses, regardless of the cause. Although initially it required a deposit by farmers, that was replaced by a small fee to enroll in the program. In this sense it differed from NISA which had required deposits by farmers in order to qualify for matching funds.

[387] Like NISA, CAIS was based on the concept of whole-farm production margin, which was calculated as the difference between agricultural sales and direct production expenses for the entire

[18] Disputes over which programs and payments should be offsets to the losses suffered by the Class are addressed later in these Reasons in my discussion of damages.

farming operation. CAIS payments were based on the difference between the current year production margin and the average production margin over the preceding five years, excluding the highest and lowest margin years. This was referred to as the reference margin or "Olympic Average." Under the program, if a producer had a loss, or margin decline, of 15% or less, the government would pay for half the loss. For any loss between 15% and 30%, the government would pay 70% of the loss, and for losses above 30% the government would cover 80% of the loss. But, due to WTO rules, in no case could the overall assistance exceed 70% of the margin decline.

[388] As a whole farm program, payments were based solely on income and did not relate to a particular commodity or volume of production.

[389] Payments from other programs discussed below, such as the BSE Recovery Program, the Transitional Industry Support Program ("TISP") in 2004 and the Farm Income Payment Programs ("FIP") in 2005, were included in income for the year, so that CAIS payments were made after these other payments, if appropriate. On the other hand, those payments were not included in calculating the reference margin in preceding years. If a producer received a payment greater than what it would have received under CAIS, that amount would be clawed back. NISA wind-down payments were not included in any of the calculations.

[390] Although Dr. Groenewegen disagreed with Dr. Hedley that CAIS payments should be included as offsets as they were not "targeted to cattle producers due to BSE" or "designed to address BSE issues", in closing argument the plaintiff agreed that CAIS payments, as calculated by Canada, should be included as offsets to losses suffered due to BSE "under the principle of mitigation."

[391] In order to estimate the amount of CAIS payments associated with cattle sales in each province, Canada calculated payments based on eligible net sales or allowable net income, using farm cash receipts as a proxy for eligible net sales. In doing so, the defendant calculated the provincial shares of farm cash receipts from cattle and calves to determine what producers in each province received for selling cattle, and used the inventory of cattle in each province compared to cattle inventory across the country to determine provincial shares of inventory.

[392] Between 2003 and 2006, it is agreed that CAIS payments to cattle farms that offset losses due to BSE total $947,294,400, which I have rounded to $947.3 million.[19]

CAIS Inventory Transition Initiative ("CITI")

[393] When initially established, CAIS treated the inventory value of a producer to be the same at both the beginning and the end of each year. However, following pressure from, largely, the cattle industry which was suffering large losses in inventory value, it was accepted that accounting principles required consideration of any change in value of inventory from the start to the end of

[19] For simplicity, I have rounded these figures to the nearest hundred thousand, as did the experts in their final calculations.

the year. The result of this adjustment increased losses and, therefore, required higher CAIS payments. This factor was included in CAIS payments in 2006, but retroactive adjustments were made for 2003 to 2005, which were identified as CAIS Inventory Transition, or "CITI", payments.

[394] As with CAIS, the plaintiff agreed in closing argument that CITI payments should be treated as an offset to the losses suffered due to BSE but disagreed with the amount proposed by Canada.

[395] Dr. Hedley originally allocated CITI payments to cattle and calf producers in the same way as he allocated CAIS payments, based on an average of farm cash receipts and the number of cattle in a province. His calculation was $195,030,423. However, Dr. Hedley subsequently changed his approach and allocated all CITI payments to producers with cattle, which totalled $588,823,431. Dr. Hedley's rationale for doing so was that cattle were the only industry at the time that was suffering a significant loss in inventory value during those years, which would cause one to expect a high proportion of the program funds to go to cattle producers. All of this money came from the federal government.

[396] The plaintiff's expert, Dr. Groenewegen, takes issue with the amount of CITI payments, arguing that they should be calculated on the same basis as CAIS payments. He observed that the amount calculated by Dr. Hedley represents 68% of a total CITI program spend of $866.2 million, which Dr. Groenewegen believes is inappropriate when many farms had a limited cattle operation and which does not consider inventory adjustments for other commodities. A more appropriate amount based on cash receipts, Dr. Groenewegen said, would be $247.3 million.

[397] As I address later in these Reasons dealing with offsets to damages, I accept Dr. Hedley's figure of $588,832,431, rounded to $588.8 million.

AgriStability 2007

[398] The AgriStability program replaced CAIS in 2007. The main change from CAIS was to eliminate any support for losses between zero and 15%, but otherwise the program was very similar, and was funded by the federal government and the provinces.

[399] Like CAIS and CITI, the plaintiff agrees that payments made under the AgriStability program should be deducted from losses "under the principle of mitigation." It is also agreed that AgriStability payments in 2007 to producers with cattle totalled $102,165,331, rounded to $102.2 million, calculated in the same way as the CAIS payments were allocated, based on cash receipts.

Cost of Production Program ("COPP")

[400] Another generally available program at this time was the Cost of Production Program ("COPP"), funded solely by the federal government, which was "aimed at providing assistance to producers impacted by rising input costs over the last few years." These costs included, for example, seed, feed, fertilizer, fuel, hogs and cattle. Initial payments began in 2007 for the 2006-2007 period.

[401] Dr. Hedley calculated that $90,673,637 was paid under this program to farms that had cattle, using the same cash receipts methodology as under CAIS, which is not disputed by Dr. Groenewegen. As with CAIS, although the plaintiff originally objected to treating the COPP program payments as an offset, in closing argument it appears to have been accepted.[20]

[402] Accordingly, COPP payments in the amount of $90,673,637, rounded to $90.7 million, shall be treated as offsets to the losses claimed by the plaintiff Class.

AgriInvest

[403] AgriInvest began in 2007, and still exists today. Similar to NISA, it contains two funds – one with the farmers' deposits, the other with government matching funds up to 1.5% of allowable net sales and containing the interest earned on both funds. The major difference from NISA is that producers can withdraw money at any point. As Dr. Hedley said, it is "to encourage producers to put money away for a rainy day."

[404] In 2007, the federal and provincial governments made contributions of $110,585,749 (rounded to $110.6 million) to AgriInvest accounts held by producers with cattle, and that money was fully available to producers in that year, whether it was taken then or not.

[405] Dr. Groenewegen took issue with treating AgriInvest funds as an offset as the money did not represent payments necessarily received by cattle producers; rather, the funds were only deposited in 2007. He also asserted that as it was treated as investment income by the Canada Revenue Agency rather than farming income, AgriInvest payments should not be considered. The plaintiff maintained this position in its closing argument.

[406] Dr. Groenewegen also took issue with the allocation method for AgriInvest. He argued that since only 42% of sales on farms with cattle can be attributed to cattle, therefore only 42% of deposits related to cattle and, consequently, only 42% of the $110,585,749 should be treated as a BSE offset, or just $46.5 million.

[407] As I explain below in addressing damages, I accept Dr. Hedley's approach and treat $110.6 million as an offset to the losses suffered by the plaintiff Class.

Kickstart

[408] Kickstart was a program to support AgriInvest in 2007. As it would take time to build up balances in AgriInvest accounts, the federal government effectively seeded accounts to make more money available in that year before requiring a payment from the farmer. The amount of

[20] In its written submissions the plaintiff argued that the COPP payments should not be offsets, but in the plaintiff's charts, including the chart provided at the very end of the argument, the COPP amount was included in the sum of generally available programs which supports the figure the plaintiff is seeking. In any event, it would fall "under the principle of mitigation" on which the plaintiff has accepted other offsets.

$190,875,614 was paid out on account of farms which had cattle. As with AgriInvest, there was no restriction on why or when funds could be withdrawn.

[409] Dr. Groenewegen objected to treating any of Kickstart as an offset, for the same reasons as he gave for AgriInvest. However, if it is to be treated as an offset, he would only include 42% of the $190,875,614, or $80.2 million, as a BSE offset, again for the same reasons as he relies on for AgriInvest. As I explain later in these Reasons, I conclude that the appropriate offset is $190,875,614, rounded to $190.9 million.

Grains and Oilseeds Program ("GOPP")

[410] Dr. Hedley described this as an *ad hoc* program in effect during the relevant time in which payments were made by the federal government based on a percentage of the eligible net sales of grains and oilseeds. It arose due to low grain and oil seed prices at the time. Dr. Hedley calculated $28,949,512 as being attributable to farms that had at least 50% of their cash receipts from cattle and calves, with some adjustment for Quebec. As Dr. Hedley put it, there is a lot of cattle on grain and oilseed farms. Dr. Groenewegen, for the plaintiff, does not dispute this calculation, but argues that it is not appropriate to include it as a "BSE offset" as it was not a payment made in response to BSE and was not paid for cattle production. For reasons discussed below, I accept Dr Hedley's position that $28,949,512, rounded to $28.9 million, should be an offset to damages arising from BSE.[21]

BSE-specific programs

[411] Canada implemented a number of direct programs to address the impacts of BSE on cattle producers and cattle production. These included the following programs discussed in this section: the BSE Recovery Program Phases 1, 2, 3 and 4; TISP – Direct; FIP – Direct; and the Milk Price Increase. The defendant relies on the payments to cattle farmers under these programs to support its position that the action is barred under s. 9 of the *CLPA*. The plaintiff disagrees with the impact of these payments under the *CLPA*, but agrees that funds paid to cattle farmers under these programs, and certain provincial programs (the "BSE-specific programs"), totaling $1.942 billion, should be deducted from the losses of the Class "under the principle of mitigation."

BSE Recovery Program

[412] The BSE Recovery Program was created by Order-in-Council ("OIC") P.C. 2003-1053 on 16 July 2003, pursuant to s. 12 of *FIPA*. It authorized the Minister of Agriculture and Agri-Food "to enter into, on behalf of the Government of Canada, an agreement with the governments of the provinces to provide financial assistance to producers of cattle or other ruminants who have been adversely affected by the suspension of imports." The OIC attached a draft agreement. Over time,

[21] In Dr. Groenewegen's final chart of program payments he refers to an earlier calculation of $24.3 million; however, in the text of his March 2021 Report he agrees that the number should be increased to $28.9 million after including dairy and an adjustment for Quebec.

as the programs evolved, the draft agreement was amended to address the different forms of assistance.

[413] Section 2.1 of the draft agreement stated:

> The purpose of this Agreement is to set out the terms and conditions related to the provision of financial assistance to the Canadian beef industry and to producers of other ruminants in managing critical pressures in the production chain in response to the suspension by the United States of America of imports of Canadian ruminants and ruminant products, through the establishment of a BSE Recovery Program…

BSE Recovery Program Phase 1- Slaughter Element

[414] The border closure created a severe backlog of cattle. Feedlot operators had cattle ready to be slaughtered or exported. Before 20 May 2003, Canadian producers marketed approximately 90,000 head of cattle per week. After the loss of export markets, slaughter dropped to 30,000 head of cattle per week. The price for slaughter cattle plummeted and feedlot operators stopped selling them. Consequently, Canada needed to encourage farmers to market their fed cattle.

[415] Phase 1 of the BSE Recovery Program was an *ad hoc* program managed by the provinces between 15 July 2003 and 31 August 2003, which was intended to encourage the Canadian slaughter of existing cattle, for consumption in Canada, by providing cattle producers with a price deficiency payment for cattle owned prior to 20 May 2003 and sold for slaughter in Canada between 1 June 2003 and 31 August 2003. [22]

[416] Also included in Phase 1 was an inventory pricing element to encourage slaughter by assisting the processing plants to pay higher prices; however, only the slaughter element paid to cattle producers is addressed here.

[417] When established in July, the program was intended to last until 31 August 2003, or until the border reopened, if earlier. The agreements contemplated the federal government making up to $276 million available, for a total program of $460 million. Although the United States began to permit the importation of boneless beef from Canada in August, the border otherwise remained closed into the fall. Phase 1 was then amended by OIC P.C. 2003-1404 on 22 September 2003 to increase the contributions, such that the federal government made $312 million available, and the provinces agreed to make additional proportionate contributions to increase the total program to $520 million.

[418] The federal government contributed 60% and the provincial governments 40%. There is agreement between the parties that the federal government paid out $266,313,833 to cattle producers from the Consolidated Revenue Fund. The provinces contributed $177,542,556, for a

[22] Due to a major electrical power failure in the summer of 2003 which affected farms in Ontario and Quebec, the program was extended for a few days into September for those producers.

total payment to cattle producers across Canada under this program of $443,856,389, rounded to $443.9 million.

BSE Recovery Program Phase 2 – Cull Animal Program

[419] Phase 2 of the BSE Recovery Program was called the Cull Animal Program. It was created by OIC P.C. 2003-1802, dated 7 November 2003, and modified by OIC P.C. 2004-0198, approved on 8 March 2004.

[420] The program was designed to delay the marketing of older animals that would ordinarily have been exported and/or sent for slaughter in the fall of 2003 until there was sufficient slaughter capacity to process these animals in Canada. Prior to the border closing, many of these "cull animals" were sent to the United States for slaughter and so it was necessary for Canada to increase its slaughter capacity, which took time. Another objective of the program was to discourage on-farm slaughter, which raised animal and public health risks as well as environmental concerns.

[421] The program initially offered producers a payment to encourage them to delay the marketing of cull animals. It began on 1 September 2003 and ended on 15 June 2004. Producers were eligible to receive payments for a proportion of their breeding herds on their farms as of 1 September 2003. Typically, culling of beef herds involves about 12% of the herd, and for dairy operations it is about 25%. When commenced, the program provided a payment of $159 per head and a feed subsidy of $1.00 per day per head over the period of 16 December 2003 to the earlier of the animal's slaughter date or 15 July 2004. However, in early 2004, the program was amended to simply provide producers with a flat-rate payment of $320 per eligible animal owned and included in inventory on 1 September 2003.

[422] This program was also jointly funded by the federal government and some of the provinces, on a 60% - 40% basis. The federal government committed to make payments up to a maximum of $110.4 million. There is agreement between the parties that the federal government paid out $104,314,084 to cattle producers, from the Consolidated Revenue Fund. Despite the lack of contribution by all provinces, payments were made to producers in every province. The four Atlantic provinces contributed $1,934,516, for a total payment to cattle producers under this program of $106,248,600, rounded to $106.2 million.

BSE Recovery Program Phase 3

[423] Phase 3 of the BSE Recovery Program was authorized by OIC P.C. 2004-1118, approved on 30 September 2004. It had three elements, described as "Fed Cattle Set-Aside", "Feeder Calf Set-Aside", and "Managing Older Animals." Only the first two elements were implemented, although a program similar to the "Managing Older Animals" element was introduced in Quebec as Phase 4, called the "Herd Management Program."

(a) Fed Cattle Set Aside Program

[424] The Fed Cattle Set Aside Program's main objective was to better balance the supply of market-ready cattle with domestic slaughter capacity. Using national weekly auctions where

producers placed bids on the per day payment they would be willing to accept to set aside some of their fed cattle for between 90 and 120 days, the program aimed to delay the marketing of some market-ready cattle until slaughter capacity more closely matched the supply of live animals, and thereby increased prices for cattle.

[425] This program was jointly funded by the federal government and some of the provinces on a 60% - 40% sharing arrangement. There is agreement between the parties that the federal government paid out $25,745,201 to cattle producers, and that these funds came from the Consolidated Revenue Fund. Payments under this program were only made where the provinces participated. Alberta, Saskatchewan, Manitoba, Ontario and Quebec paid $17,163,467 for a total payment to cattle producers under this program of $42,908,668, rounded to $42.9 million.

(b) Feeder Calf Set Aside Program

[426] The objective of the Feeder Calf Set-Aside Program was to encourage cow-calf and other beef producers to retain 1.5 million calves born in 2004 by delaying their slaughter until adequate slaughter capacity existed and, again, thereby obtain better prices for the cattle sent to slaughter. Producers entered into agreements to set aside their calves either until 1 October 2005 or 1 January 2006. They received a per head payment, which was intended to assist with feed costs. Applications were processed on a first-come, first-serve basis until provincial set-aside targets were met.

[427] This program was jointly funded by the federal government and some of the provinces. There is agreement between the parties that the federal government paid out $112,842,640 to cattle producers, again from the Consolidated Revenue Fund. The prairie provinces, Ontario and British Columbia paid $64,818,532, for a total payment to cattle producers under this program of $177,661,172, rounded to $177.7 million.

BSE Recovery Program Phase 4 – Herd Management Program

[428] This program was funded by the federal government, but only Quebec participated. The program was authorized by OIC P.C. 2005-1253, approved on 27 June 2005. The objective of this program was to ensure that older animals could be marketed and disposed of properly and herds could be rejuvenated. Payments were only made to producers in Quebec. It is agreed that the federal contribution was $9,000,000, paid from the Consolidated Revenue Fund, and that Quebec paid $5,842,927 for a total payment to cattle producers of $14,845,927, rounded to $14.8 million.

Transitional Industry Support Programs (“TISP”) – Direct and General

[429] As the CAIS program had only been established in 2003, and many farmers had not yet enrolled when the border closed, the federal government identified a need for interim support programs to get cash to cattle farmers. This was also intended to help producers keep their herds together and to prevent cows from being culled and put into waste dumps. As Dr. Hedley explained:

> The avoidance of putting cows, cull cows into a waste dump was really a major issue here. And the same with bulls after about four years of age. The reason for that is that if you keep them longer in a herd, you're going to be breeding their daughters, which is inbreeding and it's something that you want to avoid. So you've got to turn your bulls over the same as you turn your cows over. But again, it's to keep that herd intact. In fact, what you find is that particularly in western Canada a lot of the cow calf guys did not cull their cows in 2003 and they didn't cull them in 2004. They kept them and bred them again. More valuable to have the calf in the future than it was to take a loss on that cull cow. The pure economics of what they were doing and it was individual decisions. This encouraged keeping that herd together rather than losing a lot of that genetic material.

[430] Accordingly, pursuant to s. 12(5) of *FIPA*, the Transition Industry Support Programs ("TISP") were established by OIC P.C. 2004-374, approved on 31 March 2004. The OIC authorized a federal contribution of up to $928,000,000 and specifically stated that it was providing "transitional support to the cattle industry."

[431] The TISP-Direct Program was funded solely by the federal government and involved a direct payment to cattle producers based on the number of head of cattle, including calves, owned by them as of 23 December 2003. There is no dispute that the federal government made payments under this program to cattle producers for cattle across Canada of $579,187,935, which came from the Consolidated Revenue Fund. There is no dispute that this amount should be treated as a BSE offset.

[432] TISP-General was a program available to the broader agricultural sector, including cattle farmers, to bridge them to the CAIS program.

[433] Dr. Hedley, using the same methodology as he used for CAIS, calculated that the amount of payments made under TISP-General by the federal government to producers who farmed cattle was $56,803,630. Although Dr. Groenewegen asserted that the TISP-General payments should not be included as offsets, in closing argument the plaintiff agreed that this amount should be treated as an offset "under the principle of mitigation."

[434] Accordingly, both TISP-Direct payments of $579,187,935 (rounded to $579.2 million) and TISP-General payments of $56,803,630 (rounded to $56.8 million) are included as offsets to the losses suffered by the plaintiff Class.[23]

Farm Income Payment Programs ("FIP") - Direct and General

[435] The Farm Income Payment Programs ("FIP") were authorized by OIC P.C. 2005-0478, approved on 31 March 2005, pursuant to s. 12(5) of *FIPA*. These programs were essentially a continuation of the TISP programs for the year 2005, to assist producers during this period of

[23] The TISP-Direct amount is included in calculating the total of BSE-specific payments. TISP-General is included in the other generally available assistance programs total.

historically low incomes. If a farmer had received a TISP payment, the farmer would also receive a FIP payment. The OIC authorized a total federal contribution under these programs of up to $996,500,000.

[436] FIP-Direct was funded solely by the federal government from the Consolidated Revenue Fund. It provided for direct payments to cattle producers based on a per-head payment on cattle held by producers. There is no dispute that the federal government made payments under this program to cattle producers for cattle across Canada of $135,123,161.

[437] FIP-General was a program similar to TISP-General. It applied to all agricultural production, from cattle and other livestock, to crops and Christmas trees. Dr. Hedley calculated that the amount of payments made under this program by the federal government to producers who farmed cattle, based on using the share of cash receipts for cattle and calves as a percentage of provincial cash receipts, was $197,957,239. This calculation was accepted by the plaintiff's expert, Dr. Groenewegen, and the plaintiff agreed in closing argument that this amount should be treated as an offset to the losses of the Class on the same basis as the TISP payments.

[438] Accordingly, the FIP-Direct amount of $135,123,161 (rounded to $135.1 million) and the FIP-General amount of $197,957,239 (rounded to $198 million[24]), are offsets to the losses claimed by the plaintiff Class.[25]

Milk Price Increase 2005-2006

[439] In 2005 and 2006, to offset a price decrease resulting from the fall in price of culled cattle that was affecting dairy farmers, the Canadian Dairy Commission raised the price of industrial milk by $1.66 per hectolitre for 12 months, commencing 1 February 2005. Five provinces also applied the price increase to what is known as Class 1, or fluid milk. It is agreed that dairy producers were paid a total of $96,695,150 (rounded to $96.7 million) resulting from this increase which should be treated as an offset to losses claimed by the Class.

Other federal BSE-specific programs

[440] Canada also established other BSE-specific programs that provided benefits to cattle producers. These included programs to assess and assist slaughterhouse capacity, such as the inventory pricing incentive in Phase 1 of the BSE Recovery Program, as well as equity and loan loss assistance for processors. Animal identification and traceability programs were instituted which, among other things, were intended to maintain consumer confidence in Canadian beef. Market development programs were also put in place to promote consumption of Canadian beef, in Canada and abroad. The federal government also contributed to provincial-led disposal

[24] Dr. Groenewegen rounded this number down in his final calculations to $197.9 million. I have rounded up for consistency.

[25] As with TISP, the FIP-Direct amount is included in calculating the total of BSE-specific payments. FIP-General is included in the other generally available assistance programs total.

initiatives dealing with SRM from ruminants. Canada does not seek to have any of the amounts disbursed in these programs treated as offsets to damages.

Provincial programs

[441] All provinces except Newfoundland and Labrador contributed to the BSE-specific programs. Some provinces provided funding through programs of their own totalling $345,375,912, rounded to $345.4 million, which it is agreed should be deducted from losses.

Part IX - The aftermath: CFIA investigation and the decline of BSE

[442] Canada conducted an investigation into the origin of BSE in Canada which culminated in an April 2008 report, "The Natural History of Bovine Spongiform Encephalopathy in North America." Dr. Kellar authored Study I and Study III of the report, and co-authored Study II.

[443] Part of Dr. Kellar's study included an investigation of all the UK imports. This was conducted by Dr. John Campbell, building on the assessment by Dr. Koller prepared in December 1993. Dr. Campbell's report identified 184 animals imported from the UK and Ireland between 1982 and 1990. He determined that 106 did not enter the feed chain, having been destroyed in quarantine following the DePalme cow diagnosis in 1993, exported, or had died and been buried on farms. Of the remaining 78 animals, 10 had arrived from Ireland, which Dr. Campbell eliminated from consideration because "[Ireland] was a much lower risk country."

[444] That left 68 remaining animals which had entered the feed chain in Canada. Of them, 10 were determined to be of high risk based on their herds of origin in the UK. Seven were located in Alberta, and two of those were born in the same herd and birth cohort (within 12 months) of the DePalme cow. The seven high risk Alberta animals included the Jerram cow that had shown symptoms consistent with BSE when slaughtered in 1992.

[445] Dr. Kellar and his colleagues concluded that infectivity likely entered the feed chain from one or more of these animals rendered between 1991 and 1993. MBM containing BSE was likely consumed by Canadian born animals at that time which incubated the infection and were slaughtered before showing any clinical signs. The infection was then recycled through them into MBM that was consumed by calves, including the McCrea cow, in the spring of 1997 prior to the enactment of the Feed Ban.

[446] The BSE epidemic in the UK peaked in 1992 with over 37,000 cases in that year. By 1997, there were less than 5,000 cases and in 2003, just over 600. The UK had over 181,000 confirmed cases between 1989 and 2006. By 2009, only 12 cases were reported in the UK. In 2018, just one case was reported, in Scotland.

[447] BSE cases are extremely rare today. Only 5 cases were reported worldwide in 2015, just two in 2016 and one in each of 2017 and 2018. Among European countries, only Ireland (1589) and Portugal (1030), saw over 1000 cases by 2006, although France had almost 1000. Most of these cases occurred in the early 2000s. BSE was experienced in at least 28 other countries. Dr. Hope noted that only 60 cases have been seen outside Europe.

[448] In January 2005 two additional cases of BSE were confirmed in Canadian-born cattle which, Dr. Kellar concluded, were caused by contaminated feed. Through 2020, 20 cases of BSE have been reported in Canada and six in the United States. Of the six US cases, one was the Washington cow born in Canada, and the others had "atypical" BSE, a form of the disease identified in the early 2000s that appears to develop spontaneously and occurs largely in animals over 8 years of age.[26] Of the 20 Canadian cases, two were atypical, and there has only been one case since 2011, in 2015.[27] The more recent US cases were reported in 2017 and 2018. As Dr. Thiermann noted, the lower reported incidence of BSE in the United States may well be due to a lack of effective monitoring and surveillance, a view shared by Dr. Kellar and Dr. Hope. Dr. Beckett also acknowledged the possibility that BSE cases "existed undetected" in the United States.

[449] There is no evidence of any trade or economic consequences for Canada arising from the BSE cases after the McCrea cow diagnosis in May 2003. As noted, the border did gradually reopen, first for products from cattle under 30 months old, and then for live cattle under 30 months of age on 18 July 2005, and eventually to all live animals born after 1 March 1999 in November 2007. This ensured that all animals were born well after the Feed Ban which had been implemented in 1997. As Dr. Thiermann's evidence raised, rather than the total ban that was imposed by the US, these limited restrictions could have been implemented immediately, in 2003. Indeed, Dr. Thiermann was critical of the United States for imposing an import ban on Canada at all. He testified that this was not required by the *Terrestrial Code* and, in his view, was unjustified under the SPS Agreement.

[450] The novel vCJD has seen 178 cases in the UK, the last one reported in 2016 with onset in 2014. 44 cases have been identified in Europe, the last one in France in 2019, and 11 elsewhere – including four in the US and two in Canada reported in 2002 and 2011.

Part X - The independent expert evidence on BSE

[451] The parties called two independent experts on BSE. The plaintiff called Dr. Samuel Beckett, an Australian veterinary epidemiologist with a specific expertise in biosecurity and risk management. The defendant called Dr. James Hope, a biochemist/microbiologist who has been involved in studying TSEs and BSE since the emergence of BSE in the 1980s.

Dr. Beckett's evidence and the Australian situation

[452] Since 2001 Dr. Beckett has worked for various governmental agencies in Australia and with consulting firms. In 2001 he coordinated the preparation of a risk assessment on BSE for Biosecurity Australia, part of the Australian government, which concluded that the risk of BSE arising in Australia was negligible (the "Australian risk assessment"). This risk assessment was

[26] Atypical BSE is discussed below when addressing Dr. Hope's evidence.
[27] As these Reasons were being finalized, an atypical case of BSE was reported in Alberta, the first case in Canada in over six years: *Toronto Star*, January 12, 2022, page B1.

Dr. Beckett's first exposure to BSE in his professional work. Dr. Beckett provided a helpful summary of the development of the science of BSE and of Canada's response to the threat of BSE.

[453] Dr. Beckett was critical of the design of Canada's Monitoring Program, which failed to restrict the movement of the UK imports or prevent their sale for slaughter. In response to the question of whether the Monitoring Program adhered to "best practices in animal disease control", he recognized that such principles or practices did not exist but nevertheless stated that "it can be inferred" from Canada's failure to prevent BSE infecting Canadian cattle "that the Canadian government's monitoring program did not adhere to best practice principles in animal disease control." He noted the Monitoring Program failed to require owners to notify authorities of the movement of animals or to maintain records of them. As Dr. Beckett stated, "[t]his is difficult to reconcile with the import ban itself, which was implemented on account of the threat that high-risk UK and Irish animals were thought to represent to the Canadian cattle herd."

[454] Dr. Beckett stated that the Monitoring Program failed in its implementation as well, as it did not prevent the Jerram cow from being slaughtered and rendered, despite showing symptoms, and there was no notification of it to officials in Ottawa.

[455] The Monitoring Program was contrasted by Dr. Beckett with the more rigorous Australian quarantine surveillance program that he said removed the UK imports from the food and feed chain. However, Dr. Beckett was unable to confirm that the quarantine surveillance program in effect in 1990 contained the same restrictions as a later program instituted in 1996 with which Dr. Beckett was familiar, and records he obtained from 1990 only refer to "tracing" the UK cattle, not isolating them. On the other hand, the paper sent by Dr. Haslam, of the Australian Embassy in Washington, D.C., to Dr. Willis in August 1994 stated that the "traced animals" "are subject to life-long quarantine surveillance involving official registration, notification of movement or change of ownership, notification of clinical abnormality, veterinary post-mortem and laboratory examination of the brains of mortalities, and periodic official veterinary examination." Additionally, a European Union ("EU") geographical risk assessment completed in 2000 stated that all UK imports in Australia were removed from the feed chain in 1990, although no source is mentioned. Consequently, it appears that Australia had a more rigorous monitoring of cattle than Canada, and took steps to ensure the UK cattle were kept out of the food and feed chain.

[456] In Dr. Beckett's opinion, a ban on feeding ruminant protein to ruminants should have been implemented in Canada in 1993, "and no later than 1994" following the DePalme cow and the APHRAN 1994a risk analysis. He testified that a feed ban would have been "prudent" in 1990.

[457] Dr. Beckett was of the opinion that it was not reasonable for Canada to have "relied solely on a hypothesis about the dilution of infectious material during the period 1991 to 1994 when making the judgement that it was highly unlikely that an imported animal with BSE that had gone to routine slaughter or died would introduce BSE into the Canadian cattle herd." Dr. Beckett also stated that it was unreasonable of Canada not to have reconsidered this issue in light of the "interim results" of the CVL attack rate studies and what he describes as "the continued strength" of the packet theory.

[458] Dr. Beckett did not explain why the packet theory had "continued strength." Although Dr. Wilesmith and Dr. Kimberlin had recognized the theory in 1991, they continued to identify dilution as a factor that reduced the risk of BSE, and had concluded that there was a low risk of BSE developing from imports, as seen in Dr. Kimberlin's paper for the OIE in 1992.

[459] The CVL attack rate studies began in January 1992. The first results showing that even 1g of "BSE-affected cattle brain homogenate administered orally on successive days" could lead to infection were known within the CVL in September 1994. According to Dr. Beckett the results were "reported informally amongst UK officials", although he cites no support for this limited dissemination of information. Dr. Beckett referred to the results being published in 1996, but asserted that there was general knowledge of those studies as of 1995 – 1996.

[460] General knowledge of these attack rate studies before, at the earliest, August 1996, is not supported by the evidence. As discussed above dealing with knowledge of BSE transmission during this period, the interim results of the attack rate studies obtained in September 1994 were not made widely known until they were referred to in an article in *Nature* published in August 1996. Dr. Bradley did not share them with Dr. Kellar in their correspondence in 1996. Dr. Wells himself only published the preliminary results in 1998, and the final results were not published until 2007. As I discuss below, Dr. Hope, who was involved in the study of BSE in the UK at the time, doubted that the preliminary results were shared with the international community prior to the publication of the article in *Nature*. Accordingly, following the plaintiff's approach, which I accept, that facts become general knowledge in the scientific community when they are published in major scientific journals, I conclude that the interim results of the attack rate studies were not known until at least August 1996. This was after the WHO recommended feed bans in April 1996, and after countries, including Canada, were taking steps to implement such bans.

[461] Further, as Dr. Beckett conceded in cross-examination, the article identified "key questions" that remained to be answered, including the degree of infectiousness contained in contaminated feed. Dr. Beckett agreed that there is a difference between feeding brain homogenate directly to animals, and rendered meat and bone meal as contained in animal feed. He recognized that the titre, or concentration, of infectious prion is going to be lower in material that has gone through the rendering process.

[462] Dr. Beckett's evidence was that Australia banned feeding ruminant material to ruminants in 1997, the same year as Canada. Dr. Beckett gave little information on the use of MBM other than to quote the Australian risk assessment of 2001 which stated only that "[a] very small proportion (approx. 1-2%) of MBM produced in Australia was used in cattle feed."

[463] Despite having imported approximately 204 cattle from the UK in the 1980s prior to the UK Feed Ban, Australia also did not treat it as a matter of urgency to implement a feed ban in 1996 immediately after the WHO announcement even though, as Dr. Beckett acknowledged in his report, some UK imports "will have been slaughtered or died before the cessation of imports and the commencement of quarantine observation" and that it "is likely that the remains of these animals will (in whole or part) have entered the animal feed chain." Although the Australian risk assessment in 2001 found that of the 204 cattle imported from the UK between 1980 and 1988,

only five posed a risk from recycling, this was not known in the 1990s prior to implementing the Australian feed ban. In this context, Australia's situation had similarities to Canada.

[464] The Australian risk assessment of 2001 also discussed Australia's risk of exposure if at least one BSE-infected animal had been imported and entered the feed chain prior to Australia's feed ban. It referred to a number of factors that would reduce the risk including the efficacy of the Australian rendering systems, the carcass components rendered into MBM and the titre, or concentration, of BSE infectious agent in the carcass components, and the impact of dilution.

[465] The Australian risk assessment noted that Australia's rendering practices "are likely to have provided a 'degree of inactivation' sufficient to prevent infection, should livestock have been fed MBM derived from a BSE-infected carcass." It also discussed the impact of mixing SRM with low-risk materials, and the very small number of animals that might carry infection in concluding that "a dilution in the titre of infected material of at least several orders of magnitude would be expected." The Australian risk analysis also contrasted the dilution effect with the situation in the UK, stating that "dilution of this magnitude was not a feature of the situation in the UK prior to the BSE epidemic" where many animals were infected.

[466] Dr. Beckett acknowledged that the Australian risk assessment also relied on studies by Dr. Wells from 1994, 1995 and 1998 that suggested that tissues from the central nervous system of cows "were *not* infective until the onset of clinical illness" (emphasis in original).

[467] The consideration of these factors is very similar to the approach taken by Canada in the early 1990s. Indeed, in cross-examination Dr. Beckett agreed that one could substitute "Canadian" for "Australian" in the Australian risk assessment conclusion on whether a slaughtered infected (incubating or clinical) animal rendered to MBM would lead to infectious MBM for Australian cattle, which stated:

> When carried into the Australian context, this assessment showed that the titre of BSE infective agent in MBM was likely to have been substantially lowered by; (a) cach of the various rendering practices used in Australia, (b) the degree of dilution that would have occurred in Australia if carcass components a single infected animal had been combined with a large number of uninfected animal, and, (c) the additional dilution that would have resulted from localisation of infection within the small intestine of incubating animals. Overall, the likelihood that MBM derived from an infected animal would have been infectious to Australian cattle was considered very low.

[468] Dr. Beckett quoted the Australian risk assessment in his first report, written in 2014, on the issue of the amount of MBM contained in cattle feed. At that time he did not express any reservations about the risk assessment although, curiously, he did not list it as one of his references. At the trial, however, Dr. Beckett sought to distance himself from the Australian risk assessment. He said that even though he wrote much of it, it was a team effort. Dr. Beckett said that in hindsight, having learned more about BSE, there are aspects of the report, including dilution, that he would deal with differently today.

[469] Dr. Beckett said he was reluctant to criticize the report as he is now (or is again) an employee of the Australian government, while in 2014 when he was retained by the plaintiff and wrote his initial report he was a private consultant. When pressed on whether he had reservations about the report or whether his views had changed, Dr. Beckett retreated and said that he was unwilling to comment on it, saying that he had assumed that the risk assessment would not be part of the discussion in his cross-examination, and apologized for that.

[470] I found Dr. Beckett's reticence to say how his views of the Australian risk assessment might have changed, and the fact that they have changed based on information he has learned more recently, significant. Dr. Beckett's work on the Australian risk assessment was mentioned by him at the outset of his testimony. The fact that he was nominated for an award for his work on it is mentioned in paragraph 5 of his Affidavit. As an expert witness, regardless of his current employment, Dr. Beckett should not have been surprised that the risk assessment would come up in his cross-examination. Further, if he was uncomfortable with the findings in that document, he ought to have said so in his 2014 report, or in his responding report prepared in 2019. His failure to do so leads me to reject the cloud he wished to put on passages of the Australian risk assessment that showed similar thinking between the Australians in 2001, and Canada in the 1990s. In addition, any recent change in Dr. Beckett's views stems from applying hindsight rather than considering the knowledge of the time.

Dr. Hope's evidence

[471] Dr. Hope became the head of the Neuropathogenesis Unit ("NPU") in Edinburgh after Dr. Kimberlin left in 1988. Dr. Hope has been involved in the study of BSE almost from the outset of the discovery of the disease, beginning in 1987. He worked with Drs. Wilesmith, Wells, Bradley and others during the 1980s and 1990s at the height of the BSE epidemic, and has worked on TSE and BSE issues throughout his career, largely in public sector positions at the UK's Animal Health and Veterinary Laboratory Agency, including as "Lead Scientist TSE & Animal By-Products." He participated in the Southwood and Tyrrell reports and testified at the BSE Inquiry. Dr. Hope has provided extensive expert advice to the EU's European Food Safety Authority ("EFSA") as a founding member of the Biological Hazards Panel, and has represented the EU as an expert at the European Court of Justice and on various trade delegations to Asia.

[472] Dr. Hope, a biochemist and microbiologist, provided the court with detailed evidence on the science of TSEs, including the nature and characteristics of prions. In discussing the pathogenesis of the disease, he emphasized the importance of the route of infection; for example, injecting an infectious agent into the brain is different from ingesting it orally, or from having infection in the lymphoreticular system which then may slowly develop and spread. As a progressive neurological disease, Dr. Hope also agreed with the view at the time, confirmed later in the 1990s, that the titre of infectivity in animals is lower during the pre-clinical phase, and increases as the disease approaches and reaches the clinical phase. The studies, he said, showed "a timing and tempo of pathogenesis, including a long pre-clinical/sub-clinical phase." Dr. Hope also observed that a heat-treated infectious agent may be much less efficient at spreading infection, and take much longer to develop disease.

[473] Dr. Hope's evidence highlighted many uncertainties about BSE. He noted that there is uncertainty around, among other things, the origin of BSE, how the abnormal prion is created and replicates itself, the relative efficiencies of transmission, why normal deactivation procedures (pressure and heat in the rendering process) do not totally eliminate infectivity, and whether and to what extent BSE is zoonotic, or has the ability to infect humans. Dr. Hope also expressed the view that it is likely that the UK herd was exposed to BSE prions several years before the original estimate of 1982.

[474] Dr. Hope addressed the history of the science around BSE and when facts about the disease would have become common knowledge in the international scientific community. Dr. Hope agreed that such common knowledge would have existed following the publication of findings in the scientific literature. I have reviewed several of the most significant findings, and their publication dates, earlier in these Reasons.

[475] Dr. Hope described the two types of BSE which are now recognized: "classical BSE", which is what afflicted the UK in large numbers, and the DePalme cow and the McCrea cow, and which is attributed to having consumed contaminated feed; and "atypical BSE" which appears to have emerged spontaneously, perhaps through a genetic mutation. There is also an hypothesis that BSE arose spontaneously in the UK cattle herd, but became an epidemic as a result of rendering and feed practices.

[476] Atypical BSE was identified in the early 2000s and tends to occur in animals over eight years old. Though relatively few in number (a little over 100 reported worldwide), atypical cases have been reported in Europe, the United States, Brazil, Japan and Canada. The US has reported five atypical cases between 2004 and 2018, and Canada has had two cases, in 2006 and 2007[28]. As identifying the cases depends on good surveillance, Dr. Hope believes there have been more, but noted that it is rare. The OIE *Code* does not distinguish between classical and atypical BSE.

[477] Dr. Hope discussed the challenges of determining the minimum infectious dose needed to transmit BSE. In addition to the studies by Dr. Wells and others at the CVL, Dr. Hope conducted studies at the NPU in the early 1990s involving sheep and goats which suggested that a small amount of infectious material could transmit BSE, but the data was "paradoxical" because not all animals became infected and they could not base any conclusions on it. Dr. Hope therefore stated:

> In 1990-2000, to my knowledge, there was neither a simulation, probabilistic model of the distribution of residual infectivity in the different bovine by-products of the UK rendering industry or the input numbers of possible prion titre, inactivation co-efficient, product yield, and species and age profile, etc to warrant this calculation. In, say, 1993 or 1997, to my knowledge no credible, quantitative estimate of the level of BSE prion (hazard) in RMBM (or other fractions of the rendering process) was possible to inform the risk management process.[Emphasis added.]

[28] An additional atypical case in Alberta was reported as these Reasons were being completed: *Toronto Star*, January 12, 2022, page B1.

[478] Indeed, Dr. Hope's evidence is that "a 'quantitative' measure of infectivity and distribution levels….remains an unknown feature of prion biochemistry, even today."

[479] Dr. Hope also discussed the incidence of cattle in the UK which developed clinical signs of BSE that were born after the 1988 UK Feed Ban (or "BABs", for "born after the ban", as they were called), beginning in 1991, and even some born after a reinforced feed ban, which prohibited feeding ruminant protein to any animals, implemented in 1996. As the UK revised its feed ban from the original ban in 1988, it is asserted by Dr. Beckett, for example, that Canada ought to have adopted a more comprehensive ban in 1997 mirroring the enhanced UK ban. Leaving aside that Europe did not implement such a reinforced ban until 2001, and that the UK and other European countries had animals born after the reinforced ban ("BARBs") which developed BSE, this issue is not for me to decide. The facts giving rise to this case deal with whether Canada's failure to ban the feeding of ruminant protein to ruminants prior to August 1997, which caused the McCrea cow to have BSE as confirmed in May 2003, was negligent. I do not need to assess the efficacy, or reasonableness, of the scope of the Canadian Feed Ban itself.

[480] What the BABs and BARBs demonstrate, however, together with the existence of atypical, or spontaneous, BSE, as Dr. Hope pointed out, is that "it is difficult to work out the source of infection in many, if not all, of these cases with any certainty, and this uncertainty confounds the logistics of imposing an effective feed ban even in the present day." As Dr. Hope said, "[t]here are indications that, even with the insights from the UK's evidence-led approach to BSE controls, the Canadian indigenous 'event' would not have been avoided by a simple feed ban." He gives three reasons:

> Firstly, human exposure to BSE in the UK has recently been inferred to have occurred before 1982 by detection of abnormal prion protein by immunocytochemistry in appendices removed from a cohort of patients prior to 1980. Imports of UK cattle to Canada before 1982 may therefore have been incubating a sub-clinical infection with the BSE prion. Culling and destroying the carcasses of 1982-1990 imports from the UK and Ireland to Canada would consequently not have eliminated risk of exposure of the Canadian cattle herd and, potentially, an indigenous case.
>
> Secondly, the experience of the rest of the world in handling BSE has been that a ruminant protein to ruminant feed ban is not enough to prevent the spread of infection…
>
> Thirdly, one of the corollaries of the prion hypothesis, that a single, misfolded protein or its aggregate is the disease vector, is that this misfolding has a finite probability of occurring anywhere, at any time in a bovine animal or in other species expressing an endogenous prion protein in its cells….

[481] Consequently, Dr. Hope concluded: "Against this background of the science of TSEs, I do not share the confidence and certainty of the Plaintiff that feed bans in 1990 or 1993 in Canada would have prevented a case of BSE in the indigenous Canadian cattle herd."

[482] Dr. Hope is not alone in expressing uncertainty about many things regarding BSE. As a Scientific Opinion prepared by the EFSA Panel on Biological Hazards in 2017 observed, even the hypothesis that BSE originated from cross-species transmission of sheep scrapie is not certain, and other theories continue to be considered.

[483] Dr. Beckett took issue with some of Dr. Hope's work, but much of his response was based on his interpretation of what was common knowledge in the 1990s, including his assertion that the findings of the CVL in 1994 that very small amounts of infectious material could transmit BSE were well known at that time. On this question, I prefer the first-hand evidence of Dr. Hope who, as he pointed out in his responding report, was part of the "BSE research community" at the time who worked professionally with Wells, Wilesmith, Kimberlin, Bradley and others. Dr. Hope notes that he was "trusted" and had "good communication" with Dr. Wells and his team during this period. Dr. Hope doubted that there was communication of the CVL's 1994 attack rate data with the international BSE community prior to publication of interim results in August 1996 in *Nature*.

[484] Further, Dr. Hope has doubts as to the significance of the finding that a 1 gram dose caused infection, noting that putting fresh, infected brain tissue down the throat of a cow through a tube, as was done by the CVL, is quite different from giving an animal a feed supplement containing MBM that has been rendered – "essentially boiled and fractionated" – and is then chewed by the cow. As Dr. Hope wrote in his responding report: "To my mind, scientific proof of the BSE-prion Hazard cannot be extrapolated from the data of the two Attack Rate studies to prove the level of Risk arising from feed additives or sources other than known quantities of a known infective titre of BSE agent that has been suspended in physiological saline solution and then administered to cattle." Put another way, at trial he stated: "I've always been a bit wary about the quotation of this as an indication that a small amount of meat and bonemeal can cause disease in an animal because that's not the experiment that this is."

[485] Dr. Hope did not provide an opinion on Canada's response to BSE. He acknowledged that he did not know very much about Canada's situation, and was not provided with information about it. However, in response to Dr. Beckett's view that Canada should have adopted a UK-style feed ban, Dr. Hope contrasted the situation in the UK where "measures were proportionate to the size of the problem", to Canada where "it would perhaps been not proportionate." In his testimony, Dr. Hope referred to his more recent work with EFSA which considers both precautionary and proportionate responses. He testified that if there had only been one or two animals affected in the UK, a feed ban would have been disproportionate, but with respect to the reinforced ban the numbers "were such that they had to act … with even greater alacrity when it was shown there was a linkage between variant CJD and BSE in March 1996."

Conclusion on the independent BSE experts

[486] Dr. Hope's evidence was very detailed and scientific, but he presented it in a clear and helpful way. I have reviewed it in detail and have found his evidence to be compelling. Dr. Hope frankly highlighted the challenges and complexities associated with assessing the origins, pathogenesis and transmissibility of a newly discovered disease. Dr. Hope had a front row seat to the events in the 1990s interacting with all the experts. He provided insight into the scientific

uncertainties about BSE in the UK in the 1990s as it faced an epidemic not experienced elsewhere that required immediate and serious measures. In particular, Dr. Hope's review of scientific knowledge at the time demonstrated that many things about BSE were unknown including, in particular, the level of infectiousness in subclinical or preclinical animals, and the degree of transmissibility of the BSE infection through feed. This lends support to Canada's position that the risk of transmission through feed was low, having regard to the different circumstances in Canada respecting sheep and scrapie, the small number of UK cattle that entered the feed chain, and the impact of rendering and dilution. Dr. Hope's evidence about pathogenesis and the lower level of infectivity in subclinical animals also provides support for Canada's approach in designing a Monitoring Program that would identify BSE in clinical animals, but not keep subclinical animals from being slaughtered and rendered.

[487] Dr. Beckett provided a summary of the issues and useful information on the situation in Australia in the 1990s. However, Dr. Beckett lacked the expertise on the science that Dr. Hope displayed, and he was selective in what he drew from various papers and correspondence to support his opinion, based on hindsight, that Canada did not act reasonably in designing the Monitoring Program and by failing to implement a feed ban earlier than 1997. Even on the issue of the state of knowledge in the UK as to how small a dose could be infectious, Dr. Beckett acknowledged that he had "forgotten how disparate" some of the results were at the time. The inference that I am asked to draw that Canada ought to have acted like Australia is undermined by the fact that Australia also did not implement a feed ban prior to 1997 even though some UK imports had entered its feed chain, and by the fact that Australia looked at the threat of BSE in terms similar to Canada in the risk assessment authored by Dr. Beckett, among others, in 2001. Accordingly, I place little weight on Dr. Beckett's opinion.

Part XI - Common Issue # 1: Does Section 9 of the *Crown Liability and Proceedings Act* apply?

The pleadings

[488] The first common issue is whether s. 9 of the *CLPA* bars the Class members' claim against Canada. Section 9 of the *CLPA* provides:

> No proceedings lie against the Crown or a servant of the Crown in respect of a claim if a pension or compensation has been paid or is payable out of the Consolidated Revenue Fund or out of any funds administered by an agency of the Crown in respect of the death, injury, damage or loss in respect of which the claim is made.

[489] Canada's Amended Fresh as Amended Statement of Defence pleads, at para. 201, "that the plaintiff and class members benefited from programs paid out of the Consolidated Revenue Fund to compensate or mitigate injury, damage or loss caused by the impact of the discovery of BSE in a Canadian cow in May 2003, and the subsequent international embargo on Canadian cattle and beef." Accordingly, it is asserted that as the plaintiff's claim "is in respect of this same injury, damage or loss, the claim is barred" by s. 9 of the *CLPA*.

[490] In its response to a demand for particulars, Canada stated that "[a]ll programs which are funded fully or partially through the Consolidated Revenue Fund and administered by either the federal government or the provincial governments would trigger the operation of the provisions of section 9… including but not limited to the Bovine Spongiform Encephalopathy Recovery Program, Cull Animal Program, Farm Income Payment Program, Fed Cattle Competitive Market Adjustment Program, Fed Cattle Set Aside Program, Feeder Calf Set Aside Program, Transitional Industry Support Program and the Canadian Agricultural Income Stabilization program."

[491] In closing argument, however, the defendant limited its reliance to the following programs that I have described earlier in these Reasons as "BSE-specific programs":

- BSE Recovery Program: Phase 1 – Slaughter Element;
- BSE Recovery Program: Phase 2 – Cull Animal Program;
- BSE Recovery Program: Phase 3 – Fed Cattle Set-Aside Program;
- BSE Recovery Program: Phase 3 – Feeder Calf Set-Aside Program;
- BSE Recovery Program: Phase 4 – Herd Management;
- FIP-Direct;
- TISP- Direct; and
- Milk Price Increase

[492] Payments made from these funds came from the Consolidated Revenue Fund of the federal government, and were made pursuant to programs established under s. 12 of *FIPA* which authorizes the Minister, in "exceptional circumstances", to "implement such procedures or other special measures…to remedy those circumstances…."

[493] The payments were made to members of the Class. Indeed, there is evidence from Mr. Sears that the representative plaintiff, Flying E Ranche Ltd., received payments under each of the programs except Phase 1. Other Class members who were examined for discovery confirmed that they had also received payments from these programs.

[494] As I have reviewed, the plaintiff agrees that payments made under these BSE-specific programs should be offset against losses suffered by the Class, but disagree that the receipt of such funds bars the action under s. 9 of the *CLPA*.

The statutory framework

[495] Prior to the enactment of Crown liability statutes, individuals could not bring claims against the government other than a suit by way of a petition of right. This was based on the feudal principle that "the King can do no wrong": Peter W. Hogg, Patrick J. Monahan & Wade Wright,

Liability of the Crown, 4th ed. (Toronto: Carswell, 2011), at para. 1.3(c). Over time, laws were enacted to simplify the petition of right process and to provide circumstances and mechanisms for suing municipal authorities and the Crown. Eventually, following the passage of similar legislation in the United Kingdom, Canada passed the *Crown Liability Act*, S.C. 1952-53, c. 30, now incorporated in the *CLPA*, which provides, in s. 3:

> The Crown is liable for the damages for which, if it were a person, it would be liable
>
> (a) in the Province of Quebec, in respect of
>
> (i) the damage caused by the fault of a servant of the Crown, or
>
> (ii) the damage resulting from the act of a thing in the custody of or owned by the Crown or by the fault of the Crown as custodian or owner; and
>
> (b) in any other province, in respect of
>
> (i) a tort committed by a servant of the Crown, or
>
> (ii) a breach of duty attaching to the ownership, occupation, possession or control of property.

[496] Section 9 of the *CLPA*, however, limits the liability of the Crown. The burden is on the defendant to satisfy the court that it meets the criteria in s. 9. Canada submits it has done so, arguing that compensation has been paid out, or was payable from, the BSE-specific programs to the Class arising from the same damage or injury "in respect of which the claim is made." The plaintiff submits, however, that these payments were not the type of "compensation" intended by s. 9, nor were the payments made "in respect of" the same loss asserted in this action.

The purpose and scope of s. 9: the* Sarvanis *decision

[497] The leading case interpreting s. 9 of the *CLPA* is *Sarvanis v. Canada*, 2002 SCC 28, [2002] 1 S.C.R. 921 ("*Sarvanis*"). In that case, Iacobucci J. observed, at para. 20, that the words "in respect of" were very broad, quoting Dickson J. (as he then was) in *Nowegijick v. The Queen*, [1983] 1 S.C.R. 29, at p. 39:

> The words "in respect of" are, in my opinion, words of the widest possible scope. They import such meanings as "in relation to", "with reference to" or "in connection with". The phrase "in respect of" is probably the widest of any expression intended to convey some connection between two related subject matters.

[498] Iacobucci J. went on to note that a payment under s. 9 must be linked to the "event" to which liability is claimed. He stated, at paras. 28-29:

> In my view, the language in s. 9 of the *Crown Liability and Proceedings Act*, though broad, nonetheless requires that such a pension or compensation paid or payable as will bar an action against the Crown be made on the same factual basis as the action thereby barred. *In other words, s. 9 reflects the sensible desire of Parliament to prevent double recovery for the same claim where the government is liable for misconduct but has already made a payment in respect thereof. That is to say, the section does not require that the pension or payment be in consideration or settlement of the relevant event, only that it be on the specific basis of the occurrence of that event that the payment is made.*
>
> This breadth is necessary to ensure that there is no Crown liability under ancillary heads of damages for an event already compensated. That is, a suit only claiming for pain and suffering, or for loss of enjoyment of life, could not be entertained in light of a pension falling within the purview of s. 9 merely because the claimed head of damages did not match the apparent head of damages compensated for in that pension. *All damages arising out of the incident which entitles the person to a pension will be subsumed under s. 9, so long as that pension or compensation is given "in respect of", or on the same basis as, the identical death, injury, damage or loss.* [Emphasis in italics added.]

[499] In *Sarvanis* the Supreme Court held that that an inmate injured while working in a federal penitentiary could sue the Crown for negligence despite the fact that he had, due to his injuries, been receiving disability benefits under the *Canada Pension Plan*, R.S.C. 1985, c. C-8 ("*CPP*"). Despite the breadth of the words "in respect of", Iacobucci J., at paras. 31 and 38, explained why s. 9 did not apply:

> Keeping in mind that s. 9 refers to pensions and compensations "in respect of" particular kinds of events, I am of the opinion that disability benefits under the CPP do not fall within its scope on the ordinary meaning of the words. I concede that the words "in respect of" may encompass more than direct compensation for loss. However, I do not believe that the CPP makes its payments on the same basis as s. 9 seems to require. That is, *s.9 contemplates payment in some manner contingent on the occurrence of an event of "death, injury, damage or loss". A CPP disability benefit, by contrast, is not contingent on events at all, but on the present disabled condition of a qualified contributor under 65 years of age who makes an application for payment.* Whether or not the present serious and long-term disability that entitles an otherwise qualified contributor to receive CPP disability benefits happens to be the result of "death, injury, damage or loss" is not relevant to the determination of eligibility. The only relevant question, assuming a person has met the conditions of eligibility with respect to age and contribution status, is the status of the applicant as disabled at the time the application is made.
>
> …

> Simply put, s. 9 of the *Crown Liability and Proceedings Act* establishes Crown immunity where the very event of death, injury, damage or loss that forms the basis of the barred claim is the event that formed the basis of a pension or compensation award. The CPP, a contributory plan not contingent on death, injury, damage or loss, but rather on physical condition and on adequate quantum and duration of contribution, is a significantly different animal. [Emphasis in italics added.]

[500] Iacobucci J. contrasted the circumstances in *Sarvanis* with statutory schemes that specifically provide that receipt of a pension or benefit removes the right to bring an action. However, he noted the "key difference" in each statutory context cited was "not simply the fact that the bar is repeated in each particular statute" but "that in each case the crucial condition of eligibility is the occurrence of 'death, injury, damage or loss', and that it is because of that occurrence that the pension is received."

Vancise v. Canada

[501] A recent application of s. 9 of the *CLPA* arose in *Vancise v. Canada (Attorney General)*, 2018 ONCA 3, [2018] O.J. No. 16. In that case, an order was made under the *HAA* to destroy a number of cattle which had become infected with anaplasmosis by cattle imported from the United States. Compensation was paid under s. 51 of the *HAA*, but the owner of the cattle nevertheless sued Canada for negligence "in not guarding against the importation of anaplasmosis, and in imposing an inadequate quarantine on his farm": see *Vancise*, at para. 8.

[502] In response to the government's reliance on s. 9 of the *CLPA*, the plaintiff asserted that his claim was not for the destruction of cattle but for the harm to his business. Paciocco J.A., at paras. 12-13, rejected that argument and held that s. 9 applied to bar the action, stating:

> Section 9 is not simply a bar on double recovery. Its effect is to prevent actions for recovery where a government scheme has already provided a form of compensation in relation to the death, injury, damage or loss that is relied on in the action.
>
> The reach of s. 9 is settled. Section 9 has been interpreted to bar actions for additional compensation for the same death, injury, damage or loss for which compensation has been received, even where different heads of compensation are claimed: *Langille v. Canada (Minster of Agriculture)*, 140 N.R. 304; and *Begg v. Canada (Minister of Agriculture)*, 2005 FCA 362, 261 D.L.R. (4th) 36. It has also been interpreted to bar compensation that arises from "the same factual basis as the action": *Sarvanis v. Canada*, 2002 SCC 28, [2002] 1 S.C.R. 921, at para. 28. [Emphasis added.]

[503] In an earlier case, *River Valley Poultry Farm Ltd. v. Canada (Attorney General)*, 2009 ONCA 326, 95 O.R. (3d) 1, leave denied [2009] S.C.C.A. No 259, the Ontario Court of Appeal held, at paras. 73 and 74, in the context of the *HAA*, that "a farmer cannot bypass the underlying intent of the scheme in s. 51 by refusing to apply for compensation…" The bar in s. 9 of the *CLPA* applies whether the farmer applies for compensation or not, as the "combination" of s. 51 of the

HAA and s. 9 of the *CLPA* "demonstrate an express legislative intent to preclude an action for negligence."

North Bank Potato Farms v. CFIA

[504] This brings me to *North Bank Potato Farms Ltd. v. The Canadian Food Inspection Agency*, 2018 ABQB 505 (*"North Bank (ABQB)*"), aff'd 2019 ABCA 344 ("*North Bank (ABCA)*"). Two businesses that farmed potatoes were required to destroy their crops under the *Plant Protection Act*, S.C. 1990, c. 22 ("*PPA*"), following the discovery of potato cyst nematode (PCN) spores in soil samples on the plaintiffs' lands. The presence of PCN required notification to the United States and Mexico which resulted in the closure of the border to seed potatoes for 15 months, causing economic losses to potato farms in Canada. Alberta and Canada developed assistance programs under *FIPA* to provide financial support to the farmers affected by PCN. However, as in this case, the farmers alleged that more was required to compensate them for their losses, arguing that the government relief covered only a fraction of their losses, and they sued the CFIA for negligence arising from its testing, investigation and control measures.

[505] In *North Bank (ABQB)*), Fagnan J. dismissed the action under s. 9 of the *CLPA*, relying on *Sarvanis*, at para. 76:

> [Section] 9 does not require that the payment be in consideration or settlement of the relevant event, only that it be made on the specific basis of the occurrence of that event. The payment need not have fully compensated the plaintiff. Further, advancing specific acts of negligence or new heads of damage does not enable a claimant to avoid the application of s. 9.

[506] The plaintiffs appealed to the Alberta Court of Appeal. Because of the similarities between the assistance programs in this case, Flying E Ranche sought and was granted status to intervene in the appeal.

[507] After a review of *Sarvanis* and other cases including *River Valley* and *Vancise*, the Alberta Court of Appeal agreed with Fagnan J. that the action was barred by s. 9 of the *CLPA*, stating, at para. 20 of *North Bank (ABCA)*:

> As the chambers judge explained, the payments the appellants received under the Alberta Seed Potato Assistance Programs were compensation to address expenses and losses directly and indirectly related to the CFIA's actions and the subsequent border closures. The phrase "in respect of" in section 9 encompasses a broad set of connections between the compensation and the claim: *Sarvanis* at para 22. The relevant consideration is the event; there is no distinction between compensation for a loss alone and compensation for a loss caused by negligence. [Emphasis added.]

[508] The plaintiff nevertheless submits *North Bank* is distinguishable. In my view, however, although there are some differences between *North Bank* and this case, they are not significant, and the similarities support its application here.

[509] The plaintiff argues that *North Bank* involved compensating farmers for the specific actions by the CFIA, including crop destruction and quarantine measures. However, as in this case, *North Bank* did not involve compensation payments under the *PPA*, but involved payments made under *FIPA* (see *North Bank (ABCA)*, at para. 17), pursuant to agreements between the federal government and Alberta, and the federal money came from the Consolidated Revenue Fund. As the trial judge noted in *North Bank (ABQB)*, at paras. 70-71:

> The 2008 and 2009 Assistance Programs were expressly intended to provide financial compensation to assist producers in dealing with extraordinary expenses and losses directly and indirectly related to quarantine measures imposed by the CFIA caused by the discovery of the PCN and the subsequent border closures to Alberta seed potatoes in Mexico and the United States. The 2008 application form specifically states that the purpose of the 2008 Alberta Seed Potato Assistance Program was to assist seed potato producers in Alberta affected by the discovery of PCN in October 2007.
>
> The funding is referred to variably in the documentation as both "assistance" and "compensation". However, the payments were clearly intended to mitigate the adverse financial effects of the regulatory measures on Alberta potato producers following detection of PCN in October 2007. In other words, it was intended to compensate them for the negative impact of the CFIA's actions.

[510] The agreements also referred to the losses caused by "subsequent border closures to Alberta seed potatoes in Mexico and the United States" and therefore clearly went beyond compensation for quarantine and destruction orders. This is similar to the language used in the OICs and agreements which stated that the BSE Programs were "to provide financial assistance to producers of cattle…or other ruminants who have been adversely affected by the suspension of imports", which related to economic losses arising from the suspension of imports.

[511] Accordingly, both this case and *North Bank* involve payments arising from the inability to export products, and it does not matter whether that inability arose directly or indirectly from mandated government action, or government inaction and/or negligence. As the Alberta Court of Appeal stated in *North Bank (ABCA)*, at para. 20, "[t]he relevant consideration is the event; there is no distinction between compensation for a loss alone and compensation for a loss caused by negligence."

[512] Similarly, although the documentation for the payments in *North Bank* referred to payments as both "assistance" and "compensation," the payments were based on a number of factors, including "market loss, production transition" and costs incurred by farmers. This is also true of the BSE programs that dealt with a range of costs and losses suffered by cattle producers due to market loss and managing production.

[513] The plaintiff urges me to reject the reasoning in *North Bank* because the Alberta Court of Appeal erred in stating that the *PPA* does not contain a statutory compensation scheme similar to the *HAA*. As a result, it is argued, the Court did not address "the statutory pattern used by

Parliament when it intends to grant the authority to pay compensation." However, it seems to me that the Alberta Court of Appeal addressed and rejected the argument "that the features of these programs [under the *HAA* and *PPA*] are prerequisites to being captured by section 9." The court stated, at para. 19:

> This is false logic. It does not assist in determining whether payments with other features can also fall under section 9. As the chambers judge demonstrated, precedents have applied section 9 to a variety of claims in cases where detection of disease led to regulatory measures and receipt of compensation from the federal government, even partial compensation.

[514] In my view, therefore, the reasoning in *North Bank* is applicable to this case, and I find it persuasive.

Are the BSE-specific program payments "compensation"?

[515] Nevertheless, the plaintiff has made additional submissions on s. 9 of the *CLPA* and why it should not apply to this case, which I address below.

[516] First, based on the decisions reviewed above, the following principles can be stated respecting s. 9 of the *CLPA*:

- the section bars any action "in respect of" the same "factual basis" or "event" on which previous compensation was paid;
- compensation "may encompass more than direct compensation for loss" and prevents recovery "where a government scheme has already provided a form of compensation" in relation to the loss;
- the section makes no distinction between compensation for a loss alone and compensation for a loss caused by negligence;
- partial compensation is enough to trigger the application of the section; and
- the section cannot be avoided by creative pleadings alleging different heads of damages or by failing to apply for compensation.

[517] The plaintiff argues that the payments made by Canada under s. 12 of *FIPA* do not constitute "compensation." The plaintiff notes that *FIPA* is intended to protect agriculture producers' incomes, as stated in the long title of the Act: *An Act authorizing agreements between the Government of Canada and the provinces to provide for protection for the income of producers of agricultural products and to enable the Government of Canada to take additional measures for that purpose.* The word "compensation" does not appear in *FIPA*, nor does it explicitly authorize compensation payments for losses. This contrasts with specific statutory compensation programs arising from mandatory orders as found in the *HAA* and the *PPA*.

[518] *FIPA*, the plaintiff submits, must be interpreted in "total context", which includes consideration of the "condition of things existent at the time of the enactment": see *Canada 3000 Inc., Re; Inter-Canadian (1991) Inc. (Trustee of)*, 2006 SCC 24, 2006 SCC 24, [2006] 1 S.C.R. 865, at paras. 36-37. In this regard, reference may be made to other statutes dealing with similar subject matter: *Gordon v. Taylor*, 2014 ABQB 11, at paras. 10-11. The plaintiff submits that statutes such as the *HAA* and *PPA* are *in pari materia* to, or deal with the same subject matter as *FIPA*. It is argued, therefore, that the implied exclusion principle should apply and the failure to include "compensation" in *FIPA* must, applying the presumption of consistent expression, be understood to be deliberate in light of its usage in the *HAA* and *PPA*.

[519] Further, as s. 9 of the *CLPA* restricts a citizen's right to sue, the plaintiff argues that it requires a strict interpretation such that any ambiguity should be resolved in favour of the person who is seeking to assert an action: see, e.g., *Berardinelli v Ontario Housing Corp.*, [1979] 1 S.C.R. 275, at p. 280. On this point, the plaintiff argues that "compensation" must be read narrowly to apply only to taking responsibility for a negative outcome, which is different from "assistance" which the plaintiff relates to voluntary payments to ameliorate hardship.

[520] I am not persuaded by these arguments.

[521] I begin with some fundamental principles of statutory interpretation. As the Supreme Court has repeatedly stated, quoting from E.A. Driedger, *Construction of Statutes*, 2nd ed (Toronto: Buttersworths, 1983), at p. 87: "Today there is only one principle or approach, namely, the words of an Act are to be read in their entire context and in their grammatical and ordinary sense harmoniously with the scheme of the Act, the object of the Act, and the intention of Parliament": see, e.g. *Rizzo & Rizzo Shoes Ltd. (Re)*, [1998] 1 S.C.R. 27, at para. 21; *Canada 3000 Inc.*, at para. 36. In addition, "… every word and provision found in a statute is supposed to have a meaning and function. For this reason courts should avoid, as much as possible, adopting interpretations that would render any portion of a statute meaningless or pointless or redundant": see Ruth Sullivan, *Sullivan on the Construction of Statutes*, 6th ed. (Ontario: LexisNexis, 2014), at §8.23.

[522] Accordingly, the word "compensation" in s. 9 of the *CLPA* must be read in a manner that gives effect to the purpose of the section, and of the Act. This is, of course, addressed in *Sarvanis* in which the Supreme Court stated, at para. 28, that "s. 9 reflects the sensible desire of Parliament to prevent double recovery for the same claim where the government is liable for misconduct but has already made a payment in respect thereof."

[523] It is noteworthy that the Supreme Court refers to making a "payment" as opposed to using the specific wording in the section. As Iacobucci J. states in the very next sentence, "the section does not require that the pension or *payment* be in consideration or settlement of the relevant event, only that it be on the specific basis of the occurrence of that event that the *payment* is made" (emphasis in italics added).

[524] Nevertheless, one cannot simply rewrite s. 9 to say "payment" rather than "compensation." Rather, one must consider the nature of the payment to determine whether it should be regarded as compensation.

[525] In this case, the payments in issue were authorized under s. 12 of *FIPA*, which was invoked to address "exceptional circumstances" through "special measures." These two phrases are not defined in *FIPA* but must be read in a manner that gives effect to the purpose of the Act which includes, in its long title, "*to enable the Government of Canada to take additional measures"* to protect farmers' incomes. The breadth of this language must be understood as giving Canada flexibility to take whatever measures it believes are necessary to address an unexpected economic challenge facing farmers. Here, there were clearly "exceptional circumstances" arising from the BSE diagnosis of the McCrea cow and the economic losses resulting from the closure of the border to exports of cattle and beef. This is the same loss over which the plaintiff is suing Canada. The special measures involved close to $2 billion in direct payments to cattle producers to address, at least in part, their economic losses.

[526] The plaintiff also argues that the BSE Recovery Program payments were not a form of compensation because they were to "provide assistance payments primarily intended to incentivize behaviours and manage the national cattle herd", rather than address the market value of the losses. However, as Dr. Hedley put it, the programs were to "provide the incentive to the farmers to do the best thing for their cattle and their own bottom line"(emphasis added).

[527] There is no doubt that the BSE Programs were carefully designed to encourage behaviour that would manage the challenges of the crisis. Simply compensating for destruction of animals or paying money to cover losses would not have accomplished the goal of controlling the stream of cattle and of managing the national herd. As Dr. Hedley said, there are only two ways to store cattle and beef: "One is on the hoof and the other is in the freezer." Consequently, when the border closed, Canada had far more cattle than it could immediately slaughter and had to determine how to slow down the flow of cattle in the system, so that producers would store cattle "on the hoof". Canada addressed the problem in a considered way to ensure the market would function for the length of the export ban, a time period that was hoped to be brief in 2003, but which was not fully lifted for almost five years.

[528] Further, although the BSE Recovery Programs were designed to incentivize behaviour, they did so by making direct payments to cattle producers which reduced their economic losses caused by the declines in price and demand – the same economic losses over which they sue in this action. Phase 1, for example, provided a price deficiency payment directly to producers for cattle slaughtered at low prices between 1 June and 31 August 2003. It encouraged farmers to send animals to slaughter who might otherwise have retained their cattle hoping that prices would rise. The other phases of the BSE Recovery Program also provided direct payments to cattle producers, and while some may have been designed to cover increased costs associated with, for example, delaying the slaughter of animals, all of these payments are acknowledged by the plaintiff to have reduced losses as they are to be applied in reducing any damage award.

[529] In short, while not designed solely to compensate, or to compensate for all market losses, or for all market value decline as a result of the border closure, the payments significantly reduced the economic losses incurred by cattle producers. As the OAE Report stated in 2008, "the federal government provided a cushion to minimize the effects of market loss and hopefully helped the industry to evolve to a more stable position to weather future crises."

[530] As a practical matter, therefore, whether characterized as incentives, or assistance, or compensation, monetary payments were made to farmers that had the effect of compensating them for at least some of their losses, and this was how they were regarded at the time. As Mr. Lavoie put it in his direct examination, these "direct payments were made to cattle producers to compensate them for losses suffered because of the border closures." When challenged in cross-examination on his use of the term "compensation", when *FIPA* and the BSE Recovery Program agreements used "assistance", Mr. Lavoie responded:

> A. No, in this context and in all our day-to-day work, be it compensation, contribution, financial assistance, deficiency payment or whatever, it's always the same thing. It's money from government to producers. And for the producers, it's the same. It's a cheque from government in his mailbox.
>
> Q. Okay. So when you're using the word "compensation," you're saying it's the same thing as assistance or any payment from the government?
>
> A. Yeah. For us, we didn't make a distinction. For us, it was semantic. Maybe – I don't know from a legal perspective what it means, but in our day-to-day work, it was the same thing. [Emphasis added.]

[531] Further, recognizing such payments as compensation does not raise the concern discussed in *Sarvanis*, where the Supreme Court asked rhetorically, at para. 36: "Put another way, why would the *Crown Liability and Proceedings Act* explicitly give so much by removing the common law obstacle, yet tacitly take almost all of it away by the construction of the *Canada Pension Plan* advanced by the Crown?" On the facts of *Sarvanis*, the Supreme Court found that not all pensions apply under s. 9 of the *CLPA*, but only those pensions that are "in respect of" the loss. Here too we are dealing only with payments which were "special measures" under s. 12 of *FIPA* to address an "exceptional circumstance", and not all assistance or other payments that may be made to farmers under that Act such as, for example, the generally available assistance programs which are not relied on by Canada in invoking s. 9 of the *CLPA*.

[532] As to the comparisons with the *HAA* and *PPA*, in my view those Acts are not similar to *FIPA*. Although all three pieces of legislation were enacted around the same time, they are different statutes addressing different needs.

[533] To assess similarity, one must examine how closely related the statutes are in purpose, structure and language: see *Sullivan on the Construction of Statutes*, §13.58. While the Acts may all relate to agriculture, *FIPA* is an economic statute intended, as its long title makes clear, "to provide for protection for the income of producers of agricultural products…." In contrast, the *HAA* and *PPA* deal with animal and plant health. The long title of the *HAA* is "An Act respecting diseases and toxic substances that may affect animals or that may be transmitted by animals to persons and respecting the protection of animals." Section 2 of the *PPA* states that "[t]he purpose of this Act is to protect plant life and the agricultural and forestry sectors of the Canadian economy by preventing the importation, exportation and spread of pests and by controlling or eradicating pests in Canada."

[534] The *HAA* and the *PPA* both grant the government extraordinary powers to order farmers, where necessary, to destroy crops or livestock. In those circumstances, the government may grant farmers compensation for their losses, and the Acts contain comprehensive schemes dealing with the compensation process. *FIPA* contains no such mandatory provisions or compensation process.

[535] The fact that the *HAA* and the *PPA* use both "assistance" and "compensation" may indicate that within those statutes the words bear different meanings: see, e.g., *Agraira v. Canada (Public Safety and Emergency Preparedness)*, 2013 SCC 36, [2013] 2 S.C.R. 559, at paras. 81-84. Indeed, "assistance" in the *HAA*, for example, includes both financial and "technical" assistance "in controlling or eradicating a disease or toxic substance": *HAA*, s. 21; see also *PPA*, s. 10. But in light of the fundamental differences between *FIPA* and the *HAA/PPA* regimes, the fact that the word "compensation" is absent from *FIPA* is of little significance. As Laskin J.A. put it in *University Health Network v. Ontario (Minister of Finance)* (2001), 208 D.L.R. (4th) 459, at para. 31, "legislative exclusion can be implied when an express reference is expected but absent." Simply put, the term "compensation" is not in s. 12 of *FIPA* because s. 12 speaks more broadly, granting authority to take "special measures"; and the word "compensation" is not necessary and would not be "expected."

[536] Accordingly, the *in pari materia* principle and the implied exclusion rule have no application to support a conclusion that "compensation" in s. 9 of the *CLPA* does not include payments made pursuant to special measures under s. 12 of *FIPA*.

[537] A further argument made by the plaintiff is that *FIPA*, unlike the *HAA* and *PPA*, does not contain its own immunity provision, suggesting that it was not intended by Parliament that payments under *FIPA* would bar an action under s. 9 of the *CLPA*. In *Sarvanis*, Iacobucci J. observed, at paras. 36-37, that the *CPP* did not contain its own immunity provision, unlike statutes "which do reproduce the bar of actions" which, he noted, "are comprehensive schemes designed to ensure the efficacious compensation of persons for their injuries and losses incurred in the public service." *Sarvanis*, however, turned on its facts, in particular that the pension in question was not paid "in respect of" the event for which the claimant was suing. Iacobucci J. did not hold that the failure of Parliament to refer to s. 9 or "reproduce the bar of actions" means that s. 9 does not apply, but simply noted that statutes with comprehensive compensation schemes do so to ensure "efficacious compensation" in that context. In light of the differences between *FIPA* and the *HAA/PPA*, and following the principle that legislation means what it says and must be given effect, I see no basis to find that s. 9 of the *CLPA* should not apply to the payments made under the BSE-specific programs.

[538] I am also not persuaded that a "strict construction" against the government should be taken to interpreting s. 9 of the *CLPA*; although the section limits the ability to sue the Crown, the "right" to do so only exists by reason of s. 3 of the same Act, and is not a free-standing civil right. In any event, the plaintiff's submission that "compensation" be read narrowly and be linked to responsibility for a negative outcome is a meaning drawn from the dissenting opinion in *Canson Enterprises Ltd. v. Boughton & Co.*, [1991] 3 S.C.R. 534, at p. 589, a case dealing with equitable remedies that has little relevance to this case. As was stated in *Sarvanis*, at paras. 28-29, s. 9 "does not require that the pension or payment be in consideration or settlement of the relevant event,

only that it be on the specific basis of the occurrence of that event that the payment is made …. This breadth is necessary to ensure that there is no Crown liability under ancillary heads of damages for an event already compensated."

[539] The plaintiff also argues that not all producers may have been eligible for payments from each of the programs, and participation in them was voluntary. However, this is a class action and the payments were to members of the Class which it is agreed should be treated as offsets to the losses suffered by the Class in calculating damages in the aggregate. It is inconsistent with how this action has been pleaded and presented to me to reject the application of s. 9 of the *CLPA* because some members of the Class, although there is no evidence as to how many, may not have received payments under the BSE Programs. As for ineligibility of some members of the Class, again I have no evidence of that; indeed, Mr. Lavoie's evidence was that all sectors were addressed in the recovery programs.

[540] In addition, s. 9 contemplates that money may not have been paid, providing that it applies if "compensation has been paid or is payable" (emphasis added). This also accords with principles of mitigation, accepted by the plaintiff in this case, which include that a plaintiff's failure to take advantage of a program to reduce damages does not prevent the defendant from relying on the program and how it might have mitigated losses.

***Conclusion on s. 9 of the* Crown Liability and Proceedings Act**

[541] Mr. Sears agreed that he had received direct payments under the BSE Recovery Programs "as a cattle producer who had suffered losses arising from BSE" and that those payments should be deducted to determine net losses and damages. The plaintiff agrees that the total payments made under the BSE-specific programs should be credited to the defendant in reducing damages which, in my view, is a recognition by the plaintiff that the program payments have compensated the Class, at least in part, for the losses arising from the BSE event over which it is suing the government.

[542] This admission by the plaintiff brings us back to the purposes of s. 9 of the *CLPA* as articulated in *Sarvinis* and *Vancise*, which are to avoid plaintiffs obtaining double recovery and to address situations where "a government scheme has already provided a form of compensation in relation to the … damage or loss that is relied on in the action." The bar to an action under s. 9 reflects the fact that government, uniquely, has a range of legislative and regulatory tools available to it to address challenges and crises which it can invoke in the public interest. These can include specific compensation schemes arising from mandated government action as found, for example, in the *HAA* and *PPA*, or can be in the form of "special measures" under s. 12 of *FIPA* where, as here, timely payments were made from the public purse to farmers affected by BSE, which reduced their losses.

[543] In my view the BSE-specific program payments provided compensation to the Class in respect of the same losses over which this action is brought. Accordingly, I conclude that s. 9 of the *CLPA* applies and the action against Canada is barred.

Part XII - Common Issue #2: Were the defendants negligent and if so when and how?

The pleadings

[544] In its Further Fresh as Amended Statement of Claim the plaintiff asserts a number of ways in which Canada was negligent. These claims include that Canada was negligent in (1) failing to prevent UK cattle from entering the Canadian animal feed chain; (2) failing to implement a ban on ruminant meat and bone meal in feed for cattle in 1990 or "by at least 1994"; (3) failing to warn cattle producers of the risk that BSE had entered the feed chain; and (4) taking 17 months to implement a ruminant feed ban following the recommendation to do so by the WHO in 1996.

[545] The plaintiff claims that Canada owed a duty of care to cattle farmers due to its statutory obligations under the *ADPA*, the *HAA*, *Feeds Act*, and other legislation intended to safeguard animal health, and as a result of interactions with the Class, and that cattle producers relied upon the government's technical and scientific expertise within AAFC to prevent foreign diseases from infecting the Canadian cattle herd.

[546] In its written closing argument, the plaintiff summarized its claim as follows:

> The Class asserts that Canada was negligent in two specific respects: (i) permitting more than 60 of the 182 UK imports to enter the Canadian cattle feed chain, and (ii) failing to take appropriate steps to prevent development of BSE in Canada, and thus protect the Canadian cattle herd, when Agriculture Canada became aware of the likelihood of BSE infection in the Canadian cattle herd.

[547] As counsel for the plaintiff put it, Canada had two chances to prevent BSE, in 1990 and 1994. The plaintiff identified three ways in which Canada was negligent:

1. Canada failed to conduct a safety assessment before amending the *Feeds Regulations* in January 1990;

2. Beginning in February 1990, Canada failed to prevent cattle that had been imported from the UK from entering the animal feed chain[29]; and

3. Canada failed to take steps in 1994 to address the threat of BSE that had entered the feed chain following the rendering of approximately 60 UK imports since 1990.

[548] In its Fresh as Amended Statement of Defence, Canada denies that it owed a duty of care to the Class under statutes and because there is insufficient proximity between Canada and cattle farmers. Further, Canada pleads that policy considerations would negate any duty of care being found in this case as the alleged negligence involved policy and legislative decisions by

[29] Counsel for the plaintiff identified Canada's failure to prevent the rendering of the Jerram cow as an additional, fourth way in which Canada was alleged to be negligent; however, the Jerram cow is part of the broader assertion of negligence in failing to prevent imports from entering the feed chain, and I address it in that context.

government in responding to the threat of BSE. Canada also pleads that its actions were in accordance with national and international scientific knowledge and standards. In closing argument Canada argued that its actions were reasonable and did not breach the standard of care of a reasonable regulator.

Duty of Care: the* Anns/Cooper *test

[549] The first step in a negligence case is to determine whether the defendant owed a duty of care to the plaintiff. This involves assessing whether there is sufficient proximity between the plaintiff and the defendant, and whether it was foreseeable that the plaintiff would be affected by the defendant's conduct. If there is "'a sufficiently close relationship between the parties' or 'proximity' to justify imposition of a duty" then one must ask whether there are "policy considerations which ought to negative or limit the scope of the duty, the class of persons to whom it is owed or the damages to which breach may give rise?" This is known as the *Anns/Cooper* test, as summarized in *Childs v. Desormeaux*, 2006 SCC 18, [2006] 1 S.C.R. 643.

[550] The *Anns/Cooper* test is derived from the decision of the House of Lords in *Anns v. Merton London Borough Council*, [1978] A.C. 728, adopted by the Supreme Court of Canada in *Kamloops v. Nielsen* (1984), 10 D.L.R. (4th) 641, at p. 661, and modified in *Cooper v. Hobart*, 2001 SCC 79, [2001] 3 S.C.R. 537. As *Anns* only spoke of the need to find foreseeability at the first stage, *Cooper* added the concept of "proximity", which it described, at para. 22, as a "close and direct relationship of proximity or neighbourhood."

[551] *Cooper* modified *Anns* in another way. The Supreme Court stated at para. 36 that when a case falls within, or is analogous to, an established category in which the courts have recognized foreseeability and proximity such that "a *prima facie* duty of care may be posited", then it is not necessary to consider the second part of the test involving policy considerations. The *Anns/Cooper* framework was very recently confirmed by the Supreme Court in *Nelson (City) v. Marchi*, 2021 SCC 41, at paras. 15-19 and 33.

[552] Addressing policy considerations ensures that a duty of care is not cast too widely. Policy considerations arise where there are concerns about indeterminate liability, such as in cases of pure economic loss. They also arise where a public authority is the defendant, as courts must be mindful of not interfering with policy decisions of government and be respectful of the competing, and sometimes conflicting, priorities and interests that regulators must address. Accordingly, one of the key questions is whether the plaintiff is suing over a policy decision or over operational activities.

[553] I must first consider, therefore, whether the duty of care asserted to be owed by the defendant to the plaintiff in this case is an established category, or analogous to an established category recognized in the other cases. If not, then I must move to the two-part *Anns/Cooper* test and consider proximity which, if established, requires me to then consider policy reasons why a duty should not be found in the circumstances of the case.

[554] The plaintiff bears the burden of proving proximity and foreseeability on a balance of probabilities. At the second stage dealing with policy considerations, the onus shifts to the defendant: *Rausch v. Pickering (City)*, 2013 ONCA 740, 369 D.L.R. (4th) 691, at para. 52.

Analogous and established categories of duty of care

[555] In *Cooper* the Supreme Court identified a number of situations where a duty of care has been recognized, such as where public authorities have undertaken to inspect buildings, maintain roads, or engage in joint ventures with private entities. Negligent misstatements, misfeasance in public office and a duty to warn of a risk of danger have also been identified as situations in which a duty of care arises: *Cooper*, at para. 36.

[556] However, since *Cooper*, the Supreme Court has noted that previously identified categories of duty of care "should be framed narrowly": *Rankin (Rankin's Garage & Sales) v. J.J.*, 2018 SCC 19, [2018] 1 S.C.R. 587, at para. 28. This followed from the decision of the Court in *Deloitte & Touche v. Livent Inc. (Receiver of)*, 2017 SCC 63, [2017] 2 S.C.R. 855, which stated, at para. 28:

> It follows that, where a party seeks to base a finding of proximity upon a previously established or analogous category, a court should be attentive to the particular factors which justified recognizing that prior category in order to determine whether the relationship at issue is, in fact, truly the same as or analogous to that which was previously recognized. And, by corollary, courts should avoid identifying established categories in an overly broad manner because, again, residual policy considerations are not considered where proximity is found on the basis of an established category (*Cooper*, at para. 39). Analytically, this makes sense. For a court to have previously recognized a proximate relationship, second-stage residual policy considerations must already have been taken into account. When, therefore, a court relies on an established category of proximity, it follows "that there are no overriding policy considerations that would [negate] the duty of care" (*ibid.*). A consequence of this approach, however, is that a finding of proximity based upon a previously established or analogous category must be grounded not merely upon the identity of the parties, but upon examination of the particular relationship at issue in each case. Otherwise, courts risk recognizing *prima facie* duties of care without any examination of pertinent second-stage residual policy considerations. [Emphasis added.]

[557] The plaintiff argues that this case "bears a striking similarity to the inspection line of cases, including building, road, or mining" that have found a duty of care. In the Supreme Court such cases include *Kamloops* and *Fullowka v. Pinkerton's of Canada Ltd.,* 2010 SCC 5, [2010] 1 S.C.R. 132.

[558] Also cited by the plaintiff in support of this position is the decision of the New Brunswick Court of Appeal in *Adams v. Borrel*, 2008 NBCA 62, 297 D.L.R. (4th) 400, which found a duty of care lay with Agriculture Canada to conduct a timely investigation into the source of a potato virus. There, the Minister had taken action under the *PPA*, and ordered the destruction of potato crops

for which compensation was paid pursuant to s. 39 of the *PPA*. It was alleged that Agriculture Canada had acted negligently as the testing protocol which led to a plan for the subsequent year's crop that involved quarantining was flawed. As the farmers suffered losses but were denied compensation for the subsequent year, they sued Agriculture Canada. Robertson J.A. stated, at para. 41, that he was "immediately attracted to those cases in which a government authority has been held liable after having undertaken a policy of conducting inspections, either in regard to road maintenance or compliance with building by-laws." He also relied on his view of the statutory scheme of the *PPA*, stating that "an immediate purpose of the legislative scheme is to protect the agricultural sector of the economy by protecting the interests of farmers": *Adams*, at para. 44.

[559] In each of these three cases, *Kamloops*, *Fullowka* and *Adams*, it is argued, the key theme is that the public authority undertook to act to address the issue, or risk, and that once a decision to act is made, the public authority must perform its undertaking without negligence.

[560] In my view the inspection cases are not applicable here. The actions, or inaction, alleged to be negligent by the plaintiff do not involve negligent inspections that can be compared to the role of a building inspector enforcing construction requirements, as in *Kamloops*, or to a mining inspector charged with ensuring safety in a mine, as in *Fullowka*. The facts of *Adams* are also quite different, as *Adams* involved negligent testing leading to a substantial number of false positives. What is impugned in this case, by contrast, is not the negligent enforcement of existing codes, or responding to tangible and immediate risks to safety, or poor testing methods, but the decisions and actions of senior officials at AAFC engaged in assessing and determining a course of action in response to a novel threat, about which much was unknown.

[561] Further, the holding in *Adams* has been considered and distinguished by the Ontario Court of Appeal in *River Valley*, at paras. 81- 82. In *River Valley*, the CFIA was sued for negligently investigating whether an egg producer's flock was infected by a dangerous strain of salmonella. There were testing delays which caused the CFIA to recommend that eggs be diverted to pasteurization and be sold as pasteurized eggs. The plaintiff and the Ontario Egg Producers Marketing Board thought this impractical, and River Valley was then ordered by the Board not to market the eggs, leading to their destruction and the destruction of the flock. No compensation was paid by the CFIA.

[562] The CFIA's actions were taken under the *HAA*, the purpose of which, as Laskin J.A. held at para. 68, "is to enable the Crown to protect the health of people and animals." He continued, stating that "[n]othing in this statute suggests that one of its purposes is to protect the economic interests of individual farmers." At para. 69, Laskin J.A. stated that "[i]n carrying out their investigations, inspectors appointed by the CFIA have broad discretionary powers to inspect enterprises, even seize and detain and quarantine animals", and that "[i]n exercising these broad powers, inspectors are not obliged to be mindful of the economic interests of individual farmers. Their overriding concern is the protection and promotion of human and animal health." For this and other reasons, including the existence of the statutory compensation scheme in s. 51 of the *HAA*, the immunity provisions in s. 50 of the *HAA* and s. 9 of the *CLPA*, the Court of Appeal concluded that there was no duty of care to individual farmers.

[563] Justice Laskin distinguished *Adams*, noting, at para. 81 of *River Valley*, that *Adams* dealt with the *PPA* which has among its purposes the protection of the interests of farmers, which is not a legislative purpose of the *HAA*. This different purpose of the *PPA* led to the finding of a duty of care in *Adams*. Laskin J.A. also differed with the holding in *Adams* which treated the statutory immunity clause in the *PPA* as being relevant to damages but not to whether a duty of care was owed. Laskin J.A., however, was of the view that the similar immunity clauses in the *HAA* are "very relevant to the determination of proximity."

[564] *Adams* dealt with a statute that is not engaged in this case. The correctness of at least some of its analysis has been questioned by the Ontario Court of Appeal. In these circumstances, to treat *Adams* as supporting the existence of a recognized or analogous category of a duty of care similar to this case, would ignore the concern expressed by the Supreme Court in *Livent* and *Rankin* that "courts should avoid identifying established categories in an overly broad manner" and that previous categories of duty of care "should be framed narrowly": *Livent*, at para. 28.

[565] *River Valley*, on the other hand, involved a statute engaged in this case, and held that there is no duty of care between farmers and government inspectors who are tracking an infectious animal disease under the *HAA*. My attention has not been drawn to any case that has held there is a duty of care arising under the *HAA*, its predecessor the *ADPA*, or the *Feeds Act*, or in the context of administering the National Animal Health Program.[30]

[566] To the extent that it is argued that the fact that a public authority undertook to act to address an issue, or risk, is a recognized or analogous category – and it is not clear to me that the plaintiff goes this far - I would reject such a position as being a vague and an undue expansion of the duty of care contrary to the need to be cautious to take into account specific circumstances and policy concerns that may arise in specific settings. Indeed, in *Livent* the Court observed that in cases of pure economic loss arising from negligent performance of a service, a factual investigation must look at "all relevant factors arising from the relationship between the parties" to determine the existence of proximity and the scope of the rights and duties which flow from the relationship: *Livent*, at paras. 30-31.

[567] Accordingly, I conclude that the circumstances of this case do not fall within a recognized or analogous category, and therefore a full application of the *Anns/Cooper* test is necessary to determine whether the defendant owed the Class a duty of care.

Proximity and foreseeability

[568] As directed in *Livent*, where a proximate relationship cannot be found in other cases, the court "must undertake a full proximity analysis." The Court in *Livent* continued at para. 29:

---

[30] In 2007, the Ontario Court of Appeal observed that this case raises a "novel situation" in which "there is no doubt that Sauer's assertion of a private law duty of care on Canada must meet the two-stage test derived from *Anns*": see *Sauer v. Canada (Attorney General)*, 2007 ONCA 454, [2007] O.J. No. 2443, at paras. 36, 60.

> To determine whether the "close and direct" relationship which is the hallmark of the common law duty of care" exists, courts must examine all relevant "factors arising from the *relationship* between the plaintiff and the defendant". While these factors are diverse and depend on the circumstances of each case, this Court has maintained that they include "expectations, representations, reliance, and the property or other interests involved" as well as any statutory obligations. [Emphasis in original, citations omitted.]

[569] Foreseeability must also not be overlooked. In *R. v. Imperial Tobacco Canada Ltd*., 2011 SCC 42, [2011] 3 S.C.R. 45, the Supreme Court stated, at para. 41:

> Proximity and foreseeability are two aspects of one inquiry — the inquiry into whether the facts disclose a relationship that gives rise to a *prima facie* duty of care at common law. Foreseeability is the touchstone of negligence law. However, not every foreseeable outcome will attract a commensurate duty of care. Foreseeability must be grounded in a relationship of sufficient closeness, or proximity, to make it just and reasonable to impose an obligation on one party to take reasonable care not to injure the other.

[570] Recently, in *1688782 Ontario Inc. v. Maple Leaf Foods Inc.*, 2020 SCC 35, 450 D.L.R. (4th) 181, at para. 62, the Supreme Court stated that proximity is "a distinct and more demanding hurdle than reasonable foreseeability", and that the proximity analysis "informs the foreseeability inquiry and should therefore be considered prior to assessing foreseeability of injury." As the Court continued, "in *all* claims, including claims of dangerous goods or structures, the considerations that support a finding of proximity also limit the type of injury that may be reasonably foreseen to result from the defendant's negligence" (emphasis in original). Put another way, "the defendant's ability to reasonably foresee injury to a plaintiff is insufficient to ground a finding of proximity": *Maple Leaf Foods*, at para. 84.

[571] It must also be borne in mind, as Zarnett J.A. aptly put it recently in *Subway Franchise Systems of Canada, Inc. v. Canadian Broadcasting Corporation*, 2021 ONCA 25, at para. 79, that "the proximity analysis takes place against the backdrop of the fundamental principle that a plaintiff must have a right, or legally cognizable interest, that would be vindicated by recognizing a duty of care on the part of the defendant." This is particularly important, he noted, "in cases of pure economic loss because there 'is no general right, in tort, protecting against the negligent or intentional infliction of pure economic loss'. The loss to be recovered must be 'the result of an interference with a legally cognizable right'"(citing *Maple Leaf Foods*, at paras. 18-19).

Proximity

[572] Where, as here, the defendant is a government actor, the proximity inquiry looks first at the applicable legislative scheme and, secondly, on the interactions, if any, between the governmental authority and the plaintiff. In *Imperial Tobacco*, the Supreme Court, at paras. 43-46, articulated three situations in which the duty of care may arise:

(a) Where proximity arises explicitly or by implication within the statutory scheme;

(b) Where proximity arises from the interactions between the claimant and the government, and is not negated by the statute; and

(c) Where proximity is based on both the interactions between the parties and the government's statutory duties.

[573] Before addressing these situations, I observe that the test for proximity does not change because this is a class action. As the Ontario Court of Appeal stated in *Smith v. Inco Ltd.*, 2011 ONCA 628, 107 O.R. (3d) 321, at paras. 164-65, "[a] class action is a procedural vehicle. Its use does not have the effect of changing the substantive law applicable to individual actions." My task, therefore, is to determine whether proximity exists as a common issue affecting the Class as a whole, and not just some individual members of the Class or a segment of the Class: see, e.g., *Taylor v. Canada (Attorney General)*, 2020 ONSC 1192 ("*Taylor (ONSC)*"), at para. 564, in which Lederer J. held that proximity *as a common issue* was not proved merely because there was evidence of one potential Class member who may have had specific and direct interactions with the Crown.

Proximity arising from the statutory scheme

[574] In *Imperial Tobacco* the Suupreme Court, at para. 44, observed:

> It may be difficult to find that a statute creates sufficient proximity to give rise to a duty of care. Some statutes may impose duties on state actors with respect to particular claimants. However, more often, statutes are aimed at public goods, like regulating an industry (*Cooper*), or removing children from harmful environments (*Syl Apps* [*Syl Apps Secure Treatment Centre v. B.D.*, 2007 SCC 38, [2007] 3 S.C.R. 83]). In such cases, it may be difficult to infer that the legislature intended to create private law tort duties to claimants. This may be even more difficult if the recognition of a private law duty would conflict with the public authority's duty to the public: see, e.g.,*Cooper* and *Syl Apps*. As stated in *Syl Apps*, "[w]here an alleged duty of care is found to conflict with an overarching statutory or public duty, this may constitute a compelling policy reason for refusing to find proximity" (at para. 28; see also [*Fullowka*], at para. 39).

[575] The Ontario Court of Appeal echoed this sentiment in *Taylor v. Canada (Attorney General)*, 2012 ONCA 479, 111 O.R. (3d) 161 ("*Taylor (ONCA)* "), at para. 78, stating:

> Legislative schemes under which regulators operate almost inevitably impose public duties on those regulators. Plaintiffs have, generally speaking, had little success in demonstrating that those schemes impose a private law duty of care. To the contrary, courts have been more inclined to find that legislative schemes by implication preclude a private law duty of care to individuals affected by those schemes. Statutory schemes that provide immunity to the regulator, create remedies

> to injured parties other than tort remedies, or impose duties on the regulator that conflict with a private law duty of care to an individual have all been held to compel the conclusion that the legislative scheme implicitly forecloses a finding that the regulator owes a private law duty of care to an individual. [Citations omitted, emphasis added.]

[576] The reluctance of courts to find a duty of care in a legislative scheme is, therefore, well-established. Most, if not all, statutes are intended to benefit the public, or a sector of the public. As the Ontario Divisional Court stated, at para. 25, in *Klein v. American Medical Systems, Inc*., (2006), 278 D.L.R. (4th) 722 (Ont. Gen. Div.), "a statute must demonstrate a legislative intent to provide a private remedy to individuals. There can be no private law duty of care where the purpose of the legislative scheme is to facilitate a public authority to act in its discretion in the public interest."

[577] The relevant statutes in this case are the *Feeds Act*, the *ADPA,* the *HAA,* and regulations passed under those Acts. The *HAA* replaced the *ADPA* in January 1991. In my view, none of this legislation creates a private law duty of care.

[578] I begin with the *HAA*. In *River Valley*, Laskin J.A. stated, at para. 68, that the purpose of the *HAA* "is to enable the Crown to protect the health of people and animals. Nothing in this statute suggests that one of its purposes is to protect the economic interests of individual farmers." Indeed, he went further, stating, at para. 66, that the *HAA* "discloses an intention to exclude a private law duty."

[579] Given this finding, it is not surprising that the plaintiff has not argued that proximity arises from the *HAA*, and relies only on the *ADPA* and the *Feeds Act*.

[580] Like the *HAA*, the *ADPA* applied broadly to anyone having responsibilities for animals, including breeders, dealers, importers and any "person who owns or has the possession, care or control of an animal." The *ADPA* regulated a broad range of activities, including farm animals, slaughterhouses, zoos and pets, importation and quarantining. It addressed a range of objectives, including promoting the humane treatment of livestock, ensuring safe animal vaccines, and cultivating international relations. The *ADPA* granted investigators powers to search and to apprehend those violating the Act, a clear reflection of a broader public purpose. It also provided a compensation scheme where animals were ordered destroyed, which is an indication that Parliament wished to provide public law recourses rather than private law remedies.

[581] The plaintiff has referred to a statement by the Minister of Agriculture in 1975 found in *Hansard* in support of its argument that the purpose of the *ADPA* was "to protect to Canadian farmers against livestock losses due to disease." However, in the same breath, the Minister referred to the need to "retain our international reputation and markets for high quality livestock": "Bill S-10, An Act to Amend the Feeds Act", 2nd Reading, *House of Common Debates*, 31-1, No 9 (31 October 1975) at 8762 (Hon E.F. Whelan, Minister of Agriculture). In my view, this does not provide a basis to find that the *ADPA* creates a private law duty of care. The *ADPA*, like its successor the *HAA*, was a statute with broad public interest goals – to protect the health of animals and people.

[582] The existence of a statute with a broad public purpose weighs strongly against a finding of a private law duty of care. As stated by Sharpe J.A. in *Eliopoulos (Litigation Trustee of) v. Ontario (Minister of Health and Long-Term Care)* (2006), 276 D.L.R. (4th) 411 (Ont. C.A.), at para. 17, quoted with approval, at para. 50 of *Imperial Tobacco*: "I fail to see how it could be possible to convert any of the Minister's public law discretionary powers, to be exercised in the general public interest, into private law duties owed to specific individuals."

[583] The decision in *Eliopoulos* has similarities to this case. It involved a suit against Ontario for failing to prevent the entry of the West Nile Virus ("WNV") into the province, which caused the death of an individual. The plaintiff's estate sued, and asserted proximity based on the *Health Protection and Promotion Act*, R.S.O. 1990, c. H.7. Sharpe J.A. rejected such a broad duty, observing at para. 17 that the statute granted powers to act in the public interest and was "not aimed at or geared to the protection of the private interests of specific individuals." Furthermore, Sharpe J.A. stated at para. 20 that the case was "concerned with a general risk faced by all members of the public and a public authority mandated to promote and protect the health of everyone located in its jurisdiction. The risk of contracting a disease that might have been prevented by public health authorities is a risk that is faced by the public at large."

[584] I find the reasoning of Sharpe J.A. compelling and supportive of the conclusion that the statutory scheme in the *ADPA* does not impose a private law duty of care to the Class. The *ADPA* has (or had) broad public purposes and does not, expressly or by implication, create a private law duty of care between the defendant and the plaintiff.

[585] Turning to the *Feeds Act* and the *Feeds Regulations*, their purpose is to control and regulate the marketing of feed for the protection of the public and the common good. While they may well protect farmers and their livestock, the legislation is directed at the safety of animal products that enter the human food chain. As was stated by the Minister of Agriculture, the Honourable Eugene Whelan, in Parliament in 1975, the Act "is designed to protect livestock producers and consequently consumers of livestock": *House of Commons Debates*, 31 October 1975.

[586] The *Feeds Act* prohibits the manufacture, sale and import into Canada of animal feed unless it has been registered, conforms to prescribed standards and is packaged and labelled as prescribed. The *Feeds Act* sets out the foundation and authority for the establishment of a feed registration system, and mechanisms for ensuring compliance and enforcement. The *Feeds Regulations* address permitted ingredients for use in feed for livestock. The *Feeds Act* and *Feeds Regulations* also grant a range of inspection and enforcement powers to ensure compliance. Many of these powers are directed at feed manufacturers, which is a separate industry from livestock producers.

[587] The dual objectives of protecting the public and farmers are also reflected in Regulatory Impact Analysis Statement ("RIAS") for SOR/90-73, dated 8 January 1990, which stated that "[t]he purpose of the *Feeds Regulations* is to monitor and control all livestock feed used in Canada, to ensure that it is safe, wholesome and properly labelled so that consumers and livestock producers are protected against potential health hazards from residues and contaminants in livestock products, and against fraud in marketing": see RIAS, (1990) C Gaz II, 434 (*Feeds Act Regulations*, SOR/90-73) (emphasis added).

[588] Agriculture Canada's Feed Inspection Manual at the time also described a broad range of priorities and objectives that were directed at concerns for human health, as well as protecting the interests of livestock producers. As the Manual put it: "Current activities of the Feed Program are designed to support the Program's objective to ensure that the consumer receives wholesome meat, milk and eggs and also to ensure that the livestock producer obtains good quality feed as many contaminant problems which show up in milk, eggs and meat can be traced directly back to feeds" (emphasis added).

[589] Like the *ADPA* and the *HAA*, although the operation of the *Feeds Act* and the *Feeds Regulations* may benefit cattle farmers, they have larger goals that include protecting the health of people and animals generally. Indeed, the feeds legislation is directed at regulating a different industry, albeit one which supplies livestock producers. Similar to the *HAA* and *ADPA*, there is nothing in the *Feeds Act* and *Feeds Regulations* that suggests that one of its purposes is to protect the economic interests of individual farmers. Consequently, in my view the *Feeds Act* and *Feeds Regulations* do not create a duty of care towards cattle producers.

Proximity arising from interactions: the legal framework

[590] Having concluded that the *ADPA* and *Feeds Act* do not create proximity, they may not preclude it either. Unlike the *HAA*, the *ADPA* did not have an immunity clause nor, prior to 2015, did the *Feeds Act* have one. As the Court of Appeal stated in *Taylor (ONCA)*, at para. 79, "[w]here the legislation is not determinative one way or the other, the courts explore the specific circumstances of the interactions between the regulator and the plaintiff in the context of the legislative scheme to decide whether a sufficiently 'close and direct' relationship exists to justify the imposition of a prima facie duty of care." Consequently, I discuss below the interactions between the defendant and the Class to see if proximity arises from those interactions sufficient to give rise to a duty of care.

[591] In *Imperial Tobacco*, at para. 45, the Supreme Court addressed the issue of proximity from interactions between the claimant and the government as follows:

> The second situation is where the proximity essential to the private duty of care is alleged to arise from a series of specific interactions between the government and the claimant. The argument in these cases is that the government has, through its conduct, entered into a special relationship with the plaintiff sufficient to establish the necessary proximity for a duty of care. In these cases, the governing statutes are still relevant to the analysis. For instance, if a finding of proximity would conflict with the state's general public duty established by the statute, the court may hold that no proximity arises: [citations omitted]. However, the factor that gives rise to a duty of care in these types of cases is the specific interactions between the government actor and the claimant.

[592] The "special relationship" the Court says is necessary to establish proximity is not defined, although it observes that in the context of negligent misstatements the special relationship will be established if: "(1) the defendant ought reasonably to foresee that the plaintiff will rely on his or

her representation; and (2) reliance by the plaintiff would be reasonable in the circumstances of the case": *Imperial Tobacco*, at para. 42.

[593] In *Livent* the Supreme Court extended this test to cases of pure economic loss arising from negligent misrepresentation or performance of a service, stating, at para. 30:

> [T]wo factors are determinative in the proximity analysis: the defendant's undertaking and the plaintiff's reliance. Where the defendant undertakes to provide a representation or service in circumstances that invite the plaintiff's reasonable reliance, the defendant becomes obligated to take reasonable care. And, the plaintiff has a right to rely on the defendant's undertaking to do so…. These corollary rights and obligations create a relationship of proximity.

[594] The Court went on in *Livent*, at para. 31, to caution that:

> Rights, like duties, are, however, not limitless. Any reliance on the part of the plaintiff which falls outside of the scope of the defendant's undertaking of responsibility — that is, of the purpose for which the representation was made or the service was undertaken — necessarily falls outside the scope of the proximate relationship and, therefore, of the defendant's duty of care. This principle, also referred to as the "end and aim" rule, properly limits liability on the basis that the defendant cannot be liable for a risk of injury against which he did not undertake to protect. By assessing all relevant factors arising from the relationship between the parties, the proximity analysis not only determines the *existence* of a relationship of proximity, but also delineates the *scope* of the rights and duties which flow from that relationship. In short, it furnishes not only a "principled basis upon which to draw the line between those to whom the duty is owed and those to whom it is not", but also a principled delineation of the scope of such duty, based upon the purpose for which the defendant undertakes responsibility. As we will explain, these principled limits are essential to determining the type of injury that was a reasonably foreseeable consequence of the defendant's negligence. [Citations omitted].

[595] In *Taylor (ONCA)*, at para. 80, the Ontario Court of Appeal observed that although interactions will be fact-specific, the evidence should "demonstrate a relationship and connection between the regulator and the individual that is distinct from and more direct than the relationship between the regulator and that part of the public affected by the regulator's work." Examples of this type of connection have arisen in cases where a particular individual was targeted in an investigation, or an individual was being served by the regulator such that the actions of the regulator directly impacted the individual plaintiff and caused harm to that plaintiff. This is to be contrasted with "situations in which the harm to the plaintiff is caused by the actions of a third party and the plaintiff's claim is that the regulator should have acted to prevent the actions of the third party": see *Taylor (ONCA)*, at paras. 80-87.

[596] *Imperial Tobacco* provides examples of when a regulator's activities do and do not cross the line into specific interactions with individuals. Two claims were made in that case: (1) that Health Canada owed a private law duty of care to consumers of cigarettes arising from the allegation that the government had incorrectly publicized benefits of "low-tar" cigarettes; and (2) that Health Canada also owed a discrete duty of care to manufacturers as it had allegedly gone beyond its regulatory role in advising and assisting a limited group of manufacturers on the production and advertising of various tobacco products. The manufacturers also drew on Health Canada's knowledge and expertise, and "there were commercial relationships entered into between Canada and the companies based in part on the advice given to the companies by government officials": see *Imperial Tobacco*, at paras. 48-53; *Taylor (ONCA)*, at paras. 89-91.

[597] Bearing in mind that the *Imperial Tobacco* decision was based solely on pleadings, the Court concluded, at para. 50, that as there were no specific interactions pleaded between Canada and consumers, no relationship of proximity arose with consumers. Further, no duty of care arose from the relevant statutes, one of which was the *DAAA* (*Department of Agriculture and Agri-Food Act*), which the Court noted only established duties to the general public and did "not give rise to a private law duty of care to particular individuals." However, as the statute did not preclude a duty of care to tobacco companies, the Court concluded at para. 53 that, as pleaded, a finding of proximity with them could be made based on the alleged specific interactions in which it is said that Health Canada acted "apart from its statutory duties", and that it could be found that the manufacturers' reliance on Health Canada was reasonable.

[598] As I noted early in these Reasons, in the case at bar the defendant brought a motion to strike this action soon after it was commenced. One ground for the motion was that, on the pleaded facts, proximity could not be found. The motion failed. On appeal, the Court of Appeal noted that "the many public representations by Canada that it regulates the content of cattle feed to protect commercial cattle farmers among others" showed that Canada was acting in the interests of cattle farmers "rather than the broad public interest." Accordingly, it was not "plain and obvious that [Sauer's] claim of a *prima facie* duty of care will not succeed": *Sauer* at para. 62.

[599] Following the *Sauer* decision, the Court of Appeal decided two cases that arguably required a more direct connection between the plaintiff and the regulator which were said to be inconsistent with *Sauer*: see *Drady v. Canada (Minister of Health)*, 2008 ONCA 659, [2008] O.J. No. 3772, leave to appeal refused, [2008] S.C.C.A. No. 492; *Attis v. Canada (Minister of Health)*, 2008 ONCA 660, 93 O.R. (3d) 35, leave to appeal refused, [2008] S.C.C.A. No. 491. The Court of Appeal then heard *Taylor (ONCA)* as a special case under Rule 22.03 of the *Rules of Civil Procedur*e, R.R.O. 1990, Reg. 194 in order to resolve the "apparent inconsistency." By this time, the Court of Appeal had the benefit of the Supreme Court's decision in *Imperial Tobacco*. Counsel for Mr. Sauer intervened in *Taylor (ONCA)*. Speaking for a five-judge panel of the Court of Appeal in 2012, Doherty J.A. concluded that the holding in *Sauer* – that representations and reliance alone can give rise to proximity – is too low a test, stating, at para. 95 of *Taylor (ONCA)*, that:

> In my view, a finding of proximity based entirely on a regulator's public acknowledgement of its public duties to those affected by its actions, coupled with reliance by those affected on the regulator's public statements, is inconsistent with

> the Supreme Court's rejection in *Imperial Tobacco* of the claim that Health Canada owed a private law duty of care to consumers of low-tar cigarettes because it had made public representations as to the relative safety of those cigarettes.

[600] In short, representations and the nature of any reliance placed on them may be relevant, as part of the larger context, in "determining the directness of the relationship between the regulator and the plaintiff", but there must be more to establish proximity. However, as Doherty J.A. continued, at para. 118, of *Taylor (ONCA)*:

> Representations made specifically to a plaintiff and relied on by that plaintiff can clearly forge a direct connection between the regulator and the plaintiff. General representations made by the regulator to the public and relied on by the plaintiff as a member of the public do not, standing alone, create a direct relationship. However, general representations and reliance on those representations can, in combination with other factors, create a relationship between the regulator and the plaintiff that is sufficiently close and direct to render it fair and just to impose on the regulator, in the conduct of its duties, an obligation to be mindful of the plaintiff's legitimate interests.

[601] Consistent with the holding in *Taylor (ONCA)*, the Supreme Court has since held that in cases in which proximity is based on the defendant's undertaking and the plaintiff's reliance on that undertaking (e.g., in negligent misrepresentation cases), there must be detrimental reliance which is "manifested by the plaintiff altering its position, thereby foregoing more beneficial courses of action that it would have taken, absent the defendant's inducement": *Maple Leaf Foods*, at para. 40; see also *Livent*, at para. 20. Furthermore, the reliance must be reasonable, having regard to the scope of the representation or undertaking: see *Imperial Tobacco*, at para. 59; *Livent*, at paras. 30-31; *Maple Leaf Foods*, at paras. 35-36.

Proximity arising from interactions between the Class and Canada

[602] The plaintiff relies on a range of communications and interactions between Agriculture Canada and the cattle industry to support its argument on proximity.

[603] The plaintiff refers to the National Animal Health Program ("NAHP"), which was developed and adopted pursuant to Agriculture Canada's responsibilities under the *ADPA*. The plaintiff notes that the protection of the interests of Canada's livestock industry was one of the central goals of the program. As the 1986 NAHP document stated, one of the priorities of the NAHP was "to prevent the introduction of serious infectious and contagious animal diseases into Canada." The NAHP coordinated disease control, diagnostic services, disease research, and international activities to "best serve the interests of the Canadian livestock industry."

[604] Other publications from Agriculture Canada stated that "[t]he department's programs protect feed users and Canadian animals from disease." The 1988-89 Annual Report described the role of the NAHP Feed Program in controlling livestock feeds manufactured, imported, and sold

in Canada "to protect users and the public from health hazards and marketing fraud." Canada consulted with stakeholders, including the CAHCCC in preparing these documents.

[605] Canada employed hundreds of veterinarians, scientists, and researchers, and had the knowledge and expertise to carry out the objectives of the NAHP. According to Dr. Willis, Canada allocated a significant portion of these resources to assist with the health of the cattle industry. Dr. Bulmer readily acknowledged that the cattle industry relied on the Department for information on the threat of animal diseases including, in the late 1980s and 1990s, BSE. Dr. Bulmer also agreed that cattle producers relied on the Department to prevent and control diseases. In response to the question whether "producers would be relying on the government to take the right actions to control or prevent these disease", Dr. Bulmer stated: "That would be the intention."

[606] The plaintiff also relies on the fact that the Department of Agriculture regarded producers as "clients." Dr. Willis agreed that Canadian cattle producers were a "primary client" of the Department. Regulatory and business plans referred to providing services which, for example, "focus on the maintenance and establishment of national programs for the benefit of the agri-food sector": Minister of State (Privatization) and Minister Responsible for Regulatory Affairs, Federal Regulatory Plan 1988. The Federal Regulatory Plan, 1988 also stated that the Department had "three principal client groups: producers; processors, distributors, wholesalers and retailers; and consumers."

[607] As I have addressed earlier in these Reasons, the CAHCCC originated in the 1970s. It was created when the government wished to consult with the cattle producers on the management of brucellosis. The CAHCCC continued because, as Dr. Bulmer testified, "we found that having worked so well with brucellosis, we needed to keep doing that with all of the animal eradication and control programs." The CAHCCC met at least annually, and in 1989 and 1990 met twice. Canada also met with individual organizations which were part of the CAHCCC, such as the Canadian Cattlemen's Association ("CCA").

[608] The CAHCCC was the primary mode of contact between Canada and the cattle industry. As Dr. Kellar put it, "the purpose of the CAHCCC was to keep the industry informed of what we were doing, planning, thinking, and what information we had. We would summarize what we knew about the scientific information on diseases, what actions we were taking. It was…a mechanism to be transparent. …[W]e were all partners in this and that we shared what we were doing on our side. And it was open to discussion, of course." Mr. Taylor, testifying for the plaintiff, noted that organizations like the CCA had no veterinarians on staff, and so AAFC "would have been the entity or group in Canada to go to for knowledge and expertise concerning BSE (or other animal diseases)."

[609] The 18 June 1990 meeting was held to discuss BSE with a broad range of stakeholders, including organizations representing producers of cattle, sheep and goats, dairy and beef cattle groups, abattoirs, renderers and feed producers, as well as veterinary organizations, provincial officials and a representative of the USDA. At that meeting Canada articulated for the first time the "three pillars" which the plaintiff describes as the "Three Pillar Policy commitment." The evidence is clear from each of Drs. Willis, Bulmer and Kellar that the three pillars – that BSE does

not exist in Canada, BSE cannot enter Canada, and BSE will not develop in Canada – were intended to reassure cattle producers. In cross-examination, Dr. Bulmer agreed that the three pillars were telling the cattle industry that the Department "had the disease in hand", and that "there was effectively no risk of BSE coming into Canada because of Agriculture Canada's policies." Dr. Kellar, in cross-examination, agreed that it was a "commitment", but also described it as "a departmental policy position statement made for discussion with those present" at the 18 June 1990 meeting. Dr. Willis, the most senior of the three, resisted such a broad description, describing the three pillars as "talking points", although he agreed that they were intended to reassure the industry that AAFC was taking steps to try to prevent BSE from entering and developing in Canada.

[610] It is submitted by the plaintiff that the apparent failure by Drs. Kellar and Koller to specifically address the risk of BSE from recycling of cattle at the 18 June 1990 meeting was negligent and misrepresented the circumstances, and that this was relied on by cattle producers to their detriment. However, as I noted earlier in these Reasons, AAFC provided a package of material to all attendees on the topic of BSE. This package included Dr. Wilesmith's 1990 paper stating the hypothesis of the risk from recycling of cattle, as well as an OIE paper raising that possibility. Moreover, the Minutes of the meeting indicate that this issue was raised in discussion. At that time, as Mr. Taylor, who was with the CCA in 1990, testified, the industry was "strongly opposed" to a ban in 1990 because it would have imposed additional costs on beef producers and put them at a disadvantage with their US competitors.

[611] Meetings with the CAHCCC were held in 1991, 1992 and 1993, although in 1991 the third "C" was dropped as the committee expanded to include representatives of other livestock industries, and it was then known as the CAHCC. At the meeting held on 5 November 1993 BSE was discussed as part of the Animal Health Division Updates, along with many other items including other livestock diseases. Notes of that meeting record that Dr. Kellar reported that "BSE in UK is on decline", as was the case, although there was "considerable media hype" about cats, zoo animals and humans. The notes also record that Mr. Taylor, who then was with AAFC working as an industry liaison, reported to the group on the government's shift from a "zero-risk" approach to a risk assessment process. Mr. Taylor told the group that AAFC recognized that a zero-risk approach may not always be appropriate, and that the Department was developing rules to manage risk. This was not focused on BSE but on a general approach to risk management. Mr. Taylor invited the CAHCC to participate in this process.

[612] As I have reviewed earlier, Canada was in close contact with industry representatives following the discovery of BSE in the DePalme cow in December 1993 and in 1994.

[613] In my view, although the interactions between representatives of cattle producers and Canada were frequent and extensive, they do not create sufficient "proximity" such that I can find, on a balance of probabilities, that a duty of care should be found in these circumstances.

[614] The NAHP described a wide mandate and encompassed activities which benefitted the agriculture, food and forestry sectors and which were intended to strengthen the Canadian economy generally. Similarly, consultations with industry, do not on their own create a duty of care. Governments are expected to consult with those affected by their actions and do so

frequently, especially with regulated industries. This is not to ensure, however, that government is doing what an industry wants or is acting in the interests of that industry, but to ensure that government is acting in the public interest on the best information available, including input from affected stakeholders, and that those stakeholders are aware of what the government is doing, or not, and why.

[615] The types of interactions raised in this case were all, essentially, in furtherance of achieving the purposes and objectives of the *ADPA, HAA, Feeds Act,* the *DAAA* and other legislation. They do not qualify as "specific interactions" in which the government has "assumed duties separate and apart from its governing statute": *Imperial Tobacco*, at paras. 45 and 53. Nor are the interactions "distinct from and more direct than the relationship between the regulator and that part of the public affected by the regulator's work": *Taylor (ONCA)*, at para. 80. To use the words of the British Columbia Court of Appeal in *Wu v. Vancouver (City)*, 2019 BCCA 23, [2019] 9 W.W.R. 565, at para. 64, the consultations were "generic and inherent in the regulatory framework and, accordingly, are not indicative of a relationship of proximity."

[616] AAFC consulted with a wide range of stakeholders regarding BSE. Cattle farmers were not singled out by the Department, or under the regulatory regime, for special treatment or protection. The broad array of stakeholders at the meeting on 18 June 1990 was more than just "a few other industry groups", as asserted by the plaintiff. Indeed, the meeting was precipitated by the rendering industry's fear that the continued rendering of sheep could jeopardize their operations and markets, as well as have a severe impact on the sheep industry. Indeed, a follow-up meeting was held on 28 June 1990 meeting with rendering, feed and sheep industry representatives.

[617] The many stakeholders at the 18 June 1990 meeting illustrates the wide range of interests that AAFC had to consider in furtherance of its statutory mandate. Dr. Kellar testified that the purpose of this meeting was "bringing together the affected parties for an open, scientifically based discussion on the issue." He said that "[w]e wanted to dialogue with industry stakeholders to obtain their concerns and drive responsive actions and see what they had done to date on an individual or composite basis." As Dr. Kellar put it, "we looked forward confidently to managing the situation and lowering the temperature on the issue."

[618] Nevertheless, in addressing the threat of BSE, the Department of Agriculture made its own decisions. While a consensus was reached at meetings on some issues, the steps taken, or not taken, were AAFC decisions as indicated, for example, by Dr. Bulmer's notes on the Minutes of the 18 June 1990 meeting as to what items to "park." This did not involve or require agreements with, or direction to, specific industry participants. The decisions taken, rightly or wrongly, were squarely within the public, statutory functions of the Department. This is not a case like *Imperial Tobacco*, where specific representations were made, direction was given and agreements were reached with a limited group of manufacturers which went beyond and were "apart from [the regulator's] statutory duties" to create a "special relationship."

[619] In my view, the three pillars, first stated at the 18 June 1990 meeting, were, as Dr. Willis said, "talking points" which set out objectives to frame the discussion at the meeting. Thus, the

three pillars – that BSE does not exist in Canada, will not enter Canada, and will never develop in Canada – were not a promise or representation that created proximity, but objectives or goals that required decisions on what actions to take. As Dr. Kellar stated at the meeting, there were "gaps in scientific knowledge" and decisions had to be made about courses of action to address BSE. In other words, decisions had to be made on how to meet the objectives stated in the three pillars, and the 18 June 1990 meeting with a wide range of stakeholders was to assist in making those decisions which, as I discuss below, were policy decisions.

[620] As the cases have emphasized, a representation is only relevant to proximity when it is reasonable for the plaintiff to rely on it: *Imperial Tobacco*, at para. 59. In my view, treating the three pillars as promises that could be relied upon is not reasonable. They were objectives which framed discussions with stakeholders and other consultations and communications to address the threat from a novel disease, consistent with Agriculture Canada's mandate under the *ADPA* and *HAA*.

[621] BSE was a big story in the late 1980s and the 1990s. It concerned the Department and it concerned many others in government, in agriculture and related industries, and the general public. Mr. McCrea's evidence shows that he was concerned about BSE and discussed it with other farmers, and with his cousin, a veterinarian in Ireland, in the early 1990s. The discovery of the DePalme cow, in 1993, highlighted those concerns. In this context, to treat the government's three pillars as representing more than objectives that the government was striving to achieve is simply not reasonable.

[622] Further, while the plaintiff relies on evidence from Dr. Willis that AAFC regarded cattle producers as a client, even a "primary client", he also stated that "we were working for the agricultural industry of Canada", and that "we were working for the Canadian producers, and *we were working for the Canadian public*" (emphasis added). The fact that cattle farmers were among those who benefitted from the *ADPA* and the *HAA* and programs under those statutes, and were consulted regularly by government, is not the sort of interaction that creates a "close and direct" relationship giving rise to a private law duty of care; it is government performing its functions under statutes that benefit the public.

[623] The plaintiff also argues that the decisions taken in 1990, such as the import ban, creation of a Monitoring Program and destruction of the Mirabel cattle, and in 1993 and 1994 the destruction of the remaining UK imports after the DePalme cow was diagnosed, were focused on the cattle industry and cattle producers. To the extent that is correct, it is because the disease threatened cattle. But this does not create a special relationship of proximity, otherwise proximity could be found any time that a regulator responds to a threat to a specific industry.

[624] A feed ban would have affected slaughterhouses, renderers, feed manufacturers and producers of other ruminants, such as sheep. This impact was clear at the 18 June 1990 meeting, and was recognized again in 1996 and 1997 when the government consulted widely before enacting a feed ban, speaking to, among others, the Canadian Feed Industry Association, the Canadian Renderers Association, the Canadian Poultry and Egg Processors Council, the Canadian Pork Council, the Canadian Meat Council, the Canadian Sheep Federation, the Dairy Farmers of

Canada, the Mink Breeders Association and the Canadian Livestock Exporters Association. The priorities of cattle farmers took their place as one interest among many. The fact that cattle were a focus of steps taken up to 1994 does not mean a duty of care arose; otherwise, again, it could be argued that such a duty arises any time government focuses its attention on a particular industry.

[625] There is also an absence of evidence of detrimental reliance. Although cattle producers looked to the government for information, and counted on the government to prevent BSE from emerging in Canada, as Dr. Willis acknowledged, that is no different than expecting the government to fulfill its statutory mandate to prevent or control animal diseases of all kinds. It is not reliance that creates proximity.

[626] There is no indication that cattle farmers in any way changed their practices in response to positions the government took in 1990, or 1994, or at any time. To the contrary, the principal of Flying E Ranche, Mr. Sears, testified that his information about BSE came in the form of "little snippets of information coming out of the UK" that he read in the news media or received from industry associations. He believed that the risk of BSE was related to the presence of scrapie from sheep bonemeal in cattle feed. Mr. Sears said his farming practices were not altered by BSE because Flying E Ranche "didn't use calf starter ever." The evidence of Darlene Sandford, one of the additional cattle farmers examined for discovery, also stated that she got most of her information "on the news."

[627] Mr. McCrea began using feed supplements in 1995, despite saying that he was aware of the concern that BSE could be transmitted through feed as early as 1992. When pressed in cross-examination on his assertion that in the spring of 1997 he believed that Agriculture Canada had banned RMBM from feed, he acknowledged that he did nothing to confirm this, and also stated that all his information came from the newspapers. Mr. McCrea's mistaken understanding about feed, therefore, was not based on any specific interactions with the defendant.

[628] I make the same finding with respect to the cattle industry as represented by the CCA, which is the only large organization representing cattle farmers on which I have much evidence. The CCA was not an unsophisticated organization. It had a national board of directors and numerous committees. It was an active lobbyist and advocate for its membership of over 100,000 cattle producers. While it did not have veterinarians or scientists on staff, it hired experts when necessary. Thus, while Mr. Taylor said that the "primary source" of information on BSE came from AAFC, the CCA had other avenues to obtain information. Further, there is no evidence of any change in position, or detrimental reliance, by the CCA due to statements made by the defendant which might support finding a close relationship of proximity between the CCA and Canada.

[629] In conclusion, AAFC interacted with representatives of the cattle industry in its role as a regulator charged with the performance of public duties, but AAFC did not create a special, close and direct relationship with members of the Class that would give rise to a private law duty of care.

Proximity arising from both interactions and statutory duties

[630] The Supreme Court stated in *Imperial Tobacco*, at para. 46, that "it is possible to envision a claim where proximity is based both on interactions between the parties and the government's statutory duties." Unfortunately, the Court did not elaborate on this rather vague statement or tell us what it was envisioning. Presumably, this category is to address circumstances where a combination of both the statute and the interactions, while each alone is insufficient to support a finding of proximity, may tip the balance when combined.

[631] In my view, however, the two categories will only successfully combine to support a finding of proximity where the statute, by implication at least, suggests the existence of a private law duty of care. One would also need compelling evidence of interactions creating proximity.

[632] In this case, the *ADPA* and the *Feeds Act* do not expressly preclude a private law duty of care, but they do not create one either, and I have doubts as to whether they even imply such a duty. My findings above on the interactions between the Class and the defendant were not a close call, such that a tenuous argument that the statutes imply a private law duty of care do not tip the balance. In short, I cannot conclude that proximity arises from a combination of interactions and statutory duties.

Foreseeability

[633] Reasonable foreseeability exists where an injury to the plaintiff was a reasonably foreseeable consequence of the defendant's negligence: *Livent*, at para. 32; *Cooper*, at para. 30. Its existence may require a review of the evidence of what the defendant knew, or should reasonably have known, at relevant times: *Reference re Broome v. Prince Edward Island*, 2010 SCC 11, [2010] 1 S.C.R. 360, at para. 15. In many cases, this may be redundant to the proximity analysis, as the Supreme Court noted in *Maple Leaf Foods*, at para. 62. However, foreseeability, while not sufficient on its own to satisfy the first part of the *Anns/Cooper* test, remains an essential part of it.

[634] The test of reasonable foreseeability is readily met in this case, and is not disputed by the defendant. The danger of BSE to Canadian cattle and to the beef industry was recognized early on. A memorandum to the Minister of Agriculture in February 1990 recommended the import ban "in view of the danger to Canadian cattle." Another memo to the Minister one month later warned that BSE "could seriously damage Canada's animal health status and international image should it gain entry." Another memo from the same period noted that maintaining the healthy status of Canada's cattle population was "vital to protect Canada's lucrative export markets."

[635] These potentially "disastrous" consequences, recognized in 1990, were acknowledged by each of Drs. Willis, Bulmer and Kellar. Dr. Willis agreed that Canada was concerned about "the whole attitude of BSE in the world at that time", including potential import bans. As he put it, "other countries were terrified of getting it primarily because it would shut them down." Consequently, a "primary concern for the department" was protecting the valuable export markets. Dr. Bulmer agreed that BSE was a threat to cattle export earnings, and Dr. Kellar acknowledged

that Canada knew that BSE in the Canadian herd would cause a "downward spiral in the Canadian cattle industry."

[636] The fact that Canada took steps to prevent BSE from entering the country in 1990, such as the import ban, the Monitoring Program, making BSE a reportable disease, and the destruction of the Mirabel cattle, also confirms that Canada understood the serious economic and other harms that could be caused by it. In my view, therefore, by 1990 Canada was fully aware of, and reasonably foresaw, the harm that BSE would, if it entered the Canadian herd, cause to the Canadian cattle industry and the Class.

[637] The foreseeability of economic harm increased in late 1993 and early 1994 with the diagnosis of BSE in the DePalme cow and the fallout over it. Some countries, albeit briefly, suspended trade in cattle and beef from Canada at the time. Dr. Stemshorn, who succeeded Dr. Bulmer as Director, Animal Health, noted in January 1994 that "[t]he protection of the health of Canadian livestock and the resulting *preservation of our markets* are both important reasons for preventing this disease from becoming established in Canada" (emphasis added). He also stated that "[t]he trade implications of being classed as a BSE infected country exceed by far any restrictions that Canada has experienced for many years."

[638] In a memo to the Minister in December 1993, reference was made to the "valuable export markets" and the "$1.2 billion of live cattle sold annually to the United States." The RIAS for the 1997 *Feeds Regulation* noted "the total value of exports has ranged between $1.5 and $1.9 billion and is growing rapidly", and that the "U.S. accounts for virtually all Canadian exports of slaughter animals and beef."

[639] In the Federal Court proceedings in 1994, Dr. Kellar referred to the potential economic impact if BSE were allowed to develop in Canada. And at trial he conceded that he was well aware that if BSE entered the Canadian herd it would have a dramatic impact on the export markets and cause great harm to cattle producers.

[640] Before leaving the discussion of foreseeability, I wish to address the plaintiff's argument that due to the foreseeability of harm, the defendant had a duty to take positive steps. This arises from Chief Justice McLachlin's decision in *Childs*, in which she stated that "[w]here a defendant assumes a public role, or benefits from offering a service to the public at large, special duties arise." However, *Childs* was a case about host liability and actual physical harm. As McLachlin C.J. observed, "[r]unning through all of these situations is the defendant's material implication in the creation of risk or his or her control of a risk to which others have been invited." Further, "the law does not impose a duty to eliminate risk": *Childs* at paras. 37-39.

[641] In my view, it is too big a stretch to say that Canada created or controlled a risk "to which others have been invited." While, in hindsight, the earlier enactment of a feed ban might have prevented BSE in the McCrea cow, Canada did not create the risk of BSE nor did it invite cattle producers to use feed with RMBM, which had been permitted and existed in feeds for decades.

[642] In *Childs*, at para. 34, McLachlin C.J. stated that "a positive duty of care may exist if foreseeability of harm is present *and* if other aspects of the relationship between the plaintiff and the defendant establish a special link or proximity" (emphasis in original). In this case, while foreseeability exists, the other aspects of the relationship between the Class and the defendant do not establish a "special link or proximity." Accordingly, the plaintiff has failed to satisfy me, on a balance of probabilities, that a *prima facie* duty of care arises in the circumstances of this case.

[643] My findings on proximity and foreseeability result in the conclusion that Canada does not owe a duty of care to the Class. This is sufficient to dismiss the negligence claim. However, as it was fully argued, I consider below whether, had I found a *prima facie* duty of care, there are policy considerations which would negate or limit the scope of the duty.

Policy Considerations

[644] In *Cooper* the Supreme Court stated, at para. 37, that the second stage of the *Anns* test, whether there are "residual policy concerns" in recognizing a duty of care, is "not concerned with the relationship between the parties, but with the effect of recognizing a duty of care on other legal obligations, the legal system and society more generally." Among the questions to be asked are: "Does the law already provide a remedy? Would recognition of the duty of care create the spectre of unlimited liability to an unlimited class? Are there other reasons of broad policy that suggest that the duty of care should not be recognized?"

[645] The Court, at para. 38, then explained the policy – operational distinction:

> It is at this second stage of the analysis that the distinction between government policy and execution of policy falls to be considered. It is established that government actors are not liable in negligence for policy decisions, but only operational decisions. The basis of this immunity is that policy is the prerogative of the elected Legislature. It is inappropriate for courts to impose liability for the consequences of a particular policy decision. On the other hand, a government actor may be liable in negligence for the manner in which it executes or carries out the policy. In our view, the exclusion of liability for policy decisions is properly regarded as an application of the second stage of the *Anns* test. The exclusion does not relate to the relationship between the parties. Apart from the legal characterization of the government duty as a matter of policy, plaintiffs can and do recover. The exclusion of liability is better viewed as an immunity imposed because of considerations outside the relationship for policy reasons – more precisely, because it is inappropriate for courts to second-guess elected legislators on policy matters. [Emphasis added.]

[646] In *Nelson (City)* the Supreme Court explained that the need to show deference to executive and legislative decisions is rooted in the Constitution, stating, at para. 42:

> The primary rationale for shielding core policy decisions from liability in negligence is to maintain the separation of powers. Subjecting those decisions to

> private law duties of care would entangle the courts in evaluating decisions best left to the legislature or the executive. The executive, legislative, and judicial branches of government play distinct and complementary roles in Canada's constitutional order (*Ontario v. Criminal lawyers' Association of Ontario*, 2013 SCC 43, [2013] 3 S.C.R. 3, at paras. 27-29). Each branch also has core institutional competencies: the legislative branch has the power to make new laws, the executive branch executes the laws enacted by the legislative branch and the judicial branch decides disputes arising under the laws (P.W. Hogg and W.K. Wright, *Constitutional law of Canada* (5th ed. Supp.), at § 9:1 ("Definition of responsible government")).

[647] This second step of the *Anns/Cooper* test acts as a check on casting a duty of care too broadly. As observed in *Cooper*, at para. 39, it generally arises in novel situations to ensure that "there are no broader considerations that would make imposition of a duty of care unwise." According to the Court in *Nelson (City)*, at para. 35, "the onus is always on the public authority to establish that it is immune from liability because a core policy decision is at issue."

[648] In *Imperial Tobacco* Chief Justice McLachlin observed, at para. 72, that "the question of what constitutes a policy decision…is a vexed one, upon which much judicial ink has been spilled." In the course of a lengthy discussion of what constitutes a policy decision, the Chief Justice, at para. 87, observed that "[g]enerally, policy decisions are made by legislators or officers whose official responsibility requires them to assess and balance public policy considerations. The decision is a considered decision that represents a 'policy' in the sense of a general rule or approach, applied to a particular situation."

[649] At para. 90 of *Imperial Tobacco* Chief Justice McLachlin concluded "that 'core policy' government decisions protected from suit are decisions as to a course or principle of action that are based on public policy considerations, such as economic, social and political factors, provided they are neither irrational nor taken in bad faith" (emphasis added). However, she said, this is not "a litmus test" as "[d]ifficult cases may be expected to arise from time to time where it is not easy to decide whether the degree of 'policy' involved suffices for protection from negligence liability…. Nevertheless, most government decisions that represent a course or principle of action based on a balancing of economic, social and political considerations will be readily identifiable."

[650] In *Nelson (City)*, at para. 44, the Court echoed that core policy decisions "involve weighing competing economic, social, and political factors and conducting contextualized analyses of information." In light of this, the Court again cautioned against courts interfering in policy decisions, emphasizing that "[i]f courts were to weigh in, they would be second-guessing the decisions of democratically-elected government officials and simply substituting their own opinions." The Court also addressed the possibility that core policy decisions made by the legislature or the executive could cause harm to private parties and stated that the remedy to such a problem was through the ballot box and not the courts, once again stating that "[u]nlike public (administrative) law, where delegated government decisions are reviewed by the courts to uphold the rule of law, private law liability for core policy decisions would undermine our constitutional order": see *Nelson (City)*, at para. 47.

[651] In contrast, operational decisions or actions involving the implementation of governmental policy may be subject to court review and liability. In other words, once a government has settled on a plan or approach to a particular situation, the actions of those executing the plan are operational and must be done without negligence.

[652] The leading cases illustrate the distinction between policy decisions and operational actions. In *Kamloops*, for example, the city made a policy decision to regulate construction through by-laws that required approval of building plans, as well as inspection to ensure compliance. The actual inspection and enforcement of the construction, on the other hand, was operational. In *Just v. British Columbia*, [1989] 2 S.C.R. 1228, the government had made a policy decision to visually inspect roads to identify the risk of falling rock, but the manner in which the inspections were carried out, including their frequency and degree of probity, was operational. The decision in *Just*, which predates *Imperial Tobacco* by many years, observed that although policy decisions are "generally made by persons of a high level of authority in the agency", they may also properly be made by persons of a lower level of authority. The characterization of such a decision rests on the nature of the decision and not on the identity of the actors" (Emphasis added).

[653] In *Imperial Tobacco* representations by Canada that "low-tar cigarettes are less harmful to health" were found to be matters of policy "in the sense that they constitute a course or principle of action of the government", and could not give rise to a private cause of action. The representations, the Court said, at para. 95:

> were part and parcel of a government policy to encourage people who continued to smoke to switch to low-tar cigarettes. This was a "true" or "core" policy, in the sense of a course or principle of action that the government adopted. The government's alleged course of action was adopted at the highest level in the Canadian government, and involved social and economic considerations. Canada, on the pleadings, developed this policy out of concern for the health of Canadians and the individual and institutional costs associated with tobacco-related disease.

[654] In *Nelson (City)*, at para. 56, the Supreme Court summarized the four factors to consider in assessing the nature of the government's decision as policy or operational: (1) the level and responsibilities of the decision maker; (2) the process by which the decision was made; (3) the nature and extent of budgetary considerations; and (4) the extent to which the decision was based on objective criteria. The Court also highlighted features of what underlies core policy decision-making, such as "planning", "predetermining the boundaries" or "budgetary allotments", which "will often be formulated after debate — sometimes in a public forum — and input from different levels of authority", and "will be intended to have broad application, and will be prospective in nature": *Nelson (City)* at para. 55.

[655] In this case the defendant submits that the "choices attacked by the plaintiff" were policy decisions. It argues that the decision on whether to institute a feed ban is a legislative one, putting it at the "apogee" of policy-making. Canada also submits that the decision not to isolate the UK cattle and to design a Monitoring Program that did not prevent the imports from entering the feed chain involved consideration of economic, trade and consumer interests, science, and the balancing

of different stakeholder interests, which are issues of policy. Further, Canada submits that imposing a duty of care in these circumstances would conflict with the government's public duties.

[656] The plaintiff, of course, disagrees. It is necessary, therefore, to address the following issues: (1) whether the alleged negligent conduct is operational or constitutes policy decisions; (2) as part of the claim relates to whether the government was negligent in failing to enact a feed ban, whether the failure to legislate is justiciable; (3) if the conduct involves policy decisions, were they irrational or made in bad faith; (4) whether the claim, which is for pure economic loss, gives rise to concerns about indeterminate liability; (5) whether recognition of a duty of care in these circumstances will conflict with the defendant's public duties; and (6) whether other policy concerns exist to negate recognizing a duty of care in the circumstances of this case.

Was the alleged negligence policy or operational?

[657] In my view, applying the four factors from *Nelson (City)*, the government conduct complained of by the plaintiff constituted policy decisions about courses of action and were not operational activities, for the following reasons: (1) the decisions were made at senior levels of the Department of Agriculture,; (2) the decisions were made after consultation and the assessment of different options, had broad application and were prospective in nature; (3) while there was no evidence of budgetary constraints, it is clear that economic factors, both domestic and international, were considered; and (4) decisions were based on objective criteria, including scientific knowledge and balanced competing interests.

[658] The conduct of Canada which gives rise to this action was a result of decisions made by veterinarians and epidemiologists at senior levels of the Department of Agriculture on courses of action to take to prevent BSE from entering the Canadian herd after consideration of risks and in light of scientific knowledge at the time.

[659] The decision to ban the importation of cattle from the UK was a course of action decided upon to prevent BSE from entering Canada, and was a policy decision. As Dr. Willis noted, the Minister would have been involved in that decision, which raised political, economic and international trade issues, as well as concerns regarding relations with the UK. Operationally, the import ban was implemented by the refusal to grant import permits, and although there is no evidence of it, had import permits been issued in error after 9 February 1990, that would have been operational and might have given rise to liability.

[660] The decision to refuse entry to the Mirabel cattle and then to have them destroyed, was a similar decision as to a course of action based on policy considerations, including the desire to be "extra cautious." The actual destruction of the cattle was operational – had it been done badly, or animals been allowed to escape and enter Canada, that might have given rise to liability, but that is not what happened or what this action is about.

[661] The purpose and design of the Monitoring Program were also matters of policy. Unlike Australia, which appears to have taken a more rigorous approach through a program of "life-long quarantine surveillance", and the United States which did not seem to have a formal or effective

program at all, in 1990 the senior officials in the Animal Health Division of AAFC made a decision to monitor the UK imports for clinical signs only. Regardless of whether it was prudent or not, it was a decision on a course of action based on the scientific knowledge at the time, which included the belief that animals with clinical signs were more infectious than animals not showing symptoms, and was a decision in support of the goal of preventing BSE from entering the Canadian cattle herd.

[662] The scope of the Monitoring Program had economic, regulatory and legal implications. The 9 February 1990 memorandum to the Minister referred to economic, trade and political issues that were considered at the time. As Dr. Bulmer and Dr. Kellar observed, the UK imports were legally in Canada and the property of Canadian farmers. If Canadian government officials seized this property or otherwise interfered with it, there could be questions of justification, compensation, and litigation. In 1994, when Canada required the remaining imported cattle to be destroyed or returned to the UK, some owners brought proceedings in the Federal Court opposing those orders: see *Kohl*; *Jerram v. Canada (Minister of Agriculture)*, [1994] 3 F.C. 17; and *David Hunt Farms Ltd. v. Canada (Minister of Agriculture)*, [1994] 2 F.C. 625. Thus, the design of the Monitoring Program raised economic and legal concerns, as well as policy issues relating to regulatory enforcement.

[663] The Further Fresh as Amended Statement of Claim pleads, at para. 90, that, among other things, Canada was negligent in "the design and operation of the Monitoring Program." However, despite Dr. Willis' testimony that he understood the purpose of the Monitoring Program was to keep UK cattle out of the animal feed chain, the contemporaneous evidence is clear that it was not intended to keep UK animals from being slaughtered and rendered or designed to achieve that objective. Rather, as Drs. Bulmer and Kellar said, the Monitoring Program was simply intended to monitor the imports for clinical signs of BSE; and indeed it was designed that way.

[664] The evidence at trial shows that the Monitoring Program had gaps in implementation, such as not always conducting frequent inspections, or failing to forward information on potentially infected cattle, such as the Jerram cow, which had already entered the feed chain, on to Ottawa. However, to the extent, if at all, that the failings of the Monitoring Program may have allowed one or more UK imports to contaminate Canadian animal feed, this was due to the design of the program in the first place by senior officials in Ottawa, not a result of operational negligence by inspectors in the field.

[665] In *Eliopoulos*, the Court of Appeal addressed a somewhat similar situation. The plaintiff claimed that the Ontario government's plan to prevent WNV from being a threat to human health in Ontario was deficient. The plan "focused on detecting evidence of WNV in dead birds and in humans who presented with acute encephalitis or meningitis" but did not, it was alleged, "include provisions for adequate testing capacity": see *Eliopoulos*, at para. 4. As Sharpe J.A. observed, at para. 23, "the implementation of specific measures was essentially left to the discretion of members of the public, local authorities and local boards of health." Consequently, claims of negligence based on the alleged inadequacy of the plan itself were "issues of public health policy, the establishment of governmental priorities, and the allocation of scarce health care resources, not

the implementation of a specific health promotion or prevention policy at the operational level": *Eliopoulos*, at para. 30.

[666] So too here. Claims of negligence based on the alleged inadequacy of the Monitoring Program raise issues of policy and design, not the implementation of specific tasks at an operational level.

[667] The plaintiff nevertheless argues that the key decisions made by AAFC in responding to the risk of BSE were operational based on the policies reflected in the three pillars; in particular, that BSE would not enter Canada or develop in the Canadian cattle herd. The plaintiff argues that the decision to ban imports of cattle, and later all ruminants, from the UK and Ireland, and the decision to destroy the Mirabel cattle, were operational in that they were implementing the policies articulated in the three pillars. Similarly, and more to the point, it is argued that the Monitoring Program was a negligent implementation of those policies. None of those actions or decisions, it is argued, were "core policy decisions" based on public policy considerations such as economic, social and political factors.

[668] I disagree. The plaintiff's position limits policy decisions to statements of objectives. Saying that Canada wishes to keep BSE out of the country and will prevent it from entering the domestic cattle herd is an objective, but is not a decision "as to a course or principle of action based on public policy considerations." If policies were limited to only the highest statements of objectives, then every decision taken in respect of the objective, including broad decisions on how to achieve it, would be operational, even though they involve the balancing of economic, social and political factors, or the weighing of competing interests. Such a narrow view of what constitutes a policy decision is inconsistent with the jurisprudence and would make virtually every governmental decision subject to review by the courts in actions for negligence where a person or entity has been harmed by that decision.

[669] Consider the 18 June 1990 meeting with a wide range of stakeholders. The three pillars were set out by Dr. Kellar at that meeting as objectives which formed the basis for discussion of what course, or courses, of action ought to be taken to achieve those ends. One of the recommendations was to consider a feed ban which, following the meeting and after hearing from interested groups, Dr. Bulmer decided to "park." Such a decision not to adopt a course of action, which was taken in light of the scientific knowledge at the time and after considering economic and other factors must, in my view, be a policy decision.

[670] The failure to conduct a review and amend the *Feeds Regulations* in 1990 to ban RMBM, and in "not imposing a ruminant feed ban before 1997", as pleaded by the plaintiff, are also in my view quintessential policy decisions.

[671] In January 1990 a feed ban appears never to have been considered; however, had it been considered and rejected, it would have been a policy decision as to a course of action, whether to pass a law, or not. This is, as the defendant put it, the "apogee of policy-making." Indeed, policy decisions made as to courses of action flow from laws which set out basic principles and priorities. It falls to senior government officials to make policy decisions as to what laws are to be enacted

and how laws are to be given effect, which ultimately leads to operational activities which must be carried out without negligence. This illustrates that the drafting and passing of a law is at the top of government decision-making and is far removed from operational activities.

[672] This was the holding of the Federal Court of Appeal many years ago in *Kuczerpa v. R*, 1993 CarswellNat 1388 (F.C.A.), leave to appeal dismissed, [1993] S.C.C.A. No. 194, at para. 5, in which it stated that "a decision of the Government of Canada to pass or to refrain from passing general legislative measures reflecting current policy cannot as a rule give rise to a cause of action in tort by a member of the general public. That too is a question of clear policy."

[673] To similar effect is the holding of Low J. in *Sumere v. Transport Canada*, [2009] O.J. No. 4213 (S.C.), where she held, at para. 9, that "to the extent that the claim rests on the proposition that Canada ought to have enacted legislation, regulations or policies but did not do so and thereby caused or contributed to the harm that came to the deceased, the cause of action is not recognized in law."

[674] The plaintiff argues that it does not seek to hold the government liable for failing to legislate but, as stated in its written submissions, "for failure to consider and take reasonable measures to implement Canada's policy of keeping BSE out of Canada." However, this is a complaint that Canada did not decide on a course of action which required legislation, which is a policy decision, not operational negligence.

[675] The same must be the case with respect to the timing of legislation. While a feed ban could have been put in place more quickly after the WHO recommendation in 1996, decisions as to the process to follow or, put another way, the course or action to enact the ban, are policy decisions. Asserting the government was late in enacting something is simply another way of claiming the government is liable for not having legislated.

[676] The evidence is that in 1990 there were economic and regulatory concerns that had to be weighed in enacting a feed ban, and the same was true in 1994, and in 1996 and 1997. This is underscored by the consultations with various industries and their positions. A feed ban would have economic implications for slaughter and rendering businesses, and for the sheep and cattle industries. The impact on sheep farmers was specifically raised with the Minister in 1990, and was also noted by Dr. Kimberlin in his paper published by the OIE in 1992. The CCA opposed a feed ban in 1990. Dr. Koller's memo in April 1994 raised many of the same issues.

[677] Trade relations with the United States also needed to be addressed. The single market for cattle and beef in the two countries, with harmonized regulations and similar inspection services, necessitated that Canada and the US move in tandem on the BSE issue.

[678] The plaintiff's expert, Dr. Beckett, recognized this in his report, stating:

> The situation created conflict for Canada, as policy about the management of the risk and reality of BSE within its borders stood to threaten the seamless exchange of cattle and cattle products between the two countries. Equally serious was the perception that any attention given by Canada to the possible development of BSE

> within her borders (in particular, the feeding of ruminant-derived products to ruminants) should be in harmony with the US. If Canada had required more rigorous policies than the US, or had implemented them sooner, then it is likely that trade would have been disrupted and consumer groups and politically-motivated lobbyists within the US would have created substantial difficulties for the US government. The imperative to avoid taking actions that might result in this or similar scenarios was clearly felt by the Canadian government. In the 2013 Discovery of John Kellar, for example, the deponent stated that, "With a trading partner with ten times the population, ten times the marketplace, ten times the livestock, ten times the feed, and us dependent upon that flow, that continuous flow, which was much more important to us than to the US, we did not dare tinker with anything about that marketplace" (Kellar, 2013a).

[679] In conclusion on this issue, I am satisfied that Canada's decisions impugned by the plaintiff were policy decisions taken after considering economic, political and scientific implications, among other things.

Is the failure to enact a feed ban justiciable?

[680] My conclusion that the government cannot be sued for negligence for legislating, or failing to legislate, is also consistent with case law that such claims are non-justiciable. Although such cases are now often addressed under the *Anns/Cooper* test, the Supreme Court stated long before *Anns* that even when a government acts beyond its authority "it would be incredible to say in such circumstances that it owed a duty of care giving rise to liability in damages for its breach. 'Invalidity is not the test of fault and it should not be the test of liability'": *Welbridge Holdings Ltd. v. Greater Winnipeg*, [1971] SCR 957, at p. 969.

[681] While it is now possible to sue and obtain damages from government for acting inconsistently with the *Canadian Charter of Rights and Freedoms,* Part I of the *Constitution Act, 1982* being Schedule B to the *Canada Act 1982* (U.K.), 1982, c. 11 (see, e.g., *Vancouver (City) v. Ward*, 2010 SCC 27, [2010] 2 SCR 28), the law respecting duty of care remains the same. As was stated by Hugessen J. in *A.O. Farms Inc. v. Canada*, [2000] F.C.J. No. 1771 (F.C.), cited with approval by the Ontario Divisional Court in *Lucas v. Toronto Police Services,* [2001] O.J. No. 2334, at para. 8, "[g]overnment, when it legislates, even wrongly, incompetently, stupidly, or misguidedly is not liable in damages." Putting the matter a little more delicately, the Ontario Court of Appeal stated in *Ontario Federation of Anglers & Hunters v. Ontario (Minister of Natural Resources)* (2002), 211 D.L.R. (4th) 741 (Ont. C.A.), at para. 49, that "[t]he wisdom of government policy through regulations is not a justiciable issue unless it can be demonstrated that the regulation was made without authority or raises constitutional issues."

[682] This principle also applies when legislatures fail to enact legislation as "there is no duty … to enact legislation which achieves any particular purpose": *Edwards v. Rebound Resources Inc.*, 2008 CanLII 41168 (Ont. S.C.), at paras. 42-44; *Mancuso v. Canada (National Health and Welfare)*, 2014 FC 708, at para. 131, aff'd 2015 FCA 227, leave to appeal refused, 2016 CanLII 41042 (SCC). As Low J. held in *Sumere*, at para. 7, "[t]he authority to enact laws and the authority

to refrain from so doing are two sides of the same coin. They are the product of political decisions and are the sole province of government": see also *Ontario v. Satschko*, [2007] O.J. No. 4908 (S.C.), at paras. 52-53, aff'd 2009 ONCA 64.

[683] The Supreme Court recently observed in *Mikisew Cree First Nation v. Canada (Governor General in Council)*, 2018 SCC 40, [2018] 2 S.C.R. 765, at para. 37, that "the law-making process is largely beyond the reach of judicial interference." As the Court explained, at para. 2 of *Mikisew*:

> Two constitutional principles — the separation of powers and parliamentary sovereignty — dictate that it is rarely appropriate for courts to scrutinize the law-making process. The process of law-making does not only take place in Parliament. Rather, it begins with the development of legislation. When ministers develop legislation, they act in a parliamentary capacity. As such, courts should exercise restraint when dealing with this process.

[684] The Supreme Court continued at para. 35, stating that the "separation of powers is 'an essential feature of our Consititution'", which "dictates that 'the courts and Parliament strive to respect each other's role in the conduct of public affairs'; as such, there is no doubt that Parliament's legislative activities should 'proceed unimpeded by any external body or institution, including the courts' (*Canada (House of Commons) v. Vaid*, 2005 SCC 30, [2005] 1 S.C.R. 667, at para. 20)."

[685] Absent a government acting beyond its powers or in a manner inconsistent with the Constitution, there is no role for the Court to review the legislative actions, or inactions, of government. A citizen's remedy for such complaints must be at the ballot box, not the courthouse. Accordingly, I agree that the plaintiff's claims in negligence for failing to legislate a feed ban are not justiciable.

Were the policy decisions irrational or made in bad faith?

[686] The plaintiff also argues that, if the failure to implement a feed ban and to only monitor the UK imports for clinical symptoms of BSE were policy decisions, they were irrational and made in bad faith.

[687] Laws are not reviewable for irrationality, nor can a government be sued for legislating, or failing to legislate, in bad faith: *Club Pro Adult Entertainment Inc. v. Ontario*, [2006] O.J. No. 5027, at para. 90, aff'd 2008 ONCA 158, [2008] O.J. No. 777. Governments are free to legislate within their constitutional limits. As the Supreme Court put it in *Wells v. Newfoundland*, [1999] 3 S.C.R. 199, at para. 59: "Legislatures are subject to constitutional requirements for valid law-making, but within their constitutional boundaries, they can do as they see fit. The wisdom and value of legislative decisions are subject only to review by the electorate."

[688] Accordingly, it is not necessary to consider irrationality with respect to the claim about a feed ban, but it is necessary to consider whether the design of the Monitoring Program was irrational, or not "*bona fide*", as the plaintiff argues. This is addressed in my discussion and conclusion below that Canada did not fall below a reasonable standard of care in its design of the

Monitoring Program. There is also an absence of evidence suggesting that anyone at the Department of Agriculture acted in bad faith; indeed Mr. Taylor, who testified for the plaintiff but worked with Drs. Kellar and Stemshorn, among others, at Agriculture Canada during the relevant time, respected their professionalism, scientific knowledge, honesty and integrity.

Is indeterminate liability a concern?

[689] In *Cooper*, at para. 37, the Supreme Court identified "the spectre of unlimited liability to an unlimited class" as a basis to conclude a duty of care should not be recognized. This concern is well-recognized in the caution with which courts bring to claims of pure economic loss: see, e.g., *Hercules Managements Ltd. v. Ernst & Young,* [1997] 2 S.C.R. 165, at para. 31.

[690] In this case, the Class claims economic losses for lost profits, lost sales and loss in value of their property. As the Supreme Court observed recently in *Maple Leaf Foods*, at para. 19, "there is no general right, in tort, protecting against the negligent or intentional infliction of pure economic loss." The Supreme Court confirmed, however, at para. 21, that there are three categories of cases where pure economic loss may be recovered: (1) negligent misrepresentation or performance of a service; (2) negligent supply of shoddy goods or structures; and (3) relational economic loss. The claims in this case would fall under the first category.

[691] The rationales for being cautious in recognizing claims for pure economic loss were summarized in *Martel Building Ltd. v. Canada*, 2000 SCC 60, [2000] 2 S.C.R. 860, at para. 37:

> First, economic interests are viewed as less compelling of protection than bodily security or proprietary interests. Second, an unbridled recognition of economic loss raises the spectre of indeterminate liability. Third, economic losses often arise in a commercial context, where they are often an inherent business risk best guarded against by the party on whom they fall through such means as insurance. Finally, allowing the recovery of economic loss through tort has been seen to encourage a multiplicity of inappropriate lawsuits.

[692] In *Livent*, at para. 43, the Supreme Court identified three aspects to indeterminate liability that raise concerns: "(1) value indeterminacy ('liability in an indeterminate amount'); (2) temporal indeterminacy ('liability…for an indeterminate amount of time'); and (3) claimant indeterminacy ('liability…to an indeterminate class')." When a claim has one or more of these features, and the scope of liability is truly indeterminate, the Court stated, "our legal tools are insufficient to resolve the quantum of infinite damages that will flow from such a claim." On the other hand, the Court also stated, at para. 45, that the "presence of indeterminacy need not be dispositive of liability in all cases." It is a "policy *consideration*" not a "policy *veto*"(emphasis in original).

[693] Application of this policy consideration involves examining the nature of the activity. Large undertakings can be exposed to expansive liability as their actions may have broad impact, but the fact that liability may be large does not mean that a duty of care should be rejected.

[694] In this case, as framed, the scope of liability is large, but it is not indeterminate.

[695] The Class is limited to "all persons who as at May 20, 2003 were resident in Canada and farmed cattle." Dr. Kellar admitted that, under the NAHP, Canada was dealing with 12 million cattle on 150,000 farms. Indeed, the 1987 Health of Animals publication identified a cattle population of 11,997,608 head of cattle on 155,945 farms. Statistics Canada data and income tax returns provide Canada with data on the number of cattle farmers in Canada. Mr. Lavoie testified that Canada Revenue Agency filings provide information on how much of a particular commodity, including cattle, farmers produce across the country. Statistics Canada breaks down the number of cattle and calves by type each year and identifies the number and weight of live cattle for slaughter, as well as the quantity and value of cattle exports to the US.

[696] Based on the extensive data available, the experts for both sides have reached agreement on most of the losses suffered by the Class, only differing on certain assumptions and methodologies. The damages to the Class, therefore, can be determined.

[697] However, defining the scope of the Class and its damages does not resolve the concern about indeterminate liability for pure economic loss. Recognizing a duty to one plaintiff can open the door to recognition of others who may look to the defendant for compensation for economic losses as well. In *D'Amato v. Badger*, [1996] 2 S.C.R. 1071, at para. 18, Major J. described this as the "ripple effect" referring, I cannot help but note, to a case involving disease in cattle, *Weller & Co. v. Foot and Mouth Disease Research Institute*, [1966] 1 Q.B. 569. There, as Major J. summarized it, Widgery J. "disallowed pure economic loss and opined that if auctioneers could recover for damage to farmers' cattle, so might butchers, transport workers, and dairy workers."

[698] The evidence in this case was that many industries, not just cattle producers, were affected by BSE and the government's response to it. This included slaughterhouses, renderers and feed producers, as well as cattle and sheep farmers. Others come to mind, just as they came to mind in *Weller & Co.* 55 years ago, such as transport workers, auctioneers, packers, fertilizer companies and others affected by the beef and dairy industries. Indeed, there is evidence of links to these businesses in the testimony of Mr. McCrea and Mr. Sears. The attendees at the 18 June 1990 meeting are illustrative of the many industries affected by BSE.

[699] Losses suffered by those other industries would also be economic losses, not physical losses, the limits of which may be difficult to determine. For this reason, I suspect, the Court of Appeal was being careful in *Vlanich v. Typhair*, 2016 ONCA 517, 131 O.R. (3d) 353, at para. 31, to limit proximity to situations where "the public authority assumes responsibility for ensuring compliance with a standard that is intended to avoid or to reduce a risk of physical damage or harm" (emphasis added).

[700] Further, the economic losses in this case raise squarely the third and fourth concerns identified in *Martel*. The losses claimed "arise in a commercial context" involving "an inherent business risk best guarded against by the party on whom they fall through such means as insurance." Allowing recovery may also "encourage a multiplicity of inappropriate lawsuits." Accordingly, I accept Canada's submission that indeterminate liability to an indeterminate number of claimants weighs against finding a duty of care in this case.

Would a duty of care conflict with public duties?

[701] Another policy concern with recognizing a duty of care to the Class in this case is that doing so may create a conflict with the regulator's public duties. As the Supreme Court stated in *Fullowka*, at para. 72: "[c]onflicting duties have been an important consideration in dealing with proximity in claims against regulators and others carrying out statutory duties: see, e.g., *Cooper, Edwards, Syl Apps and Hill*. Serious negative policy consequences may flow where such conflict exists."

[702] The interests of cattle farmers do not always align with the duties of the Department of Agriculture. This was seen in 1994 when several cattle producers went to court to try to prevent the destruction of their UK imports. In *River Valley*, the Court of Appeal, at para. 86, recognized a similar conflict arising from costly testing requirements imposed on farmers.

[703] In *Eliopoulos*, dealing with Ontario's response to the threat of the West Nile Virus, Sharpe J.A. would have negated any *prima facie* duty of care as it would interfere with Ontario's ability to protect public health, stating, at para. 33:

> I agree with Ontario's submission that to impose a private law duty of care on the facts that have been pleaded here would create an unreasonable and undesirable burden on Ontario that would interfere with sound decision-making in the realm of public health. Public health priorities should be based on the general public interest. Public health authorities should be left to decide where to focus their attention and resources without the fear or threat of lawsuits.

[704] The same reasoning applies here. To hold that government owes a private law duty of care to one particular industry or economic group when it is responding to a new and serious threat to animal and, potentially, human health, would be contrary to the public interest. It would "interfere with sound decision-making" because of the "fear or threat of lawsuits." In this case, as Dr. Hope persuasively testified, much about BSE was, and remains, unknown. My review of events in the early 1990s demonstrates that knowledge about BSE was still limited and evolved over several years. As Lederer J. stated recently in *Taylor (ONSC)*, at para. 89: "Science does not tend to develop understanding in moments of immediate and complete insight. Rather it evolves over time." In such circumstances, governments must make challenging decisions about courses of action in the public interest and should not be inhibited, or driven by, fear or threats of lawsuits.

Other policy concerns with recognizing of duty of care

[705] There are additional policy concerns that arise in this case that also weigh against finding a duty of care.

[706] One concern arises from the existence of extensive farm subsidy programs funded by the defendant and the provinces which provided financial assistance to the Class during the period following the closure of the border in May 2003. As I have described, cattle producers received close to $2 billion in direct financial assistance arising from BSE, most of which was from the federal government. They also received over $2 billion from the federal government in other

general farm assistance programs to offset their losses. I have calculated the total of these offsets from direct and general assistance to be $4.256 billion. Although I have concluded that NISA funds should not offset the damage claim, the Class received an additional $894.4 million in government funds from the wind-down of that program between 2003 and 2007, the period for which damages are claimed. This is a large portion of the $7.116 billion damage claim sought by the plaintiff at the conclusion of the trial, and an even larger portion of the damages I have found that the Class actually suffered, of $5.419 billion.

[707] My review of agricultural assistance programs demonstrates a long-standing commitment by Canada to support farming through public law programs. The federal government payments were made to cattle farmers pursuant to *FIPA*, reflecting the decision by Parliament to assist farming operations which are subject to many risks beyond anyone's control, due to their importance in the Canadian economy. Canada has made a policy decision through enactment of *FIPA* and the various programs created under it, including programs that constitute "special measures" arising from "exceptional circumstances" under s. 12 of *FIPA*, to ensure farmers' losses are limited, whatever the cause. In short, Canada has enacted a public law scheme to address farm losses, however caused, which weighs heavily against recognizing a private law duty of care.

[708] Related to this is Canada's argument that finding a private law duty here and imposing liability on Canada would, to use the words of the Supreme Court in *Cooper*, at para. 55, "effectively create an insurance scheme … at great cost to the taxpaying public." A similar concern was recognized in *Attis*, at para. 74, in the context of discussing indeterminate liability. In this case, Canada has, through its assistance programs, chosen to create something akin to an insurance scheme, at considerable cost, to address farm losses. Indeed, creating and administering these public law programs is part of AAFC's regulatory function. In my view these circumstances are a policy reason not to find a private law duty of care.

[709] Another residual policy concern in this case is that if proximity arises from the consultations between Agriculture Canada and cattle industry associations, there will be a chilling effect on such consultations, as governments may be reluctant to consult if it could create private law liability. While I agree with counsel for the plaintiff that this is somewhat speculative, it is not disputed that consultation is an accepted practice of good government. This too is a concern that weighs against finding a duty of care arising from consultations, including the interactions relied upon by the plaintiff.

[710] A final policy concern is that to give effect to the plaintiff's claim may place a duty on Canada to protect an industry from market forces caused by a global public health event. This raises concerns about indeterminacy. This concern arises in this case, as one of the disputes on damages relates to whether the measure of Canada's liability should be increased because Americans also suffered a border closure following the diagnosis of the Washington cow. As I discuss later in these Reasons, such a claim is too remote and begs the question of where damages should end.

Conclusion on Duty of Care

[711] In summary, I conclude that Canada does not owe a duty of care to the defendant in this case. Although the damage was foreseeable, the statutory framework and interactions between the parties do not create a proximity between them such that a duty of care can, or should, be recognized. Further, I am satisfied that there are a number of important policy concerns that would negate such a duty if it existed.

Standard of Care

[712] In light of my finding that the defendant did not owe a duty of care to the plaintiff and to the Class, it is not strictly necessary for me to address whether the defendant breached the requisite standard of care. However, a large portion of the extensive evidence in this trial was directed at this issue and it is appropriate that I address it.

The legal test

[713] Both parties cite the Supreme Court of Canada decisions in *Ryan v. Victoria (City)*, [1999] 1 S.C.R. 201, and *Hill v. Hamilton-Wentworth Regional Police Services Board*, 2007 SCC 41, [2007] 3 S.C.R. 129, as the governing case law regarding standard of care.

[714] In *Ryan*, the Supreme Court stated, at para. 28:

> Conduct is negligent if it creates an objectively unreasonable risk of harm. To avoid liability, a person must exercise the standard of care that would be expected of an ordinary, reasonable and prudent person in the same circumstances. The measure of what is reasonable depends on the facts of each case, including the likelihood of a known or foreseeable harm, the gravity of that harm, and the burden or cost which would be incurred to prevent the injury. In addition, one may look to external indicators of reasonable conduct, such as custom, industry practice, and statutory or regulatory standards.

[715] This approach was recently confirmed by the Supreme Court in *Nelson (City)*. As the Court noted at para. 92, "[t]he reasonableness standard applies regardless of whether the defendant is a government or a private actor." Just as a physician or lawyer must meet the test of a reasonable and prudent doctor or lawyer in the same circumstances, a government official must meet an objective test of reasonableness for an individual in those circumstances. As the Supreme Court put it in *Hill*, discussing the standard of care to be applied to police in an action for negligent investigation, "[t]he standard of care required to meet the duty is not that of a reasonable lawyer or judge, but that of a reasonable *police officer*": at para. 50 (emphasis in original). The Court went on to note, at para. 54:

> Courts are not in the business of second-guessing reasonable exercises of discretion by trained professionals. An appropriate standard of care allows sufficient room to exercise discretion without incurring liability in negligence. Professionals are

> permitted to exercise discretion. What they are not permitted to do is to exercise their discretion unreasonably. This is in the public interest.

[716] Reasonableness is, of course, contextual. It includes consideration of the likelihood of harm, the gravity of that harm, and the cost that would be incurred to prevent the harm. But, as observed in *Hill* at para. 73, the reasonableness standard "gives due recognition" to professional discretion "provided that it stays within the bounds of reasonableness." This means that the standard of care is not breached simply because the exercise of discretion was not "optimal", as long as it falls "within the range of reasonableness." The Court continued:

> The standard is not perfection, or even the optimum, judged from the vantage of hindsight. It is that of a reasonable officer, judged in the circumstances prevailing at the time the decision was made — circumstances that may include urgency and deficiencies of information. The law of negligence does not require perfection of professionals; nor does it guarantee desired results (Klar, at p. 359). Rather, it accepts that police officers, like other professionals, may make minor errors or errors in judgment which cause unfortunate results, without breaching the standard of care. [Emphasis added.]

[717] Recently, in *Taylor (ONSC)*, at para. 622, Lederer J. aptly summarized the test for the standard of care to be applied to a reasonable regulator as follows:

> Generally speaking, a reasonable regulator's job is to administer its authorizing statute. Those powers should be exercised in light of relevant information and for the purpose of advancing the statute's objectives. Reasonable regulators evaluate relevant information and choose a regulatory response in good faith based on their assessment of what best promotes the statutory purpose in the circumstances. <u>The mere existence of a power to control a risky situation does not mean that the reasonable regulator must deploy that power in all cases to eliminate risk, particularly when judged with the benefit of hindsight.</u> [Emphasis added]

[718] At the same time, one must be cautious not to import policy concerns into the reasonableness standard to further immunize government from liability. As the Supreme Court put it in *Nelson (City)*, at para. 92:

> The reasonableness standard applies regardless of whether the defendant is a government or a private actor (*Just*, at p. 1243). In *Just*, Cory J. recognized that the "standard of care imposed upon the Crown may not be the same as that owed by an individual" (at p. 1244). However, this is not because public policy concerns applicable to governments displace the reasonableness standard. In fact, Cory J. was clear that the analysis under duty of care must be "kept separate and distinct" from the analysis of the standard of care (at p. 1243). It is important that the standard of care analysis not be used as another opportunity to immunize governments from liability, especially when a determination has already been made that the impugned government conduct was not core policy.

The standard of care issues

[719] As summarized at the outset of my discussion of Common Issue #2, at the conclusion of the trial counsel for the plaintiff identified three ways in which it asserted Canada was negligent:

(i) Canada did not conduct a safety assessment before amending the *Feeds Regulations* in January 1990;

(ii) Beginning in February 1990, Canada did not prevent cattle that had been imported from the UK from entering the animal feed chain; and

(iii) Canada did not take steps in 1994 to address the threat that BSE may have entered the feed chain following the rendering of approximately 68 UK imports.

Should Canada have conducted a safety assessment prior to amending the Feeds Regulations in January 1990?

[720] The plaintiff's submission on this issue is rooted in the evidence of Canada's knowledge of BSE in 1990. The plaintiff argues that by 1990 Canada knew that feeding infected RMBM to cattle was believed to be the primary means of transmission. Although BSE likely originated from scrapie-infected MBM, the UK experience suggested that recycled cattle carcasses containing the infection were augmenting the spread of the disease, and this was known to Dr. Kellar and others by 1990.

[721] Although amendments were made to the *Feeds Regulations* regarding fresh ingredients in January 1990, this does not mean that Canada acted unreasonably in failing to conduct a safety or risk assessment regarding RMBM in cattle feed and in failing to impose a feed ban at that time. The amendments made in 1990 had been proposed and subject to input and consultation for at least three years, and did not include amendments relating to the inclusion of MBM in feed. Rather, the amendments permitted the addition of fresh meat by-products which are fed to mink and foxes; they had nothing to do with cattle feed and BSE. As Mr. Sears testified, "I don't think I know anyone who has ever fed fresh meat to their cattle."

[722] At the time these regulations were being prepared in the 1980s, knowledge of BSE was limited and was seen by Canada, and by other countries, as primarily, if not exclusively, a problem in the UK. This is supported by the fact that the OIE had yet to take any steps to address BSE and, later, when it did address it, the *Terrestrial Code* did not require countries with no, or a low, incidence of BSE to bring in a ruminant-to-ruminant feed ban.

[723] There is no evidence that the United States conducted a review, evaluation or risk or safety assessment of including MBM in animal feed at that time. Indeed, despite Dr. Beckett's criticism of Canada for failing to review the *Feeds Regulations* to address the risk of MBM as a source of BSE prior to the promulgation of the Regulations in January 1990, he gave no evidence that Australia did so either. As noted in the parties' Agreed Statement of Facts, MBM had been a widely used component of feed in Canada, the United States, and elsewhere in the world for many years.

This changed in Europe in the early 1990s as BSE emerged there, but it was not mandated by the OIE and did not change in Canada, Australia and the United States until the WHO recommendation was made in 1996.

[724] The spread of the disease in the UK and its emergence in some European countries through imported cattle led to Canada taking further steps in 1990; however, there is no evidence to suggest that Canada acted unreasonably in failing to consider a feed ban prior to January 1990. Canada had taken the step of controlling UK imports in 1988, and although Canada took a number of additional steps in 1990 to address the risk of BSE, including refusing further imports of cattle and beef products from the UK, the destruction of the Mirabel cattle, making BSE a reportable disease, and the implementation of a Monitoring Program, those actions all took place after the *Feeds Regulations* were amended.

[725] Dr. Leiss, who was not reluctant to harshly criticize what he viewed as Canada's failings respecting BSE, did not take issue with Canada not including a feed ban in the amendments to the *Feeds Regulations*, passed in January 1990, but said that from early 1990 forward Canada ought to have implemented a ban.

[726] In light of the prevailing knowledge at the time, and the limited reaction to BSE by the OIE and other countries as of January 1990, I am not satisfied that Canada acted unreasonably in not conducting a review of the use of MBM in cattle feed in the regulatory review process leading to the amendments to the *Feeds Regulations* in January 1990. There is no basis to conclude that the failure to do so was unreasonable or departed from the standards expected of animal health regulators in a country that had no BSE and was regarded as having a low risk of developing it.

Should Canada have taken steps to keep UK cattle out of the feed chain beginning in February 1990?

[727] Having implemented an import ban and destroyed the Mirabel cattle in order to prevent more UK cattle from entering the Canadian cattle herd by March of 1990, it is argued that Canada ought to have also taken steps at that time to prevent the remaining UK imports from entering the animal feed chain. Canada did not take such steps until the UK imports were destroyed in 1994 following the DePalme cow diagnosis.

[728] In taking steps to prevent further imports and destroying the Mirabel cattle, Canada's witnesses agreed that Canada was following a "zero-risk" approach, and had adopted the "precautionary principle" in dealing with BSE, which permitted Canada to take steps even beyond those for which there was clear scientific justification. This "precautionary priniciple" was the subject of discussion in *Morton v. Canada (Fisheries and Oceans)*, 2015 FC 575, [2015] F.C.J. No. 566. It was described by Rennie J., at para. 43, as recognizing "that as a matter of sound public policy the lack of complete scientific certainty should not be used as a basis for avoiding or postponing measures…." However, in that case the precautionary principle was incorporated into legislation in prohibiting government from doing certain things (see paras. 97-98). In another decision involving the same parties, Strickland J. said that the principle's "focus is to exercise more caution when information is uncertain and, where appropriate, to ensure that steps are taken

to prevent irreversible harm, even when the potential risk of causing that harm is uncertain": *Morton v. Canada (Fisheries and Oceans)*, 2019 FC 143, [2019] 4 F.C.R. 3, at para. 168.

[729] Canada was able to order destruction of the Mirabel cattle under s. 3(b)(i) of the *ADPA*, which permitted Canada to act when animals "are affected with infection or contagious disease or suspected of being so affected." It did so despite protests by the UK's MAFF which described Canada's reaction as "draconian and irrational." Although there was no evidence of horizontal transmission of BSE at the time, it could not be ruled out, hence the destruction of all of the Mirabel cattle and not just the one from an infected herd. As Dr. Willis testified, admitting them to Canada had become "an unnecessary risk."

[730] Dr. Kellar admitted that Canada suspected subclinical infection in any animal imported from the UK between 1982 and 1990. Dr. Bulmer admitted that the concern with the Mirabel cattle was "the same suspicion that the department had about the previous imports", specifically that "they could be infected with BSE" although it was a "very low possibility." In this context it is argued that Canada inexplicably, and negligently, failed to follow its zero risk, precautionary approach, by not isolating the remaining UK imports to prevent them from being slaughtered and rendered and recycled in animal feed. In particular, the plaintiff submits that Canada was negligent in designing and implementing a Monitoring Program which failed to keep the UK animals out of the feed chain.

[731] With the benefit of hindsight, of course, had Canada isolated the remaining UK imports in 1990, BSE in the indigenous Canadian herd may have been prevented, although even this is doubted by Dr. Hope. Nevertheless, as it is admitted by the defendant that BSE likely entered Canada through the slaughtering and rendering of a UK import in approximately 1992, had that been avoided, there would not have been BSE in Canada in 2003. But hindsight is not the test; one must consider the knowledge and standards of the day to determine whether Canada's actions, and more particularly the steps taken, or not taken, by the Animal Health Division of AAFC were unreasonable. As the Supreme Court stated in *Ryan*, at para. 28, this "depends on the facts of each case, including the likelihood of a known or foreseeable harm, the gravity of that harm, and the burden or cost which would be incurred to prevent the injury." The Court went on to state that "one may look to external indicators of reasonable conduct, such as custom, industry practice, and statutory or regulatory standards."

[732] Canada may have adopted the precautionary principle in dealing with the Mirabel cattle, but Canada was not obligated to eliminate all risk or to adopt a "zero risk" approach. As stated in *Hill*, "the standard is not perfection." Rather, to the extent Canada did not adopt a zero-risk approach by not isolating the remaining imports so that they did not enter the feed chain, the issue is whether that was unreasonable. Implementing an import ban and deporting or destroying a handful of cattle not yet introduced into Canada was quite different than isolating many more animals that had already entered the Canadian herd.

[733] There is no question that Dr. Kellar and others were aware in 1990 of the risk that some of the UK imports might be subclinically infected with BSE, and that this posed a risk to Canadian

cattle through recycling. They were also aware of the serious economic impact that the Canadian cattle industry would suffer if BSE entered the Canadian herd.

[734] Dr. Kellar, Dr. Bulmer and others were also aware that the Monitoring Program would not be effective in preventing subclinical imports from being slaughtered and rendered. As Dr. Koller wrote in January 1994, and Dr. Kellar admitted they knew in 1990: "All monitoring does is perhaps bring the fact that disease has spread to your attention a little sooner than without monitoring. By the time anything shows up in a monitored anml [sic] the disease is already spread."

[735] Dr. Kellar and others, however, reasonably regarded the risk of transmission through feed to be very low. Canada's sheep population was very small and the incidence of scrapie was very low compared to the UK. The paper written for the Minister in November 1991 noted, at least in the context of scrapie, the "very small amount of infected material" that could enter the rendering process and that it would be "further diluted by a low level of incorporation into ruminant rations."

[736] In 1990, transmission through recycling of cattle was a hypothesis to explain the spread of BSE in the UK where large numbers of subclinically infected animals had been slaughtered. While a compelling theory, and known to Canada, it was not seen as applicable to the Canadian situation, with a very small number of potentially infected cattle and different rendering procedures. Among a Canadian cattle population of approximately 12 million, there were, essentially, a handful of UK cattle spread over a very large land mass, and if any were subclinical, their meat and bone meal would be subject to rendering and dilution, limiting the risk of transmission. As Dr. Kellar summarized it: "Dilution by virtue of minimal numbers entering a massive population."

[737] This view was supported by the opinions of experts in the UK and the United States at the time. Studies concerning the US (in 1991) and Northern Ireland (in 1992) concluded that there was little risk of imported UK cattle spreading BSE in those countries – despite the greater number of UK imports in both of those countries (approximately 459 UK imports in the United States, and over 300 in Northern Ireland between 1981 and 1984 alone), and in Northern Ireland a much smaller cattle population. In May 1992, Dr. Kimberlin's lengthy paper for the OIE stated: "In most situations, the consequences of importing an infected animal would be minimal… <u>The chances of this infecting other cattle would be small because of extensive dilution with uninfected material</u>"(emphasis added). In light of the discussion about dilution reducing risk of transmission through feed, dating back to 1990, I do not accept the plaintiff's submission that dilution is an after-the-fact justification for Canada's inaction, which was not considered at the time. The evidence supports the opposite conclusion.

[738] In the early 1990s, as Dr. Hope explained, the pathogenesis of the infection in cattle was still not well understood. It was not known how much infectious agent would lead to transmission. However, as Dr. Kellar testified, it was believed at that time that unless an animal was expressing clinical symptoms, its infectivity, or infectious load, was low. In 1995, the report of the WHO meeting in May stated that "[e]xposure depends on the amount of a given bovine tissue, the infectivity titre of the tissue and any reduction in titre achieved during manufacture or preparation." Dr. Wells' studies in the 1990s, as the 2001 Australian risk assessment authored by Dr. Beckett pointed out, showed that tissues from the central nervous system of cows "were *not* infective until

the onset of clinical illness" (emphasis in original) which caused Dr. Beckett and his colleagues to observe that the infective agent in subclinical animals "is also likely to be substantially lower than the titre of infective agent associated with the CNS tissues of clinically affected animals."

[739] The CVL's attack rate studies that were intended to determine the amount of infectious material needed to transmit the disease only began in 1992 and took many years to complete. Even when some experts at the CVL became aware in September 1994, through a controlled study involving putting fresh infected brain tissue down the throat of a cow through a tube, that 1 gram of BSE titre could transmit BSE, Dr. Hope observed that this was quite different from giving an animal a feed supplement containing MBM that has been rendered – "essentially boiled and fractionated" – and is then chewed by the cow. The finding that a very small amount of infectious material could result in transmission surprised the BSE experts at the CVL, and was not shared with Canada, or others, until at least 1996, after the results had been confirmed. But by September 1994, the Monitoring Program had ended as the UK imports had been ordered destroyed, and by early 1996 the WHO recommended a feed ban, which Canada took steps to implement.

[740] The view that the risk of transmission of BSE from the imports was low was also shared by the OIE, the international body that sets standards for animal health and trade in animals. The report to the FMD Commission of the OIE by Drs. Wilesmith and Bradley in November-December 1989, and the subsequent summary of it highlighted, as Dr. Kellar testified, that the focus was on clinical animals as the threat. Dr. Kimberlin and others at the time had suggested that it would take large doses of infectious scrapie material to cross the species barrier. Although Dr. Kimberlin's view evolved such that in his 1992 paper for the OIE he noted that the evidence suggested that the average dose of infective material was "extremely low", he said that the "main effect of recycling" was to increase the number of batches of MBM to a threshold sufficient to infect. But in countries other than the UK, unless large numbers of animals were imported and rendered, Kimberlin said the statistical probability of UK imports causing infection was "quite small." As noted, even after 1992, studies by Dr. Wells suggested that tissues from the central nervous system of cows "were *not* infective until the onset of clinical illness."

[741] In this context, a decision to monitor the UK imports for clinical signs of BSE was not, in my view, unreasonable, especially when Canada had very little scrapie, made limited use of MBM in feed, and had a very small number of UK imports among an enormous population of Canadian cattle.

[742] It follows that I do not accept Dr. Beckett's opinion that Canada's failure to implement a quarantine program in 1990 similar to Australia's was unreasonable. Dr. Beckett's opinion was based on hindsight. He relied on findings in the BSE Inquiry report of 2000 and the assumption, which I have found to be incorrect, that it was widely known that a very low dose (1 gram) of infectious material could transmit the disease when it appears that many experts held a different view. Although prepared after the BSE Inquiry report, the 2001 Australian risk assessment also identified dilution as a factor that reduced the risk of infection spreading through feed.

[743] Canada's Monitoring Program was not required by the OIE; indeed at that time there was no express directive from the OIE on how countries should deal with cattle imported from the UK.

In 1992, Canada established a BSE surveillance program requiring ante-mortem testing for BSE on animals exhibiting neurological signs consistent with the disease, but it was not until 1997 that the OIE adopted the implementation of a surveillance and monitoring program as a requirement for BSE country categorization.

[744] In his report, Dr. Thiermann stated that "[t]he efficiency of the Canadian surveillance and testing program, and the transparency in their searching and reporting, may be the reason why Canada finds itself among the very few non-EU countries reporting native BSE cases, notwithstanding that the risks of BSE were known to exist throughout the Americas." In his testimony, Dr. Thiermann was more blunt in suggesting that Canada's honesty in reporting BSE differed from at least one other country in the Americas which delayed reporting a BSE case for many months.

[745] As Dr. Thiermann testified, at all times Canada complied with, and often exceeded, OIE standards. Canada decided to make BSE a reportable disease under the *ADPA* in April 1990, before the OIE decision to list it. Canada, through Dr. Willis, pressed for stricter provisions prohibiting trade in any ruminant protein from the UK. When the *Terrestrial Code* chapter on BSE was approved in 1992, Canada was in compliance with it, and remained in compliance with all amendments to the *Code* relating to BSE.

[746] As Canada points out, the BSE symptoms of the DePalme cow were identified in 1993 and it did not enter the feed chain. However, that was not the case with the Jerram cow in 1992, which entered the feed chain despite signs of disease, possibly BSE although the symptoms are very similar to the much more common disease of rabies. Signs of disease required notice under the *HAA*, which did not happen.

[747] A monitoring inspection report described the Jerram cow months after the event, but that report did not come to Ottawa's attention until Dr. Stemshorn learned of it when reviewing monitoring reports after the DePalme event in December 1993. This delay in reporting the Jerram cow's symptoms to Ottawa may be some evidence of operational negligence in the implementation of the Monitoring Program, but this is not what caused the animal to be slaughtered and to enter the feed chain; that was caused by the failure of the owner of the animal and the abbatoir to isolate the animal and report its condition under the *HAA*.

[748] Canada did not call Dr. Stemshorn to explain what steps, if any, he took when he learned of the Jerram cow. However, the knowledge by Dr. Stemshorn that a UK import that may have had clinical signs of BSE did not cause him, or AAFC, to implement a feed ban or take some other course of action. Dr. Kellar attempted to minimize the lack of disclosure to Ottawa of the Jerram cow, asserting without any grounds that a reasonable decision was made at the local level not to follow up. Nevertheless, the operational delay in the Jerram cow coming to the attention of people in Ottawa highlighted the weakness of the design of the Monitoring Program which, as Dr. Koller wrote in 1994, was that "by the time anything shows up in a monitored animal the disease is already spread."

[749] The US did not have a formal monitoring program. Although it made efforts to trace its UK imports in 1990, by October of that year it had been unable to trace many of the animals. In contrast, Canada located nearly all UK imports by the end of May 1990. Dr. Kellar implied that the low number of cases reported by the United States might have been inaccurate due to "the distribution of regulatory authority in that country."

[750] Dr. Beckett's view that "the Canadian government's monitoring program did not adhere to best practice principles in animal disease control" was undermined by his admission that there were no "best practices", and was based simply on the fact that the Monitoring Program failed to keep BSE out of the feed chain. Athough he observed failings in its implementation, Dr. Beckett's main criticism of the Monitoring Program was on its design, supporting my earlier finding that the alleged negligence was in adopting a policy or course of action rather than operational shortcomings.

[751] Neither the US or Australia expressed any concern with Canada's steps to limit BSE, even after the DePalme event in December 1993 when representatives from both countries were fully briefed on the Canadian situation.

[752] Australia took more stringent steps than Canada but, as Dr. Bulmer noted, different countries have different risk tolerances. He observed that Australia, as an "island country" is "almost a zero-risk country" with very tight import controls. Canada's situation was different. Its cattle industry was highly integrated with the United States and regulations were aligned, as Dr. Beckett noted in his report. Cattle crossed the US-Canada border freely and risks and regulatory action had to be assessed in that context. As Dr. Willis stated, "…if you don't want to take any risk at all, don't import."

[753] The participants at the 18 June 1990 meeting, and the CAHCCC, were aware of the Monitoring Program, and nobody called for a different approach, including stricter monitoring or isolation of the UK imports. Indeed, a stricter approach may have met with opposition from the cattle industry due to trade issues, as Dr. Beckett observed. The opposition by some cattle farmers to the order to destroy the remaining UK animals in 1994 is also indicative of resistance to more rigourous regulation in the cattle industry.

[754] Mr. Taylor, who worked at various times for both the cattle industry and Agriculture Canada, stated that he did not recall AAFC telling industry about "the risk or possibility that previously imported UK cattle, which might be sub-clinically infected with BSE, posed a risk to the Canadian cattle herd of potential BSE infection if the cattle were rendered and their remains entered the feed chain." However, the existence of a feed ban in the UK was widely known by 1990 and Mr. Taylor conceded that the industry was aware of the challenges of BSE, including the risk from subclinical infectivity. At the 18 June 1990 meeting, articles were provided to stakeholders that raised the possibility of disease being spread through recycling of subclinical cattle, the Minutes reflect some discussion of it, and a ruminant feed ban was listed as an option considered at the meeting.

[755] During the period from 1990 to December 1993, Canada did not conduct a formal assessment of the risk of rendering any of the UK imports, including the impact of dilution. Dr. Leiss stated that without a risk assessment, Agriculture Canada was never able "to estimate the true magnitude of the risk of BSE in Canada at any time after 1989" and that Canada's failure to apply risk management principles in 1989 and 1990 meant that it missed a "first" chance to prevent BSE from developing in Canada when it ought to have quarantined the UK imports and/or implemented a feed ban. In 1994, following the DePalme event, Dr. Leiss says that Canada failed to take "the only remaining effective BSE risk control option still open to Agriculture Canada", which was to implement a feed ban.

[756] Implicit in Dr. Leiss' opinion is that had Canada conducted such a formal risk assessment, it would have taken additional steps. But he provides no evidence to back up such a conclusion, simply stating, generally, that "despite recognizing the severe consequences of this occurrence [the potential for "'catastrophic loss' to Canadian farmers" and "devastation to 'Canada's lucrative export market'"], Agriculture Canada failed to consider the combined impact of these consequences with the probability of infection occurring."

[757] Dr. Leiss did not conduct risk assessments to demonstrate that they would have compelled a different approach; indeed that is beyond his expertise. Dr. Leiss is not an animal health expert, epidemiologist, or a regulator. Yet his opinion, essentially, second-guesses those with that expertise and experience.

[758] For example, one of Dr. Leiss' primary points is that, as he puts it in his summary: "*In my opinion*, Agriculture Canada officials did not draw the correct conclusions about the risk of subclinical BSE infection to the Canadian cattle herd despite having all the necessary information at the relevant time" (emphasis added). This opinion is not within Dr. Leiss' expertise, which is in risk communication and risk management, not risk assessment, let alone animal disease, and assumes that the "correct conclusions", to use his words, were that the risk was high and ought to have been addressed by additional steps. This led him to assert that Canada's failure to quarantine the UK imports and implement a feed ban was "incompetent and irresponsible", or "truly reckless", or "startlingly incorrect", to cite just a few of his phrases.

[759] However, as Dr. Hope, the independent scientific expert on BSE who was involved with the disease at the time, stated: "In, say, 1993 or 1997, to my knowledge no credible, quantitative estimate of the level of BSE prion (hazard) in RMBM (or other fractions of the rendering process) was possible to inform the risk management process." Dr. Hope also drew a distinction between the risk factors and responses in the UK and those elsewhere.

[760] Dr. Leiss did not give any weight to the OIE position regarding controlling BSE contained in the chapter in the *Terrestrial Code* developed in the early 1990s, nor did he address the evidence from experts that suggested the risk of BSE developing in Canada was low. His opinion did not consider the impact of a feed ban on the sheep, slaughter, rendering and feed industries, or that cattle associations objected to a ban on ruminant feed, all of which would need to be addressed by a reasonable regulator.

[761] Dr. Leiss knows the BSE story in Canada well; he co-authored a book on it,[31] and his report provides a lengthy review of the events between 1989 and 1994 based on the documentary record and some of the literature from the time period and afterwards, such as the BSE Inquiry report and other reviews completed well after the UK epidemic had concluded. Dr. Leiss provided opinions on what he thought Canada should have done, but in my view those opinions are based on hindsight and are not rooted in his expertise.

[762] Accordingly, I find Dr. Leiss' evidence to be unhelpful and to be little more than advocacy. The conclusions as to whether Canada acted incompetently or irresponsibly, to paraphrase Dr. Leiss, are conclusions for me to draw, or not, based on the evidence, including the knowledge and standards of the time.

[763] In any event, Canada did assess and respond to risks during this period. Dr. Kellar did an informal qualitative risk analysis based on scrapie. Senior officials at AAFC were at all times aware of the serious consequences that would follow if BSE entered the Canadian herd, and the steps they took were in response to that risk. As Dr. Bulmer said, "risk assessment is an everyday event in just about everything you do in the National Animal Health Program…You're assessing risk on every move you make…but not necessarily…a long, drawn-out, formal process that would be recorded, demonstrated, and shared with industry."

[764] When pressed on the failure to to do a risk assessment based on dilution, Dr. Kellar stated: "While no one did an assessment, one carried a belief that 183 animals imported into a population of 12 million and distributed to attrition across an interval of approximately 12 years, geographically dispersed literally from Cape Breton to Vancouver Island was not a significant threat by virtue of dilution itself."

[765] The fact that Canada did not conduct a quantitative risk assessment of any kind until 1994 does not mean Canada fell below an appropriate standard of care. The formalized approach to risk analysis and risk assessment was developing during this period in Canada and elsewhere, and there is no basis to conclude that the Department, acting reasonably, ought to have conducted such an assessment earlier, or that it would have led to a different response to BSE. As has been noted, Canada was not obliged to remove every risk of BSE, but to act reasonably in light of the risk.

[766] There is no evidence that Australia conducted any risk assessment in the 1990s. On the other hand, in the United States APHIS published qualitative and quantitative risk assessments in January and February 1991 highlighting differences in the sheep and cattle populations, farming and rendering processes and that much more MBM was used in animal feed in the UK than in the US where there is an abundant supply of vegetable protein such as soybean. Dr. Kellar testified that he would have received and reviewed the APHIS reports and said: "It's the Canadian context all over again", and it did not cause him, or AAFC, or the USDA, to revise their approach.

---

[31] Douglas Powell and William Leiss, *Mad Cows and Mother's Milk: The Perils of Poor Risk Communication*, 2nd ed. (Montreal: McGill-Queen's University Press, 2004).

[767] Risk analysis and risk assessment is a limited methodology that is dependent on what risk factors are known, and included, when the analysis or assessment is conducted. There are also elements of subjectivity and discretion as to what weight is given to different, often competing, factors. As one document summarizing risk analysis for AAFC in 1994 noted, "[t]here are limits to the 'science' of risk analysis" and "[m]any of the questions raised are those of 'value' and require political answers." This does not make risk assessments unhelpful; quite the contrary, they can provide useful justification for policy decisions. The move to using risk analysis at the OIE and under GATT was to prevent irrational or unjustifiable non-tariff import restrictions. But risk analysis, while helpful, cannot dictate policy decisions, and the fact that a formal risk assessment was not completed or the conclusion of a particular risk assessment was not followed does not compel a findings of negligence by a court.

[768] Consequently, I cannot find that Canada acted unreasonably or was negligent in not taking steps to ensure that the UK imports did not enter the feed chain between 1990 and 1993. Having regard to the knowledge of BSE at the time, including its origins and the low likelihood of transmissibility from sheep or from rendered subclinical UK imports, the standards set by the OIE, the practices in other countries, and the very different circumstances prevailing in Canada compared to the UK, Canada's position in not isolating the UK imports was not unreasonable.

Should Canada have implemented a feed ban in 1994?

[769] The plaintiff's third position is that Canada breached a reasonable standard of care when, following the DePalme cow event in December 1993, it failed to implement a feed ban in 1994 or earlier than when it ultimately did in 1997. However, many of the reasons I have set out above regarding Canada's actions prior to the DePalme cow event apply to Canada's conduct in 1994, and I conclude that Canada did not breach the standard of care expected of a reasonable regulator in failing to implement a feed ban in 1994, or until it did so in 1997.

[770] The DePalme cow event caused Canada to order the return to the UK, or destruction, of the remaining UK imports in order to prevent them from being recycled. It is submitted by the plaintiff that it was unreasonable for Canada to have not then addressed the risk that the feed chain had already been contaminated by the slaughter and rendering of approximately 68 animals that had been imported from the UK between 1982 and 1992. As the plaintiff puts it in its closing submission, "[i]n light of its clear knowledge of subclinical infectivity, transmission of the disease through feed, and suspicion of every one of the UK imports as potentially infected, Canada owed a duty to take the only remaining risk control option available", which was to enact a feed ban.

[771] The DePalme cow was a UK import, not an indigenous cow. While its discovery led to the destruction of the remaining UK imports, this step was taken to eliminate the risk that any of those animals would develop BSE. There was a concern that discovery of a second animal with BSE would lead to trade sanctions.The removal or destruction of the remaining imports also ensured that the remaining imports could not enter the feed chain. However, the view of Dr. Kellar and others in early 1994 remained that the risk of BSE entering the feed chain from an asymptomatic, or subclinical UK import, was low.

[772] Some cattle farmers objected to the destruction of their animals in 1994 – a position not supported by the CCA and other industry associations. In Canada's evidence on the judicial review applications in 1994, Dr. Kellar referred to the recycling of cattle as a cause of the spread of BSE in the UK as part of his rationale for the destruction of the imports. However, no one spoke up to raise concerns about the UK cattle that had already entered the feed chain in Canada, presumably continuing to regard the risk as low. Further, as Mr. Taylor testified, industry opposition to a feed ban that existed in 1990 would have continued until both the United States and Canada implemented a ban together following the WHO recommendation.

[773] Following the DePalme event, US and Australian experts were briefed on the Canadian situation and the steps Canada was taking, and no concerns were expressed about Canada's approach or about any risk of infection in feed due to the rendering of imports prior to December 1993.

[774] Canada's decision to destroy the remaining UK imports was unique among countries with a positive BSE case. As Dr. Kellar testified, "…I don't know of anyone who killed their imports."[32] Dr. Kellar admitted that the "mere suspicion" that an animal had been exposed to BSE agent in the UK was the basis for Canada destroying the UK imports in 1994, and was taken in order to preserve the health status of the Canadian herd given the need to protect Canada's lucrative export markets. There was also considerable concern at the time that if a second animal – which would most likely be a UK import – was discovered with BSE, that there would be significant economic and trade consequences. Dr. Kellar agreed that "in that instance" Canada was "exercising the precautionary approach." Again, while the plaintiff notes that Canada took a zero risk approach to those remaining imports, and Dr. Kellar admitted that Canada did not consider dilution to be a sufficient defence against infectivity of the Canadian cattle herd for those animals, it did not take that approach for the UK animals already slaughtered and rendered. But, as I have said, Canada was not obliged to eliminate all risk.

[775] Canada examined the tissues of all of the UK cows that were destroyed, as well as the herdmates and offspring of the DePalme cow after they were euthanized, and found them all to be free of BSE.

[776] Canada continued to be in compliance with OIE rules and, as the DePalme cow was a UK import rather than an indigenous Canadian-born cow, Canada continued to be considered a "BSE-free" country in the 1990s.

[777] This was illustrated in the evidence of Dr. Thiermann when he was questioned on the destruction of MBM containing tissue from the Oxford dead stock in January 1994, reviewed earlier in these Reasons. When it was suggested that allowing that material to enter the feed chain would have been contrary to the *Terrestrial Code* because it contained protein from a UK animal,

---

[32] Dr. Leiss's book states that the US only took steps to destroy its remaining imports in April 1996 following the WHO report of the link between BSE and vCJD and direction from the U.S. Centres for Disease Control and Prevention. According to the book, twenty-one states began ordering the slaughter of 113 cattle known to be in the USA.

Dr. Thiermann disagreed. He noted that the sections restricting trade in MBM related to "high incidence" countries, and drew a distinction between MBM from a high incidence country where infection is widespread and found in many animals – of which the only country was the UK - and MBM that may include infectious material from only one animal. Dr Thiermann testified that "[t]here's a very big difference in terms of the importation of an animal that is potentially infected and the dilution factor that it will imply on having – meat and bonemeal having one UK cattle compared to meat and bonemeal made in the United Kingdom at the time the United Kingdom had 190,000 cases." He stated that there is a "dilution factor" and a "tremendous difference" from a risk standpoint, observing that "meat and bonemeal as a commodity is a result of grinding of animals in that particular country with a particular incidence", and stated that one "cannot compare the risk of bonemeal from the UK with the risk posed by one UK cattle in a population in Canada."

[778] Dr. Kellar's view that the risk of infection from the UK imports already rendered was low was shared by others. Although Dr. Kimberlin's 1992 paper for the OIE had observed that "[t]he most effective approach is a complete ban on the feeding of all ruminant protein to ruminants, as originally introduced and maintained in Britain", he did not say it was necessary, nor did Canada's trading partners which had also not imposed feed bans. The positions of Dr. Kimberlin and other experts on BSE regarding lower infectiousness of subclinical animals, dilution and the impact of rendering, among other things, had not been revised, and continued to be relied on by Canada.

[779] Indeed, in 1994 Drs. Wilesmith and Kimberlin co-authored an article restating the scrapie hypothesis and the changes in rendering in the early 1980s as the original source of BSE in the UK, arising in dairy cattle that were fed large amounts of feed supplements as calves. They highlighted that the BSE epidemic in the UK was likely the result of "the *simultaneous* presence of four main factors: (1) a large sheep population, relative to that of cattle, with both populations widely distributed; (2) a high incidence of endemic scrapie infection; (3) the use of substantial quantities of ovine meat and bone meal in cattle feed; (4) conditions of rendering that allowed the survival of small but significant amounts of infectivity, would have depended on the amount of the initial contamination" (emphasis in original). Drs. Wilesmith and Kimberlin recognized that BSE had appeared in some other countries in small numbers. Irish cases were described as "spillover" from the UK, and some cases in other countries were likely linked to the importation of contaminated UK feed, which was not an issue for Canada as it had not imported any UK feed since 1978. No direct link to infected ruminant protein from a recycled UK animal was established, and the authors' view was that "with the passage of time, these risks [of BSE developing] seem increasingly low."

[780] As several witnesses for the defendant stated, the prevailing view was that BSE continued to be regarded as a UK problem, and the detection of BSE in a UK import rather than an indigenous Canadian cow was consistent with that view. Dr. Hope's evidence in which he contrasted the situation in the UK where "measures were proportionate to the size of the problem," to Canada where "it would perhaps been not proportionate", is also consistent with this view of the risk to Canada.

[781] The plaintiff, however, identifies two new elements that did not exist prior to 1994 that it argues support the conclusion that Canada acted unreasonably in not implementing a feed ban: (1)

the conclusions of the APHRAN 1994a risk assessment completed in May 1994; and (2) the correspondence between Dr. Kellar and Dr. Bradley in 1995 and 1996 warning of the risk of not having a ruminant feed ban.

[782] As I discussed earlier in these Reasons, the APHRAN 1994a risk assessment was prepared following OIE guidelines and concluded that the "probability of *entry* of BSE infected cattle through the 1982-89 importation of 183 cattle from the U.K. appears to be very high" (emphasis added). Indeed, it was stated to be a virtual certainty with a risk rating of 10/10. Of course, by this time, the DePalme cow event had already occurred, which was consistent with the APHRAN 1994a assessment. APHRAN 1994a went on to state that it was a virtual certainty that at least one of the approximately 67 surviving imports in 1994 also carried the disease – a conclusion that was not borne out by the post-mortem tests on those animals.

[783] Dr. Kellar acknowledged that APHRAN 1994a told them that the statistical probability of BSE occurring in the UK imports was 100%. As he put it, there was "[c]ertainty that they bore infection walking off the boat into Canada." However, the importance of the APHRAN 1994a report is limited. It did not say that there was "certainty" that BSE would survive rendering and infect the Canadian herd. Rather, it said that the probability of exposure, disease outbreak and spread potential was negligible. Although the overall rating for "risk and uncertainty" was high, this appears to have been due to the concern that another case might arise from any remaining imported cattle, and that this could have significant trade and economic consequences.

[784] APHRAN 1994a, therefore, accords with the view expressed by Drs. Kimberlin, Wilesmith, Hueston, and others, that the UK imports posed a low risk of infecting the indigenous herd. Contrary to the submission of the plaintiff, in my view Dr. Hueston's comment on a draft of the APHRAN 1994a report, in which he stated that Canada was "very likely" to see another case must be read as referring to a case among the UK imports, not an indigenous case. Dr. Hueston did not address risk of infection in the feed chain, nor does the APHRAN 1994a report discuss it. The lack of action by the United States, which had more UK imports and a cattle industry integrated with Canada's, and his observation that "each year that one does not see a case lowers the cumulative risk of seeing a case in the future," also supports this conclusion. It is noteworthy, in this context, that Dr. Hueston was the US expert who co-authored the comparative risk studies for the US and Northern Ireland with Dr. Wilesmith, which concluded the risk of transmission from imported cattle in countries with more imports than Canada was low.

[785] An EU assessment of the risk of BSE emerging in Canada, prepared in July 2000, stated that the risk was "unlikely", but that the risk cannot be excluded "that domestic cattle are (clinically or pre-clinically) infected with BSE-agent." As noted, the Canadian and US cattle markets were highly integrated and formed one market. In risk assessments completed in 2001 and 2004 the EU assigned the same level of risk of BSE to the US and Canada.

[786] An APHRAN risk assessment in December 2002 found the risk of BSE emerging in Canada to be very low. In a report dated December 2002, which reviewed slaughter, rendering and feed practices in Canada, APHRAN estimated that the probability of at least one infection of BSE

prior to 1997 was "negligible", and that "the risk was even further reduced by the mitigating measures in place since 1997." The report stated:

> In conclusion, the measures applied prior to the 1997 Feed Ban (import policies, disease control measures, detection system on-farm and at slaughter plants) combined with Canadian feed production and feeding practices, were effective in preventing the entry of BSE and its subsequent amplification through the feed system.

[787] The EU risk assessment of Canada in 2001 is consistent with my interpretation of APHRAN 1994a, as is the APHRAN report prepared in 2002. In my discussion of Dr. Beckett's evidence I noted that Australia's thinking on BSE in 2001 was also similar to the views of Canada's experts in the 1990s.

[788] In light of my conclusions on the limited value of the APHRAN 1994a report, the fact that it was not shared with the cattle industry is of little significance. While it would have been preferable to share the report with the industry, the failure to do so does not support the submission that the industry was misled about the risk of BSE to the indigenous Canadian cattle herd.

[789] Similarly, assuming that APHRAN 1994a was not disclosed to the Minister, had it been shown to him there is no basis to think that this would have led to any different action by Canada.

[790] Turning to the correspondence with Dr. Bradley in 1995 and 1996**,** I accept Dr. Kellar's evidence that while Dr. Bradley made important points, he added nothing new to the science in his comments on Canada's position. Dr. Bradley and others at the CVL were privy to information that was not shared with Canada which suggested dilution may not be as much of a protection as had been stated by Dr. Kimberlin, and others, in 1992. Dr. Hope's evidence confirms that this information was not shared and in any event he expressed his doubts about the applicability of the attack studies. This highlights the continued uncertainty over the risk of transmission and in particular, as Dr. Hope testified, the degree of transmissibility of the BSE infection through feed. Dr. Kellar and the Canadian regulators in the Department of Agriculture at this time continued to have reason to believe that the risk of transmission through feed was low, having regard to the different circumstances in Canada respecting sheep and scrapie, the small number of subclinical UK cattle that may have entered the feed chain, and the impact of rendering and dilution.

[791] In *River Valley*, the Court of Appeal stated at para. 5 that I must consider "how a reasonable [regulator] with like skills and expertise would have acted in like circumstances." In my view, in light of the knowledge of BSE at the time, Canada's understanding of it and Canada's situation, and the positions taken by the OIE, the United States and Australia, I am not satisfied, on a balance of probabilities, that by not taking steps to enact a feed ban in 1994 or prior to 1997 after the call from the WHO in 1996, Canada's conduct was unreasonable or fell below the standard of care of a reasonable regulator.

Delay in enacting the 1997 Feed Ban?

[792] The plaintiff has also pleaded in its Further Fresh as Amended Statement of Claim that Canada was "grossly negligent" in taking 16 months to enact a feed ban following the recommendation of the WHO. However, the plaintiff called no evidence to support this allegation, nor has it pressed this specific point in its closing submissions other than to argue that a feed ban could, and should, have been implemented quickly.

[793] To address this issue, Canada called Mr. Presley, who provided expert evidence on the timeliness of the implementation of the 1997 Feed Ban. Mr. Presley had a lengthy career in regulatory affairs with the federal government and teaches in that field at Carleton University in Ottawa. He was qualified as an expert on regulatory management in the federal government, including the development and approval of new regulatory proposals. I accepted the need for this evidence insofar as it assisted the court in understanding the inner workings of government that are beyond the general knowledge of courts and citizens.

[794] Mr. Presley's opinion was that Canada complied with its regulatory and approval process in a competent, timely and transparent manner, and that a preventative, rather than an emergency, regulatory response was appropriate in light of the significance to the stakeholders. Mr. Presley agreed with counsel for the plaintiff that Canada could have moved more quickly and treated the Feed Ban as an emergency matter; but based on the need to consult, the need to comply with the US-Canada Free Trade Agreement, and the desire to move in lockstep with the United States due to the highly integrated nature of the North American cattle industry, Mr. Presley's view was that Canada acted appropriately and indeed moved rapidly in completing the regulatory process and in enacting the Feed Ban by August 1997.

[795] The plaintiff takes issue with Mr. Presley's opinion that the government acted openly and transparently due to the failure to disclose the APHRAN 1994a report to industry, which it asserts would have led to urgent action. Similarly, the plaintiff argues that the Minister and Cabinet ought to have been given more information which would have caused them to move more quickly, and that the failure to do so constitutes negligence. Cabinet was not informed of the APHRAN 1994a risk assessment or of the risk of subclinical infection in the UK imports, which were also not mentioned in the RIAS, (1997) C Gaz II, 2321, which provided the rationale for the *Regulations Amending the Health of Animals Regulations,* SOR/97-362. Rather, the justification discussed in the RIAS is the WHO request, and refers to trade implications and the need to match the United States' feed ban.

[796] In my view, it is speculative to conclude that the Minister or Cabinet would have acted differently if provided with more information, or that the cattle industry would have pressed for more urgent action. As I have discussed, the APHRAN 1994a report stated that the risk of a UK import developing symptoms of BSE was high, but that the risk of infection in the indigenous Canadian herd was negligible, which was consistent with the views expressed by UK and US experts at the time. Furthermore, this argument is aimed directly at the law-making and the legislative process which, as I have discussed earlier dealing with policy considerations and justiciability, is not subject to private law remedies from courts.

[797] In any event, there is no evidence that Canada acted unreasonably in taking until August 1997 to enact the Feed Ban or that the time it took was inconsistent with the actions of other countries. There is no evidence that the WHO underlined the urgency of feed bans such that it should have been enacted more quickly. The WHO's recommendation, made in April 1996, was motivated by reports from the UK of a potential link between BSE and vCJD in humans; however in a follow-up meeting in May 1996, the WHO noted that there was insufficient evidence to prove a link between BSE and vCJD. The OIE did not adopt the requirement of a feed ban until May 1997, by which time Canada had already published its draft Regulation. The Americans, who were in a very similar situation to Canada, also took time to impose their feed ban, and Canada enacted its ban on the same day as the American ban. Despite the risk that a small number of UK imports had entered its feed chain, Australia also did not implement a feed ban until 1997.

Conclusion on standard of care

[798] In my view the plaintiff has not established, on a balance of probabilities, that Canada acted unreasonably and below the standard of care expected of a reasonable regulator in how it addressed BSE in the 1990s. In reaching my conclusion on the standard of care, I recognize that the evidence from Dr. Kellar and others at AAFC indicates that they were largely focused on the risk of BSE developing from scrapie-infected material in sheep which could be processed into MBM for use in animal feed, as BSE had emerged in the UK. There was limited discussion of the hypothesis, and growing evidence to support it during the period between 1990 and 1994 based on the exponential growth in cases in the UK, that BSE could be spread through recycling of subclinical cattle. The Canadian regulators were aware of that risk, however, and reasonably regarded it as a low one, a view shared by the UK experts at the time.

[799] The US took a similar view of BSE; indeed Dr. Kellar and Dr. Hueston collaborated on a position statement on BSE shortly after the DePalme cow event in early 1994 which showed they were approaching the risk of BSE in the same way. This included the reasonable conclusion that BSE was unlikely to arise from scrapie in North America, and also placed reliance on different rendering techniques and limited use of MBM in animal feed in North America.

[800] Canada also relied on concerns about horizontal transmission in its decision to destroy all the Mirabel cattle, which continued to be reflected in communications over the next few years and was a factor in ordering the destruction of the remaining imports in 1994. The focus on this concern, which had not been excluded as a means of transmission but was also not supported by any evidence, and on the origin of BSE in scrapie, may have come at the expense of more consideration of the risk of transmission from recycling.

[801] Dr. Kellar's comments on the CBC's Quirks and Quarks program in December 1993 that animals that did not show signs of the disease were not a threat to the feed system was contrary to the views of the experts at that time, as Dr. Willis readily acknowledged. The draft Q&A document prepared around the same time also contained this misstatement. However, an inaccurate statement on a popular radio show which downplayed a risk about an issue that may have been causing alarm, and in a draft communications statement, does not mean that Canada was negligent in the steps it took, or did not take, to address what continued to be regarded by many, including leading BSE

experts, as a low risk. Canada's actions must be assessed on an objective standard of reasonableness based on information available at the time, not based on hindsight or a standard of perfection.

[802] Dr. Kellar was Canada's main witness. He was involved in many of the decisions around BSE in the early 1990s, and he led the CFIA investigation which resulted in the April 2008 report, "The Natural History of Bovine Spongiform Encephalopathy in North America." Dr. Kellar was examined and cross-examined at length. In hindsight, his actions and inaction, may be subject to criticism, and this necessarily made him quite defensive at times. But one must consider his actions based on what was known at the time. Dr. Kellar demonstrated a great deal of knowledge about BSE, he was in regular communication with the BSE experts in the UK and the US, and I cannot conclude that his actions were unreasonable based on the knowledge and standards of the day.

[803] Hindsight also explains some of the answers adduced from Canada's witnesses in cross-examination. Dr. Bulmer, for example, who retired many years ago, was prepared to agree with suggestions in cross-examination that were based on hindsight, including the description of the UK imports as "ticking time bombs." But I do not accept that he regarded them that way at the time and chose to ignore them. Rather, he accepted the views of his colleagues, including Dr. Kellar and others, and the views held by leading experts, that the risk of BSE infecting the Canadian feed chain was low.

[804] Dr. Willis, also long-retired, testified at trial that his understanding of the Monitoring Program was that it was intended to keep the UK imports out of the feed chain. This is not consistent with the documentary record at the time, the evidence of others, and the design of the program. Dr. Willis' misunderstanding may be due to the passage of time, as he was asked about matters that occurred 30 years ago. In my view, where the evidence of Dr. Willis and Dr. Bulmer is inconsistent with the written record, the written record should be preferred.

[805] The plaintiff's case is that the regulators failed to take what were seemingly simple and straightforward steps of isolating the UK imports and implementing a feed ban which would have prevented the severe consequences that followed the McCrea cow event in 2003. The plaintiff points to steps Canada did take, based on a "zero risk" approach, and cites Dr. Leiss to say it is "inexplicable" that the defendant did not impose a feed ban.

[806] But BSE was not simple and straightforward. Much about it was unknown then, and much remains unknown today. In the time period in question, between 1990 and 1997, animal health experts were facing a novel disease and took steps to contain it to the British Isles where it reached epidemic proportions. Those steps were largely successful. BSE was not regarded as posing a high risk to Canadian cattle, although the serious impact on the Canadian cattle industry if it entered the Canadian herd was recognized. Canada took a zero-risk approach in certain circumstances that did not have negative effects on other aspects of livestock farming and the slaughter, rendering and feed industries. The senior staff in the Animal Health Division of AAFC were aware of the science and the risks, and made decisions that were not irrational or in bad faith, but based on their interpretation of the knowledge of the disease and risk factors in Canada, as well as other factors

that, as regulators, they were obliged to consider. This included the interests of cattle farmers themselves, who were opposed to a feed ban.

[807] I also do not accept, as the plaintiff argued, that BSE should be compared to dangerous goods, giving rise to an enhanced standard of care, given the catastrophic effect it could have on the cattle industry, citing *Northwestern Utilities Ltd v. London Guarantee & Accident Co*, [1935] 4 DLR 737, [1935] 3 WWR 446 (PC).

[808] Canada was not alone in responding to BSE as it did. The European Community, which included several countries that were affected far more seriously than Canada, only directed a feed ban in all member countries in June 1994. The United States and Australia only brought in feed bans in 1997, the same year Canada acted. If anything, Canada acted more diligently than the United States. Canada complied with all international standards.

[809] In hindsight, it can be seen that isolating the UK imports and enacting a feed ban earlier would likely have prevented the McCrea cow from being infected with BSE. But hindsight is not the test. Applying the knowledge and standards of the time, including the conduct of other countries, recommendations by leading scientists, the standards set by the OIE, and the circumstances faced in Canada, I cannot conclude, on a balance of probabilities, that Canada's failure to take additional steps to prevent BSE entering the feed chain between 1990 and 1997 was unreasonable, or negligent.

Duty to warn

[810] The plaintiff has also pleaded and argued that the defendant, having undertaken to prevent infection in the Canadian cattle herd, had a positive duty to take precautions to reduce that risk, including having a duty to warn the plaintiff of dangers associated with that risk. It is alleged that Canada failed in that duty.

[811] Both parties cite the Supreme Court's decision in *Childs* on this issue. In that case the Supreme Court identified three situations in which a positive duty to act may arise. Each situation, however, arises from circumstances in which the defendant is implicated in "the creation of risk or his or her control of a risk to which others have been invited." One of those situations is when the "public provider of services undertakes a public service, [it] must do so in a way that appropriately minimizes associated risks to the public": *Childs* at para. 38. In the following paragraph, however, the Supreme Court is quick to point out that "the law does not impose a duty to eliminate all risk" and recognizes that "competent people have the right to engage in risky activities."

[812] I do not agree with the plaintiff's argument that Canada, as "the only entity with authority to control the importation of UK cattle" and "the only entity with the expertise, power, and authority to recognize the risk of infection from subclinical cattle, and to prevent entry of cattle into the feed chain", falls within this duty to act. This argument overlooks the first step, which is whether Canada is implicated in the creation of the risk and has control of the risk to which others have been invited.

[813] Canada permitted the importation of UK cattle in the 1980s, but it did not invite it. Canada also did not invite any members of the Class to engage in cattle farming which is, like all agricultural activities, a risky undertaking. The extensive financial assistance programs for farmers exist due to the many risks associated with farming, including cattle farming. Those risks include animal disease. Canada may have had some ability to control the risk of BSE once it was identified in and around 1989 and 1990, and offered a "service" in the sense of fulfilling statutory duties under the *ADPA* and the *HAA*, but these facts did not create liability for a particular risk that it had no part in creating and to which it did not invite the Class.

[814] Further, in my view, Canada did warn Class members about BSE, including the scientific understanding of the disease prevailing at the time. Dr. Willis, Dr. Bulmer and Dr. Kellar all testified about trying to be transparent with the public, industry groups and farmers, including cattle farmers. The CAHCCC met with government once or twice a year. A special meeting was devoted to BSE in June 1990, and there was close contact with industry associations following the DePalme cow event in December 1993.

[815] Although the plaintiff complains that the cattle industry ought to have been told of the APHRAN 1994a report, as I have discussed, this report only raised the high likelihood of UK cattle incubating the disease, which the industry knew from the DePalme cow; APHRAN 1994a did not sound an alarm about the risk of BSE surviving the rendering process and infecting the Canadian herd through feed.

[816] Industry associations may have looked to Canada for its scientific expertise in addressing BSE, but the cattle industry organizations were neither small nor unsophisticated, and did not hesitate to seek out expertise when it was needed, as Mr. Taylor's evidence confirmed. The CCA was well aware of the magnitude of the BSE epidemic in the UK, it understood subclinical infectivity and that there was a risk associated with the UK imports, some of which it knew had been slaughtered and rendered.

Causation

[817] It is not necessary to address causation at any length in these Reasons. Dr. Kellar's investigation into the cause of BSE infectivity in Canada concluded that BSE "was likely introduced into the Canadian feed supply by one or more of the UK imports that entered the slaughter/rendering system in Canada." It is essentially admitted, and I conclude based on the evidence, that the cause of BSE in the McCrea cow was the consumption by it, prior to the implementation of the 1997 Feed Ban, of feed containing the BSE prion which originated with a UK import that was slaughtered and rendered in Canada.

Conclusion on negligence

[818] For all of the foregoing reasons, I conclude that Canada is not liable in negligence to the plaintiff. In addition to not owing the Class a duty of care, I conclude that the plaintiff has not established that the defendant acted unreasonably or breached the standard of care of a reasonable

regulator having regard to the knowledge of BSE and the specific circumstances Canada faced between 1990 and 1997.

Part XIII - Common Issue #4 - can damages be determined on an aggregate basis and, if so, what is the amount of damages?

The pleadings and general principles

[819] Despite my conclusions that the action is barred by s. 9 of the *CLPA* and that Canada was not negligent, I heard extensive evidence on damages and provide below my analysis and conclusions on damages that I would have awarded if I had found in favour of the plaintiff on liability.

[820] In paragraph 278 of the Further Fresh as Amended Statement of Claim, the plaintiff seeks aggregate damages as follows:

> The Plaintiff's and Class Members' claims for damages in this action represent the difference between the increased financial support, if any, provided by the Provincial and Federal governments to the Plaintiff and the Class Members, and the actual damages suffered by the Plaintiff and the Class Members. No double recovery is intended or sought in this action.

[821] There are two major steps, therefore, in considering the damages in this case. First, it is necessary to consider the overall, or gross, losses to the plaintiff Class. This involves looking at losses to the various sectors and subsectors of the cattle industry arising from the impact of the border closure between May 2003 and 31 December 2007, which is the period for which damages are sought.

[822] The second step in the damages analysis is to consider the offsets, or payments made to the Class under assistance programs established by the government during the same period which will reduce the damages.

[823] There is no dispute that the border closure following the discovery of the McCrea cow in May 2003 had a huge impact on cattle producers. Canadian cattle prices initially dropped by as much as 70%. In 2002, just over 5 million head of cattle were disposed of (slaughtered or exported). This number fell to 3.68 million in 2003, and was just over 4 million in 2004, as the US markets were largely closed during that time period. According to Statistics Canada, cash receipts for cattle and calves dropped from $7.68 billion in 2002 to $5.16 billion in 2003 and to $5.09 billion in 2004.

[824] The experts for both sides, Dr. John Groenewegen for the plaintiff and Mr. Robert Low for the defendant, approached the damages issue by comparing US prices to Canadian prices between 2003 and 2007. As they agreed, Canadian cattle and beef prices were determined by the US market, which is approximately ten times larger than the Canadian market. As it was put at trial, Canada is a "price taker." Prior to the BSE event in May 2003, cattle prices in western Canada and the US

were closely aligned as there was virtually unrestricted trade in live cattle and beef. Canadian prices obtained by producers were slightly lower due to transportation and other costs.

[825] However, the experts used different methodologies to assess price differences and applied different assumptions in coming to their conclusions. There was also disagreement over whether and how other events during the period should be treated, including the impact of the Washington cow in December 2003, which depressed US prices, and the reopening of the US-Canada border in July 2005 to cattle under 30 months old.

[826] There is no dispute that payments from the BSE-specific assistance programs should apply to reduce the damage claim. However, there is much disagreement over which generally available programs should also apply and the amounts that should be included. The disagreements on this issue were largely between Dr. Groenewegen and Dr. Hedley. Mr. Low was not asked to review the assistance programs, but simply accepted Dr. Hedley's approach and deducted the amounts Dr. Hedley believes should be credited to Canada to reduce the losses suffered by the plaintiff Class.

[827] As I noted earlier in these Reasons in setting out the issues to be determined, my task at this stage is only to fix an aggregate amount for damages for the Class. While the experts have presented detailed information on the various sectors of the industry, and losses suffered in those sectors broken down by year, the experts have left me with aggregate figures for both losses and offsets. The parties agree that I should not address Common Issue #3 at this time.

[828] I am satisfied that this is an appropriate case in which to award aggregate damages under s. 24(1) of the *CPA*. The parties have not challenged the reliability of much of the underlying data, and in fact the experts have reached agreement on a great deal of it, in the end differing on a limited number of items, some assumptions and their application. Accordingly, the evidence is sufficient for me to rely on in making an aggregate award and will not result in unfairness to the parties: see *Ramdath v. George Brown College of Applied Arts and Technology*, 2015 ONCA 921, 392 D.L.R. (4th) 490, at paras. 75-76.

[829] The Court of Appeal's decision in *Ramdath* stated, however, that one must be cautious in awarding aggregate damages to not overstate them. As the Court put it, at para. 51, "the aggregate damages methodology will be reasonable if some members of the class are over-compensated and some are under-compensated, as long as the defendant's total liability is not over-stated" (emphasis added). The Court also stated, at para. 76:

> I endorse the trial judge's view that it is desirable to award aggregate damages where the criteria under s. 24(1) are met in order to make the class action an effective instrument to provide access to justice. I also agree with his focus, at para. 47, on the legislature's choice of a 'reasonableness' standard for determining aggregate liability and with the three criteria he sets out to ensure that both sides are treated fairly by the assessment:
>
> 1) whether the non-individualized evidence presented by the plaintiff is sufficiently reliable;
>
> 2) whether use of the evidence will result in unfairness or injustice to

the defendant, such as overstatement of its liability: see *Healey v. Lakeridge Health Corp*., 2010 ONSC 725, 72 C.C.L.T. (3d) 261, at para. 284, affirmed 2011 ONCA 55, 103 O.R. (3d) 401; and
3) whether the denial of an aggregate approach will result in a "wrong eluding an effective remedy" and a denial of access to justice: see *Markson v. MBNA Canada Bank*, 2007 ONCA 334, 85 O.R. (3d) 321 at para. 42, leave to appeal refused [2007] S.C.C.A. No. 346.

[830] Of course, the general principle is that damages "should as nearly as possible get at that sum of money which will put the party who has been injured, or who has suffered, in the same position as he would have been in if he had not sustained the wrong for which he is now getting his compensation or reparation": see *Livingstone v. Rawyards Coal Co* (1880), 5 App Cas 25, at 39. In doing my best to determine damages that achieve this objective, however, I must bear in mind the concern expressed in *Ramdath* that fairness requires that I be cautious not to overcompensate. As the Supreme Court stated in *Southcott Estates Inc v. Toronto Catholic District School Board*, 2012 SCC 51, [2012] 2 S.C.R. 675, at para. 25, quoting from *Redpath Industries Ltd. v. Cisco (The)* (1993), 110 D.L.R. (4th) 583 (F.C.), at p. 597: "The Court must make sure that the victim is compensated for his loss; but it must at the same time make sure that the wrongdoer is not abused."

The experts and their evolving positions

[831] The plaintiff's damages expert, Dr. Groenewegen, received a Ph.D. in Agricultural and Applied Economics from the University of Minnesota in 1980. He worked as an analyst and researcher with the United States Department of Agriculture and with Agriculture Canada for several years before becoming a private consultant. He has provided business planning, strategic analysis and economic impact analysis studies, including market and price analyses and other economic consulting services to the agriculture and food sector for 35 years. This has included the livestock, dairy and poultry sectors, grains and oilseeds, and horticulture. He has advised industry associations including the Ontario Cattlemen's Association and the Ontario Agricultural Sustainability Coalition.

[832] The defendant did not object to Dr. Groenewegen being qualified as an expert agricultural economist who specializes in commodity market analysis, financial loss, and damages in the Canadian agricultural industry.

[833] The defendant's expert, Mr. Low, became a Chartered Accountant in 1974 and has been a Chartered Business Valuator since 1980. He has decades of experience providing reports and evidence on business valuations and quantification of losses from business disruptions and pricing reductions. He has worked in a wide range of industries, including agriculture, where he has conducted valuations and assessments of economic values in the grain and poultry sectors. He has been qualified as an expert by courts and tribunals on many occasions.

[834] The plaintiff took no issue with Mr. Low being qualified as an expert in the field of business valuation and quantification of economic losses arising from business disruptions. However, the

plaintiff objected to Mr. Low being qualified as an expert on the specific losses claimed in this case, since he has no particular expertise in the cattle industry and had retained the services of a company with agribusiness expertise to provide him with industry data and loss calculations. I rejected the plaintiff's objection, noting that expert witnesses frequently need to source information from others about particular industries, including obtaining assistance in making calculations and assumptions to inform their opinions, and I qualified Mr. Low to give expert opinion evidence on the losses claimed in this case.

[835] Nevertheless, Mr. Low's lack of in-depth knowledge of the cattle industry, and of the data relied upon, was apparent in cross-examination. It was clear that much of the work in his report had been completed by others. Mr. Low was unable to explain or support a number of aspects of his report. On the other hand, while Dr. Groenewegen had more familiarity with the material and could explain his position and calculations clearly and cogently, as I discuss below, his position shifted in significant ways in his reports, as he responded to criticisms by Mr. Low of his assumptions and approach. Mr. Low's position also shifted over time as he accepted certain criticisms made by Dr. Groenewegen.

[836] In the end, both experts adjusted their opinions to reflect common ground and provided helpful evidence as they focussed on the limited areas of disagreement in their approaches and assumptions.

[837] The expert reports are detailed, complex and lengthy. They involve consideration of prices, and price adjustments reflecting a range of factors, including exchange rates, volume, weight, supply and demand, and feed costs, among other things. Analyses were conducted for each sector of the cattle industry, including cow-calf, pure-bred breeding, backgrounding, feedlot, feeders and fed cattle, heifers, veal and dairy. The damages suffered in each sector varied for a variety of reasons, including timing, pricing differences, feed costs, additional carrying costs resulting from delayed slaughter, culling costs, region, and the gradual reopening of the border.

[838] While the data for each sector was reviewed in the reports and at trial, my findings on damages were assisted considerably by the ability of the experts to reach agreement on many issues, making it unnecessary for me to engage in a sector by sector, or even year-by-year, approach. However, some fundamental differences remained, as I review below.

Dr. Groenewegen's March 2014 Report

[839] Several years before the trial and before the plaintiff had conducted extensive discovery on damages, Dr. Groenewegen prepared an initial report on damages on behalf of the plaintiff in March 2014 (the "March 2014 Report"). He estimated the gross losses to the Class to be approximately $8 billion. Dr. Groenewegen was prepared to accept offsets from direct payments from BSE-specific programs of $1.94 billion, resulting in a net loss by the Class of $6.06 billion.

[840] In his March 2014 Report, Dr. Groenewegen compared actual prices between Canada and the US and assumed that historical differences would continue. However, he used Statistics Canada data on farm cash receipts for cattle and calves from 2001 and 2002 as an additional reference

point for calculating losses based on an assumption that the volume of production in Canada would have continued to expand had BSE and the border closure not occurred. Dr. Groenewegen noted that in 2002, the value of cash receipts for cattle and calves calculated by Statistics Canada was $7.68 billion, which fell by 33% in 2003 to $5.16 billion and to $5.09 billion in 2004.

[841] Dr. Groenewegen calculated gross losses due to the impact of lower prices and lower volume of production between 2003 and 2009 to be $6.81 billion. This included losses in 2008 and 2009 of $633 million reflecting a continuing volume impact due to production of fewer calves between 2003 and 2007. Dr. Groenewegen also considered costs borne by producers arising from higher feeding costs, maintaining larger herds, the costs and loss of revenue associated with higher levels of mortalities and condemnations due to the lack of a market, and losses attributable to additional expenses associated with complying with regulations passed in 2007 dealing with removal of SRM. These costs totalled $1.19 billion. This led to Dr. Groenewegen's total of gross losses to be $8 billion.

[842] Dr. Groenewegen's discussion of assistance program payments in his March 2014 Report was based on the limited publicly available information to which he had access at the time. He included payments made to cattle farmers under the following programs: TISP-Direct, FIP-Direct, and Phases 1, 2 and 3 of the BSE Recovery Program.

Mr. Low's August 2020 Report

[843] In August 2020, Mr. Low delivered a report in which he concluded that the aggregate losses to the Class, excluding offsets, was $3.095 billion (the "August 2020 Report"). However, Mr. Low then applied offsets from program payments totalling $4.824 billion, eliminating any damages.

[844] Mr. Low agreed with Dr. Groenewegen on a number of issues. For example, both experts agreed that the direct price impact (as opposed to volume) ended, at latest, by 2007 when the border reopened. They also agreed that there was a significant impact on cash receipts as reported by Statistics Canada, and that there were higher feeding costs that had to be borne by producers during the period between 2003 and 2007.

[845] Mr. Low took a different approach to pricing. He compared Canadian prices to price and volume forecasts issued just prior to May 2003. Those forecasts were found in monthly World Agricultural Supply and Demand Estimates ("WASDE Reports") published by the USDA which provided a basis to measure the impact of the Canadian BSE event on US prices. As Mr. Low explained, the US price projected in April 2003 turned out to be about $10 below the average actual price for 2003, as there was an explosive price surge in the US during the fall of 2003. Mr. Low noted that there was a price differential for subsequent years of between $6 and $10 based on that April 2003 forecast, which he attributes to the Canadian BSE event. However, Mr. Low was unable to clearly explain to the court how these prices were adjusted as, it seems, this was a task undertaken by the consulting firm that assisted him. Mr. Low also did not consider actual volumes after 2003, but simply took the differential in 2003 and applied it to 2004 and 2005.

[846] Mr. Low disagreed with Dr. Groenewegen's application of US prices without adjustment, as the reduced supply of cattle from Canada caused an increase in the price US producers could obtain for their cattle. As Mr. Low put it, "the appropriate but-for scenario must assume that the Canadian BSE event did not occur", and therefore the impact of the event on US prices must be removed before a comparison can be made of the price differences.

[847] Mr. Low also disagreed with Dr. Groenewegen's use of cash receipts in 2001 and 2002, prior to the BSE event, as a basis for volume adjustments. Mr. Low noted that Canadian prices were at their highest in that period due to the low US to Canadian dollar exchange rate.

[848] Mr. Low objected to Dr. Groenewegen's inclusion of costs attributable to compliance with the SRM removal regulations which, Mr. Low argued, would have been incurred absent the Canadian BSE event due to the subsequent US BSE event when the Washington cow was reported.

[849] Mr. Low took issue with Dr. Groenewegen's inclusion of any losses after 2007, noting that with "the passage of time and the border reopening, along with the rapid appreciation of the Canadian dollar in comparison to the US dollar, our view is that the affected parties would have adjusted their operations to accommodate these changes…and the losses would have ceased at the end of 2007."

[850] Mr. Low also took into account the reopening of the border in July 2005 to Canadian animals aged 30 months or less which, in his view, reduced the losses in the cow-calf sector.

[851] With respect to offsets, Mr. Low was instructed to deduct total program payments that had been calculated by Dr. Hedley to be $4.918 billion. This included funds received from *ad hoc* and BSE Recovery programs totaling approximately $1.65 billion, and payments made under general assistance programs of about $3.26 billion. Consistent with his approach regarding the SRM issue, Mr. Low deducted $93.4 million associated with a program addressing those costs, resulting in total offsets of $4.824 billion.

[852] Mr. Low reached his own conclusion based on his stand-alone approach that the aggregate losses were $3.095 billion. He observed that the principal difference between his figure and Dr. Groenewegen's figure of $8 billion arose from their starting points on volume and pricing assumptions. Dr. Groenewegen assumed larger numbers of cows and calves would have been sent to slaughter than Mr. Low. Further, Mr. Low excluded volumes, and losses, for cattle under 30 months of age from July 2005 forward, as the border had reopened to those animals in that month. However, Mr. Low pointed out that even accepting Dr. Groenewegen's volume assumptions, but applying Mr. Low's approach to price, total losses increased by $1.114 billion to $4.209 billion, which is still less than the offsets Mr. Low applied.

[853] Mr. Low also put forward an alternative approach that used Dr. Groenewegen's methodology but made adjustments where he disagreed with assumptions relating to volume, the impact of the Canadian BSE event on US prices, and the removal of losses in 2008 and 2009. This led to an adjusted total based on price and volume of $3.567 billion in losses. Further, after removing the SRM costs, reducing the amount associated with higher mortalities, and accepting

Dr. Groenewegen's figures for higher feed costs, Mr. Low reached what he called a "JRG Adjusted" total of $4.051 billion in losses. Again, this is less than the offsets applied by Mr. Low.

Mr. Low's Addendum Report of October 2020

[854] In October 2020, Mr. Low provided a brief Addendum Report revising the offsets to include program payments associated with Kickstart and AgriInvest, and to make a slight downward adjustment relating to the Milk Price Increase. This increased the offsets from program payments to a total of $5.12 billion.

Dr. Groenewegen's November 2020 Report

[855] Dr. Groenewegen prepared a supplementary report in November 2020 (the "November 2020 Report"). By this time, in addition to Mr. Low's August 2020 Report and Addendum, Dr. Groenewegen had the benefit of Dr. Hedley's evidence provided at his examination for discovery on both losses and program payments. In answers to undertakings, Dr. Hedley had also made specific comments about Dr. Groenewegen's 2014 Report.

[856] A large amount of additional data and information was produced by the defendant between 2017 and 2020 and reviewed by Dr. Groenewegen. This included two government reports prepared in 2008, the OAE Report relating to programs and the work of the BSE Response Team, discussed earlier in these Reasons, and another AAFC report: "Economic Impacts of BSE and Programs on the Canadian Agricultural Markets" (the "AAFC Report"). These reports concluded that there was a reduction in cash receipts to producers of cattle of approximately $8.8 billion in the 2003 to 2007 time frame that was attributable to BSE. Dr. Groenewegen noted that this was similar to his calculation of the loss in cash receipts contained in his March 2014 Report and tended to validate his approach.

[857] In his November 2020 Report Dr. Groenewegen revised his calculations. He accepted Dr. Hedley's criticism that a change in cash receipts, which he relied on in 2014, is not equal to a change in net income, and concluded that the losses should be reduced from $8 billion to $7.196 billion.

[858] In response to concerns about having overstated the loss in volume of production in his March 2014 Report, Dr. Groenewegen revised his loss estimate to exclude any impact arising from volume changes had BSE not occurred. Dr. Groenewegen thus revised his loss estimate to be based on "a loss in net income due to lower prices received arising from BSE for the number of cattle the producers actually had, instead of the number of cattle they would otherwise have produced."

[859] Dr. Groenewegen also agreed with Mr. Low that US prices had to be adjusted to reflect the impact of the closed border following the May 2003 McCrea cow event, which had caused US prices to rise. This adjustment reduced the price differential, and losses, suffered by Canadian producers.

[860] However, Dr. Groenewegen then added a new adjustment to US prices resulting from the impact of the Washington cow following December 2003. The discovery of the Washington cow

led to a trade embargo on American beef, cutting off the significant Asian market. As demand for US beef dropped, so did US prices. Dr. Groenewegen adjusted US prices upwards to remove that impact in 2004 and subsequent years. This increased the spread between the US and Canadian prices and increased Dr. Groenewegen's calculaton of the losses to Canadian producers. On the other hand, Dr. Groenewegen also adjusted US prices to take into account a decline in the supply of US beef in 2003 which increased prices and which, he said, should not be included in the price spread.

[861] Dr. Groenewegen agreed to remove losses for 2008 and 2009, limiting the damages to the 2003 to 2007 period. However, he disagreed with Mr. Low's exclusion of losses for cattle under 30 months during 2006 and 2007 because there was still a price differential, and because imports from Canada of live cattle under 30 months after July 2005 remained low due to lower demand resulting from the reduction in US beef exports to Asia, which Dr. Groenewegen described as a "BSE impact."

[862] Dr. Groenewegen disagreed with Mr. Low's use of the WASDE projections, arguing that they do not take into account non-BSE changes that impacted the US market, such as declining US cattle production on US prices. Nor do they adjust for the decline in US prices caused by the Washington cow which Dr. Groenewegen says must be corrected to a no-BSE price.

[863] Based on the AAFC Report and Dr. Hedley's comments, Dr. Groenewegen made some additional volume adjustments in certain sectors, including the number of cattle deaths, and an adjustment on the value of industrial milk which affected the dairy sector. Although the AAFC Report only addressed cash receipts rather than net income, just as Dr. Groenewegen had done in his March 2014 Report, Dr. Groenewegen used Statistics Canada data on revenues and expenses for cattle operations in 2001 and 2002 to determine net income losses based on the AAFC Report. Using complete data on cash receipts and deducting expenses, including increased feed costs, Dr. Groenewegen concluded that cattle producers suffered losses of approximately $3.6 billion which, when combined with what he says they ought to have received if BSE had not occurred ($3.53 billion), the total loss was $7.13 billion. This is close to the conclusion Dr. Groenewegen reached based on his own analysis and methodology, and provided support for the approach in his March 2014 Report.

[864] Addressing offsets, Dr. Groenewegen revised his calculation of direct payments relating to BSE to be $1.97 billion. Dr. Groenewegen raised several questions about the inclusion of the generally available programs, including: (1) whether programs not designed in response to BSE issues and generally available to all farmers (cattle and non-cattle) should apply; (2) whether some programs apply to cattle producers at all; (3) whether funds were actually distributed to farmers or were simply government deposits into accounts; and (4) if they are to be included as payment offsets for BSE losses, what methodology should be used to reflect payments applicable to cattle operations and not other farming activities.

[865] Dr. Groenewegen was prepared to consider offsets of about $2 billion from generally available programs, depending on how they were allocated and whether assistance from generally available programs were "deemed applicable." Applied to his gross loss figure of $7.196 billion,

if only BSE-specific programs are considered as offsets the net losses are about $5.2 billion, but if general program offsets are also accepted, the losses drop to about $3.4 billion.

Mr. Low's February 2021 Report

[866] Mr. Low prepared a responding supplementary report dated 12 February 2021, shortly before the commencement of the trial (the "February 2021 Report"). This report responded to Dr. Groenewegen's November 2020 Report and addressed evidence provided in the Affidavit of Mr. Sears, the representative plaintiff, dated 31 December 2020, which formed part of Mr. Sears' evidence-in-chief at trial.

[867] In his February 2021 Report, Mr. Low revised his estimate of total losses from $3.095 billion upward to $3.725 billion, and his offsets figure was revised from $5.12 to $5.15 billion, thus continuing to conclude that the damages were nil.

[868] Mr. Low accepted Dr. Groenewegen's amended calculations of feeding costs, increasing that amount by $255 million. Losses arising from dairy inter-farm heifer sales and dairy exports were increased by $98 million, and the amount attributed to higher mortalities that Mr. Low had accepted in his August 2020 Report, of $245 million, was now included in his summary of total losses. In addition, a loss for carrying costs of bulls referred to in Mr. Low's earlier report was incorrectly summarized as $20 million when the correct amount was $52 million, a difference of $32 million. These adjustments (255 + 98 + 245 + 32) increased Mr. Low's calculation of losses by $630 million, to his revised figure of $3.725 million. In addition, as Mr. Low acknowledged in cross-examination, he made an arithmetic error on his calculation of losses for dairy exports which understated losses in that sector by $240 million. Correcting for that, as counsel agreed I should, Mr. Low's total loss number based on his approach is in fact $3.964 million.

[869] Mr. Low acknowledged that Dr. Groenewegen had accepted that US prices needed to be adjusted to what they would have been "but-for" the Canadian BSE case in May 2003; however, he disagreed with Dr. Groenewegen's further adjustment to increase US prices to take out the effect of the Washington cow. Mr. Low argued that the proper "but-for" analysis involves correcting for the impact of the May 2003 BSE event, not other events that would have occurred in the US market in any event.

[870] Mr. Low was also critical of Dr. Groenewegen for adjusting the US prices based on "the impact of declining US cattle production on US prices in 2003" which is a market event unrelated to the Canadian BSE event.

[871] As in his August 2020 Report, Mr. Low also made an alternate calculation based on Dr. Groenewegen's methodology with further adjustments that reflected Mr. Low's different assumptions. The adjustments included removing the impact of the Washington cow on US prices, reducing the losses from July 2005 forward, and making other adjustments to reflect different assumptions about volume, weight and pricing in various sectors. These changes resulted in losses of $4.522 billion, which became the new "JRG Adjusted" number. As Mr. Low pointed out,

however, this amount was still exceeded by the $5.15 billion in program payments which he included as offsets, resulting in a damage claim of nil.

Dr. Groenewegen's March 2021 Report

[872] Dr. Groenewegen provided a second supplementary report dated March 2, 2021, one week before his testimony at the trial began on 10 March 2021 (the "March 2021 Report").

[873] Dr. Groenewegen revised his position to state that the total losses were $7.116 billion, down from $7.196 billion in his November 2020 Report. This arose from his acceptance of a number of additional adjustments made by Mr. Low. Dr. Groenewegen, however, also addressed and made adjustments to Mr. Low's "JRG Adjusted" figure of $4.522 billion, increasing it to $4.665 billion. When the adjustment of $240 million is made for dairy exports, the "JRG Adjusted" figure increases to $4.905 billion.

[874] The difference between Dr. Groenewegen's $7.116 billion and the revised "JRG Adjusted" figure of $4.905 billion is $2.211 billion. Of that, $1.65 billion, is attributable to price differences, primarily due to the different treatment of the Washington cow, and $561 million is due to volume differences, largely resulting from Mr. Low rejecting losses for cattle under 30 months after the border reopened to them in July 2005.

[875] Dr. Groenewegen's position on offsets remained that only direct payments linked to BSE should be included, in a revised total amount of $1.942 billion, making his net loss figure $5.174 billion. However, if generally available program payments were to be included as offsets, Dr. Groenewegen's position was that the most that should be included for those programs was $1.642 billion, for a total program offset of $3.584 billion, resulting in a net loss of $3.532 billion.

Final positions of the parties on damages and issues to be resolved

[876] In closing argument, the plaintiff's position on losses was as set out in Dr. Groenewegen's March 2021 Report, in the amount of $7.116 billion. In its closing submissions, the plaintiff conceded that amounts for some of the generally available programs should be included as offsets together with the BSE-specific program payments as tallied in Dr. Groenewegen's March 2021 Report, and therefore the total damages sought by the plaintiff are $3.532 billion.

[877] The defendant's stand-alone position based on Mr. Low's pricing methodology is that losses are $3.964 billion. The defendant's alternative, "JRG Adjusted" figure using Dr. Groenewegen's methodology, however, results in losses of $4.522 billion. The defendant's position that it should be credited with program payments of $5.15 billion remains unchanged, resulting in no damages on either approach.

[878] Based on this review and the narrowing of the experts' differences on losses, I must resolve the following remaining areas of disagreement:

(a) which pricing methodology to apply – Dr. Groenewegen's approach taking actual price differences, or Mr. Low's approach using WASDE forecasts;

(b) whether US prices should be adjusted to reflect the impact of the US BSE event and other factors that affected pricing in the US; and

(c) the impact of the border reopening to cattle under 30 months in July 2005.

Pricing methodology

[879] The experts' different approaches to pricing leads to a wide difference in the losses: Dr. Groenewegen at $7.116 billion and Mr. Low at $3.964 billion. Mr. Low's starting point uses the WASDE forecasts, whereas Dr. Groenewegen uses actual prices.

[880] In my view, Mr. Low's approach cannot be accepted. This is not because it is necessarily inappropriate to use WASDE forecasts which were made prior to the BSE event, but because, under cross-examination, Mr. Low could not explain how the WASDE quarterly prices were used and how he adjusted them. His report did not adequately reference source information which had been obtained and analyzed by his supporting agribusiness consultants, nor did it contain information about assumptions they had made.

[881] Under cross-examination, Mr. Low's inability to provide explanations of the approach to pricing in his reports demonstrated that he had relied to a great extent on the consultants, such that much of the work in his report was not his own. Mr. Low could not explain adjustments such as the "seasonal factors" and their impact on his conclusions. He used different averages for different calculations. These deficiencies made it impossible for me to have confidence in the accuracy and reliability of Mr. Low's approach.

[882] Canada submits that I should ignore these frailties in Mr. Low's evidence, noting that I had rejected the plaintiff's argument that his evidence should not be admitted because he had relied on information and analysis from others, and that at no time since the delivery of Mr. Low's reports had the plaintiff asked for underlying data supporting his methodology and calculations.

[883] Canada's submission misses the point. A ruling permitting an expert to testify where he or she has assistance from others does not mean that the expert need not be familiar with what has been done by them. Admissibility is quite different from assessing the cogency of the evidence, the "aptness of the methods of analysis chosen by experts and…the soundness of the conclusions they reach": *Canada v. Piot*, 2019 FCA 53 at para. 47.

[884] Regardless of whether an expert has had assistance in formulating his or her opinion, the expert must be fully knowledgeable of and be able to explain the opinion and the basis for it. This includes what others have provided to them. Because an expert's opinion can carry great weight, it must be able to withstand careful scrutiny on cross-examination. It is simply not an answer to say that portions of the work were completed by others. Nor is an expert not required to be familiar with the data and calculations underlying his or her opinion simply because the other side did not previously ask for it or give the expert a "heads up" in advance.

[885] In contrast, Dr. Groenewegen's work was his own, and his approach was clear and compelling. He took actual prices in the United States and compared them to Canadian prices,

rather than relying on forecasts and projections over a lengthy period. He was very knowledgeable about the industry and able to explain his adjustments and his differences with Mr. Low's approach.

[886] The changes made by Dr. Groenewegen in response to Mr. Low's criticisms over the course of the exchange of reports does not make his evidence unreliable, as suggested by Canada; rather, it demonstrates an open-mindedness towards what is a very complicated issue. Dr. Groenewegen quite properly considered those criticisms and adjusted his approach where he concluded that they were well-founded. This is what is expected of an independent expert witness, whose primary duty is to the court: see *White Burgess Langille Inman v. Abbott and Haliburton Co.*, 2015 SCC 23, [2015] 2 S.C.R. 182, at paras. 26-45.

[887] My rejection of Mr. Low's approach to pricing in calculating losses does not mean, however, that I accept Dr. Groenewegen's conclusion that the gross losses are $7.116 billion. Although Mr. Low had difficulty explaining his underlying data, he was clear and persuasive on the basic assumptions of how economic losses should be quantified, which was squarely within his area of expertise, and some of those assumptions require adjustments to Dr. Groenewegen's approach, as Mr. Low did in his "JRG Adjusted" figures.

Impact of the Washington cow

[888] In his initial March 2014 Report, Dr. Groenewegen did not consider the impact of the border closure on US prices following the May 2003 event on US prices. He acknowledged in his November 2020 Report that this should have been done to determine the appropriate US price "but-for" the Canadian BSE event. However, he then raised the impact of the Washington cow on US prices following December 2003 as a relevant factor, which had not been mentioned in his March 2014 Report either. Mr. Low took issue with this second adjustment, arguing that it undermined the "but-for BSE in Canada" analysis and, as Dr. Groenewegen acknowledged in cross-examination, instead calculated a price "but-for BSE in North America."

[889] In my view Dr. Groenewegen's adjustment to remove the drop in price of US cattle following the Washington cow event is not appropriate, for a number of reasons.

[890] I begin with the pleadings. The plaintiff did not plead that Canada was liable for damages resulting from the Washington cow. Rather, a review of the Further Fresh as Amended Statement of Claim makes clear that the plaintiff is seeking damages caused by the McCrea cow that was found to have BSE in May 2003. The Class is defined as those who "farmed cattle" on 20 May 2003. The pleading makes specific reference to the cow diagnosed in May 2003 as the cause of damage, noting that it was this event which caused export markets to shut down and the value of Canadian cattle to plummet. As para. 84 of the Further Fresh as Amended Statement of Claim states:

> The discovery of one case of BSE in one cow, in one herd, in one province set off a series of events that devastated cattle producers across Canada. The industrialized world immediately closed its borders to Canadian cattle and beef, and a fully

> integrated North American market for beef products and live animals disintegrated. Cattle prices spiraled downward, cattle herds grew beyond affordable levels, flourishing cow-calf operations were made unprofitable, and packers and processors were burdened with costly new processing regulations.

[891] Under the heading "Causation" in the Further Fresh as Amended Statement of Claim, the plaintiff only refers to the Canadian cow diagnosed in May 2003 as the cause of losses. The Washington cow is referred to once in the pleading, in a chart listing cases of BSE "originating in the Canadian cattle herd." In the section on damages, the Washington cow is not mentioned, and all damages are linked to the "border closure" and the discovery of BSE "in Canada" in May 2003. The occasional reference to causing BSE in the "Canadian cattle herd" is not sufficient to bring in liability for the impact of the Washington cow, especially in a pleading that has been repeatedly and carefully amended.

[892] Consistent with the pleading, Dr. Groenewegen's engagement was to "opine on losses… stemming from the diagnosis of bovine spongiform encephalopathy (BSE) in the Canadian cattle herd on 20 May 2003, and the consequential border closure that prohibited and then later limited the exportation of beef and cattle from Canada." Neither he nor the plaintiff thought the impact of the Washington cow was relevant until Mr. Low's comments required the damages to be reduced by adjusting US prices downwards to remove the impact of the lack of Canadian cattle in the US market following May 2003. Only then did Dr. Groenewegen expand his mandate to include the impact of the Washington cow, which increased the damages.

[893] Dr. Groenewegen acknowledged in cross-examination that if only the Washington cow had been found with BSE, then only US beef exports would have been affected. Had there not been the Canadian case in May 2003, Canada could have continued to export to the United States. Although counsel for the plaintiff objected to this line of questioning as speculative, the answers are consistent with what happened in May 2003 – that Canada could no longer export cattle and beef, but the United States continued to export its beef to other countries despite the close integration of the two countries' cattle industries. The rest of the world appeared to see Canada and the US as separate markets from which to buy beef, and the drop in price of US beef due to the actions of other countries should not be laid at Canada's feet.

[894] The AAFC Report also adjusted for the impact of the Washington cow on US prices. However, the AAFC Report did not consider responsibility for the US BSE event; its purpose was to "measure the economic consequences of this crisis", which is quite different than calculating damages in a lawsuit. The AAFC and OAE reports looked more broadly at the impact of BSE. They were not prepared for litigation. Indeed, the purpose of the OAE Report was to assess how Canada responded to the crisis, particularly the impact of the support and assistance programs offered by government, which was also reviewed in the AAFC Report.

[895] Dr. Hedley took issue with the use of the AAFC Report for a number of reasons. First, it dealt with cash receipts, not net income. Second, Dr. Hedley was unsure as to the source of the AAFC data and the assumptions that were made in coming to its conclusions. Third, the AAFC Report "attributed all of the changes that have occurred in that market since 2002 to BSE",

something Dr. Hedley doubted "very much" to be the case. Dr. Hedley also cited the impact of the change in the exchange rate between the Canadian and US dollars during this period as something that was not given enough weight, as the Canadian dollar rose dramatically over those years.

[896] While Dr. Groenewegen refers to the AAFC Report as "indicative" of the scope of the damages which provides support for his conclusion as to the size of the losses, it should not be given undue weight. The fact that the AAFC Report considered the impact of the Washington cow does not mean that it should be considered in this case where the damages sought are those resulting from the impact of BSE on Canadian cattle farmers resulting from the closure of the Canadian border, not the US border.

[897] In my view, to make an adjustment for the Washington cow, which favours the plaintiff, not only extends liability beyond what was pleaded, but is also too remote. To include this adjustment would beg the question of what other effects there might have been from Canadian cattle that might have carried BSE to other countries, directly or indirectly. Mr. Low, who has decades of experience in calculating damages, argued that the proper "but-for" analysis involves correcting for the impact of the May 2003 BSE event, and not for other events that affected the US market, and I agree.

[898] In his March 2021 Report, and in cross-examination, Dr. Groenewegen agreed that the adjustment for the Washington cow was the primary cause of the pricing differences between him and Mr. Low. Applying Dr. Groenewegen's methodology, removal of the adjustment for the Washington cow results in a decline in losses of $1.098 billion[33], from 7.116 billion to $6.018 billion.

Losses following July 2005

[899] The US border opened for live cattle trade on animals under 30 months in July 2005. Mr. Low therefore takes the position that losses attributed to the cow-calf sector following July 2005 should not be included. Dr. Groenewegen disagrees, observing that Canadian cattle prices remained somewhat lower than the normal differential with US prices during 2006 and 2007, indicating a continuing impact of BSE.

[900] In my view, Mr. Low's position is persuasive.

[901] First, the pleading relating to the impact of the US border closure indicates that the plaintiff seeks damages "consequential" to the Canadian border closure. The border closure ended for a large portion of the Canadian cattle industry in July 2005.

[902] Second, the cow-calf sector is the largest sector in the industry, and it is agreed between the parties that, generally, most cattle are harvested for beef between 12 and 30 months of age, and most are 24 months or less. The cow-calf sector accounts for close to half of all losses during the

[33] This is the sum of the price difference for cow-calf feeders, culled heifers, and cows for slaughter, and dairy cows for slaughter and dairy culled heifers found in Table 5.2 of Dr. Groenewegen's March 2021 Report.

2003 - 2007 period, the bulk of which were in 2004 and 2005. However, Dr. Groenewegen's analysis shows much lower losses in 2006 and 2007. Indeed, by 2006, slaughter levels had returned to levels seen in 2001 and 2002.

[903] Third, the price differential in 2006 and 2007 was much less than it had been from May 2003 through the first half of 2005. According to Dr. Groenewegen's data, even after considering exchange rates, the price of Canadian fed cattle was almost always lower than US cattle prices between 2000 and 2010, and the price differential fluctuated, including during non-BSE years. Following the reopening of the border to most cattle in July 2005, the price difference was much smaller than it had been since May 2003 and was similar to the differences before May 2003 and after 2007.

[904] Fourth, the price differential and lower volume of exports in 2006 and 2007 compared to pre-BSE levels would have been affected by other factors. This included the increasing value of the Canadian dollar which rose from a low of about 64 cents US in 2002 to 94 cents US by 2007. The rising dollar meant that Canadian cattle producers would receive less for their cattle than had been the case pre-BSE or even in 2003 to 2005. Additionally, demand for Canadian beef in the United States would have been affected by the continued closure of US exports to the Asian markets.

[905] Fifth, as Mr. Low noted, the market adjusts. Farming, including cattle farming, as Dr. Groenewegen readily conceded, is highly susceptible to market forces. Over a longer period of time, the impact of a specific event diminishes as producers make business decisions about how to respond to changing or new conditions, some of which may mitigate their losses. Indeed, in this case, there is evidence that cattle farmers adjusted their practices to limit their losses, and that some engaged in different types of farming instead of raising cattle.

[906] Quantifying the reduction in losses due to my conclusion that the partial reopening of the border in July 2005 must be recognized does not mean that the Class suffered no losses after that date, as even Mr. Low continued to recognize losses in 2006 and 2007 of over $400 million. However, using the "JRG Adjusted" approach, as calculated by Dr. Groenewegen, due to the partial reopening of the border in July 2005, losses should be reduced by $599 million.[34] This results in losses being reduced from $6.018 billion (after backing out Dr. Groenewegen's adjustment for the Washington cow) to $5.419 billion.

[34] This is the value of the volume difference associated with cow-calf feeders ($545M), cow-calf culled heifers ($35M) and dairy-culled heifers ($19M) found in Table 5.2 of Dr. Groenewegen's March 2021 Report, and explained at para. 36 of that report. In its written submissions the plaintiff provided revised tables which assisted in calculating this adjustment. Canada challenged these calculations, asserting that plaintiff's counsel was presenting fresh theories on which there is no evidence. I disagree. The calculations are firmly rooted in the data provided in the evidence.

General and aggravated damages

[907] The Further Fresh as Amended Statement of Claim seeks general damages for each Class member of $100,000 "for pain, suffering and loss of enjoyment of life." The plaintiff also seeks aggravated damages in the same amount. The pleading asserts that the Class has suffered, and continues to suffer income loss, loss of business opportunities, and a diminution in the value of their businesses and property. In addition, it is pleaded that "[t]he Plaintiff and the Class Members have suffered, and continue to suffer, loss of enjoyment of life" as well as "emotional upset and mental distress."

[908] During the trial I heard very little evidence that would support awards under these heads of damages.

[909] There was reference to the emotional cost in Mr. Sears' affidavit, who stated that "some older cattle producers exited the business as soon as prices allowed them to leave with something rather than nothing." Mr. Sears described financial strains he faced and the general decrease in the value of inventory and land at the time. But aside from his own situation, he provided no details of the extent of this impact on others.

[910] The plaintiff, through the read-ins, provided the court with a few documents from the early days of the border closure that referred to concerns about the impact on families and the "human cost." Dr. Hedley admitted that the BSE crisis "unquestionably" had a very severe impact on the cattle industry, that a large percentage of producers had to increase their debt load, and that some had to find off-farm jobs. He acknowledged that the BSE event had "very, very severe" impacts on cattle producers and that there were concerns about bankruptcies.

[911] But no evidence was presented as to the extent of these impacts which were, in any event, almost entirely economic. Evidence of pain and suffering is anecdotal and limited. The three additional cattle farmers produced by the plaintiff for discovery on damages testified that they did not suffer emotional harm or stress that would support an award of damages for pain, suffering and loss of enjoyment of life.

[912] The Court of Appeal has observed that claims for pain and suffering "involve serious questions of evidentiary rigour" and should only be awarded where the psychological harm is serious: see *Healey v. Lakeridge Health Corporation*, 2011 ONCA 55, 103 O.R. (3d) 401, at para. 65; *Mustapha v. Culligan*, 2008 SCC 27, [2008] 2 S.C.R. 114, at para.9. I simply have insufficient evidence on which to find that such a threshold has been met.

[913] As Canada also points out, the plaintiff is a corporation and cannot make claims for pain, suffering or loss of enjoyment of life, as corporations do not have feelings: see *Walker v. CFTO Ltd.*, 1987, 59 O.R. (2d) 104, (C.A.). Aggravated damages in particular are intended to compensate for mental distress which, of course, a corporation cannot suffer: see *Hill v. Church of Scientology of Toronto*, [1995] 2 S.C.R. 1130, at paras. 188-189.

[914] The plaintiff countered that in a class proceeding a representative plaintiff can make a claim for aggravated damages on behalf of a diverse class that can include both natural persons and

corporate entities, and that there is no requirement that all class members have the same claims, citing *Western Canadian Shopping Centres Inc. v. Dutton*, 2001 SCC 46, [2001] 2 S.C.R. 534, at para. 39. However, I have no information on the extent to which other Class members may be corporations such that, even if I were inclined to award damages of this kind, I do not have a reliable basis to do so that would meet the requirements of s. 24(1) of the *CPA* and the principles set out in *Ramdath*, at paras. 52, 75 and 76.

[915] Aggravated damages are only intended to be available "where the defendant's conduct has been particularly high-handed or oppressive": *Hill v. Church of Scientology of Toronto*, at para. 188. In this case there is no basis for such a finding. To the contrary, when the borders closed in May 2003, the government acted immediately to provide assistance to cattle farmers, in addition to the general assistance programs already in effect.

[916] The plaintiff's written reply submission suggested that I did not need to decide on an award for pain and suffering or aggravated damages at this stage, stating:

> The parties have also agreed that if an aggregate damages award is made, they will make best efforts to agree on a distribution protocol and, in the absence of agreement, the Court can resolve issues concerning distribution. The parties may be able to agree, or this Court may hold, that individual farmers who experienced pain and suffering or aggravated damages can make a claim to the fund created with an aggregate damages assessment. The entitlement to claim these kind of damages can thus be deferred until after the common issues have been resolved.

[917] In closing argument, in reply, counsel for the plaintiff said that pain and suffering is an "individual issue" which the experts can address in their distribution protocols, which is why it was not pressed before me.

[918] I do not agree with the plaintiff's position that the general and aggravated damages issue can or should be deferred. The common issues require me to determine an aggregate amount of damages. There is no exception or carve-out for different types of damages. Furthermore, as counsel conceded in argument, the plaintiff did lead some evidence on this issue. It was open to the plaintiff to lead more, such as, for example, statistics on cattle farm bankruptcies, or foreclosures by banks, and the toll on individuals and families. To accede to the plaintiff's suggestion would be permitting it to split its case and would be unfair to the defendant.

[919] In conclusion, I find that there is an insufficient basis to make an award of general or aggravated damages.

Damages Offsets

[920] The plaintiff Class received approximately 1.942 billion (rounded up to the nearest million) in payments made under the phases of the BSE Recovery Program and other steps taken by the federal and provincial governments in direct response to BSE, including the TISP-Direct, FIP-Direct and the Milk Price Increase, as well as a number of provincial only programs, as follows:

- Phase 1 – Slaughter Element - $443.9 million
- Phase 2 – Cull Animal Program – $106.2 million
- Phase 3 – Fed Cattle Set Aside - $42.9 million
- Phase 3 – Feeder Cattle Set Aside - $177.7 million
- Phase 4 – Herd Management - $14.8 million
- TISP-Direct - $579.2 million
- FIP-Direct - $135.1 million
- Milk Price Increase – $96.7 million
- Provincial programs - $345.4 million

[921] The plaintiff Class agrees that the payments listed above should be applied as offsets to reduce the losses suffered by it. This has been Dr. Groenewegen's position since his November 2020 Report, after he was provided with details of the program payments. The plaintiff accepts these offsets "under the principle of mitigation" since cattle producers, as business people, acted reasonably in choosing to participate in these programs to reduce their losses: see generally *Southcott Estates Inc*., at paras. 23-25.

[922] However, as I mentioned earlier in my discussion of the programs, although Dr. Groenewegen initially objected to CAIS and other generally available programs being treated as offsets as they were not specifically responsive to BSE, he ultimately took no position with respect to whether any of these program payments should be included as offsets to the plaintiff's losses. He asserted in his evidence that he considered it a "legal question" on which he would not give an opinion. At the same time, he readily conceded that cattle farmers did receive assistance during the relevant time from those programs.

[923] I found this surprising. As an agricultural economist with a detailed understanding of these programs, Dr. Groenewegen ought to have been able to explain and defend the position he took on this issue in his reports, and to challenge the position taken by Dr. Hedley. In my view, his failure to do so constituted a significant concession respecting the application of the generally available programs as offsets.

[924] In its closing argument the plaintiff has agreed that payments made under several generally available programs should be deducted from losses, also "under the principle of mitigation." The plaintiff submits that those deductions should be as follows, totalling $1.642 billion (rounded to the nearest million):

- CAIS 2003-2006 - $947.3 million

- CITI - $247.3 million
- TISP – General - $56.8 million
- FIP – General - $198 million
- AgriStability - $102.2 million
- COPP - $90.7 million

[925] Canada submits that the appropriate amount to deduct for CITI is $588.8 million. In addition, Canada submits that the following program payments should also offset any damages:

- NISA - $894.4 million
- AgriInvest - $110.6 million
- Kickstart - $190.9 million
- GOPP - $28.9 million

[926] I address each of these disputed amounts below.

CITI

[927] Dr. Hedley calculated an amount of $588.8 million for CITI based on amounts paid to farmers who had cattle, regardless of how many animals they actually owned. This differed from the methodology he used for other generally available programs, which involved an allocation based on eligible net sales or allowable net income, using farm cash receipts in order to estimate the amount of payments associated with cattle sales in each province, and which also involved consideration of the inventory of cattle in each province. Dr. Hedley did not do this for CITI because, he testified, cattle was the only industry that was suffering a significant loss in inventory value during those years, and this would cause one to expect a high proportion of the program fund to go to cattle producers.

[928] Dr. Hedley's approach leads to an offset of 68% of a total CITI program spend of $866.2 million, which Dr. Groenewegen argued is inappropriate when many farms had a limited cattle operation. Dr. Groenewegen also said that Dr. Hedley's approach does not give sufficient weight to other inventory adjustments for crops during this time. However, the value of those other inventory adjustments was not calculated for me. Based on the cash receipts approach, Dr. Groenewegen came up with his figure of $247.3 million.

[929] During the cross-examination of Dr. Hedley, the plaintiff adduced Statistics Canada data showing that the inventory value of crops was greater than the inventory value of livestock during the relevant years, and that some crops decreased in value such that crop producers would also have received significant payments under CITI. However, Dr. Hedley was skeptical of some of the

Statistics Canada data, which would not have been used by AAFC. No specific data or calculations were provided by the plaintiff to support the conclusion that Dr. Hedley's number was unreasonable or that Dr. Groenewegen's figure, which was based on cash receipts, not inventory, was closer to the mark.

[930] Neither figure, therefore, represents what was actually received by cattle producers under this program attributable to cattle inventory. They are just two different methodologies to come up with what each party submits would be a reasonable allocation to the Class from the CITI program.

[931] I prefer Dr. Hedley's approach. CITI came about because of the losses in the cattle industry and the very marked decline in inventory values for cattle due to BSE. Indeed, the CITI program was established under s. 12(5) of FIPA as a "special measure" by Order-in-Council in 2006 in order to make retroactive payments for 2003-2005. It might have more properly been considered under BSE-specific programs rather than generally available programs, as I did with TISP and FIP, which have both BSE-specific and generally available components. In my view, it is reasonable for Dr. Hedley to have departed from the cash receipts approach given that the impetus for this program was to address the decline in value in cattle inventory. I do not agree with the plaintiff that Dr. Hedley's methodology "has a significant upward bias in favour of the government." Rather, I am concerned that applying Dr. Groenewegen's approach would risk overcompensating the Class, which I must be cautious to avoid when fixing damages on an aggregate basis.

[932] Accordingly, I conclude that the offset for CITI should be $588.8 million. In my view Dr. Hedley's figure is more likely to reflect that loss in value than a figure based on cash receipts.

NISA: entitlement and allocation

[933] The defendant argues that NISA wind-down payments made from Fund 2 to cattle farmers between 2003 and 2007, in the amount of $894,433,335 (rounded to $894.4 million), should be treated as an offset to the losses resulting from BSE. The plaintiff takes issue with treating any of the Fund 2 balance as a BSE offset for two reasons: (1) the NISA program expired in 2002 before the BSE border closure, and therefore none of the payments were intended to address BSE; and (2) the funds would have flowed regardless of BSE.

[934] Dr. Groenewegen's March 2021 Report also takes issue with the amount, arguing that any NISA offset should reflect the percentage of funds paid in that was attributable to cattle sales, which he calculates to be 37%. Dr. Groenewegen says this "can adjust out the Fund 2 payments that went to other commodities on the farms that had some cattle sales." This would result in an offset of $330.9 million.

[935] Dealing first with the allocation issue, Dr. Groenewegen's approach, in my view, is likely much farther from the mark than Dr. Hedley's calculation of $894.4 million. NISA existed for some twelve years, and funds were not paid in, or out, based on specific commodities. Dr. Hedley noted that there is no connection between the commodity source of the pay-in and the purpose of the withdrawal, nor is the withdrawal of funds limited to losses resulting from a specific commodity, as this was a whole farm program. Regardless of the source of the income that farmers

paid into NISA accounts, they could use money withdrawn for any purpose. Further, as Dr. Hedley noted, while "whole farm" programs were not commodity-specific, the reality is that if the value of one commodity on a farm goes down then money in the program tends to drift towards that commodity. Further, the volume of crops and livestock will have varied over that period and it should not be assumed that payouts would be applied in the same manner as they were paid in, especially when cattle operations would be the ones in need of support between 2003 and 2007.

[936] Turning to the larger question of whether NISA payments should be included as an offset at all, I favour the position of the plaintiff. Having terminated the program in 2002 and announced that all funds must be withdrawn over the next five years, the NISA payments became an amount that farmers were entitled to receive regardless of any other events. While the original purpose of NISA was to provide an incentive to farmers to put money aside for times of income loss, and Canada had contributed to Fund 2 to fulfill that objective, that purpose ended when the program was stopped.

[937] Although the payments to cattle farmers from NISA made over the 2003-2007 period may well have assisted them in weathering the crisis and mitigating their losses, it cannot be treated as mitigation because the farmers were entitled to it in any event. The money was not made available to cattle farmers to reduce, or mitigate, their losses, nor did the farmers have to take reasonable steps to obtain the funds and use them to reduce their losses. Put simply, it was, as of December 2002, their money which they had a right to receive – indeed were required to receive – between 2003 and 2007.

NISA: the collateral benefits argument

[938] Canada argues, in the alternative, that the amounts received by cattle producers under the wind-down of the NISA program are collateral benefits that should be deducted from losses in order to avoid double recovery.

[939] In *IBM* Canada v. Waterman, 2013 SCC 70, [2013] 3 S.C.R. 985, Cromwell J., at para. 20, described "collateral benefits" as follows:

> In general terms, there is a collateral benefit when a source other than the damages payable by the defendant ameliorates the loss suffered by the plaintiffs as a result of the defendant's breach of legal duty: J. Cassels and E. Adjin-Tettey, *Remedies: The Law of Damages* (2nd ed. 2008), at p. 416. For example, if an employee is wrongfully dismissed, but receives employment insurance benefits, those benefits are a collateral benefit. The problem is whether they should be deducted from the damages the defendant will pay for wrongful dismissal.

[940] Many of the collateral benefits cases arise in the employment context. In *IBM*, for example, the issue was the whether pension benefits received following the employee's wrongful dismissal should be deducted from damages. The Court held they should not, as there was an independent entitlement to the pension unconnected with the defendant's wrongful action. While this may well

lead to "some form of excess recovery…there is only a collateral benefit problem if the benefit is sufficiently connected to the defendant's breach." As Cromwell J. continued, at para. 25:

> This requirement of sufficient connection serves a purpose with respect to collateral benefits that is analogous to that served by rules of causation and remoteness with respect to damages. Just as plaintiffs cannot recover all losses, no matter how loosely related to the defendant's breach or how far beyond the parties' reasonable contemplation, so too the defendant does not get credit for all benefits accruing to the plaintiff, no matter how loosely connected to the defendant's wrongful conduct.

[941] As to the connection that is required to constitute a collateral benefit, Cromwell J. stated for the court, at para. 28:

> Returning to the issue of connection between the benefit and the breach, the question is what sort of link is required before the issue about deduction arises. The cases suggest two answers. The advantage must either be one that (a) would not have accrued to the plaintiff "but for" the defendant's breach or (b) was intended to indemnify the plaintiff for the sort of loss resulting from it. If neither of these conditions is present, there is no issue about deduction. If either of these conditions is present, there is. [Emphasis added.]

[942] Neither circumstance arises in this case. The NISA payments were a pre-existing entitlement and did not arise because of, let alone "but for", the BSE event in May 2003. Although the government made payments into NISA for the purpose of assisting farmers in times of need, and therefore the funds were originally intended to assist for "the sort of loss" resulting from BSE and the border closure, that purpose was discarded when the government decided to terminate the program and pay out funds regardless of need, losses, or any other event that affected farmers. Indeed, the NISA wind-down payments were not considered in determining entitlement to other program payments. Accordingly, the NISA payments were not a collateral benefit.[35]

[943] In reaching this conclusion I appreciate that the NISA payments may be seen as a windfall for the Class from the defendant. But that windfall was granted to the Class, and to all other farmers who had NISA accounts, in December 2002, before the BSE event occurred in May 2003. It is not, therefore, a BSE windfall.

[944] Accordingly, I conclude that none of the funds received from the NISA wind-down should be applied to offset the losses of the plaintiff Class.

AgriInvest and Kickstart

[945] AgriInvest was a generally available program established in 2007, similar in nature to NISA, but was more flexible as it allowed producers to access funds at any time. Kickstart was a

[35] Another factor that is discussed in the context of collateral benefits and weighs against the defendant is that those who received NISA payouts did so because they had made deposits into NISA accounts themselves: *IBM*, at para. 56.

related program designed to make sure producers could receive funds from the outset of AgriInvest.

[946] The plaintiff argues that AgriInvest and Kickstart should not be offsets, asserting that as savings programs which treated payments from the government's fund as investment income, the programs were not designed "to indemnify cattle farmers for the very losses caused by Canada's negligence." Consequently, payments made from these programs are neither received as mitigation or as collateral benefits. In addition, it is argued that the funds allocated were only a "deposit" in 2007, and not necessarily received by cattle producers during the relevant time.

[947] The fact that payments were treated as investment income is not important. The receipt of funds made available to them by the government under AgriInvest and Kickstart is of the same character as the funds received from other generally available whole farm programs such as CAIS, CITI and AgriStability, each of which the plaintiff has conceded should be recognized as offsets "under the principle of mitigation." While, as Dr. Groenewegen said, deposits were made by government to encourage savings by farmers, the programs were intended to ensure producers had savings to draw on when they needed them, as can be anticipated in the risky business of farming. In this respect, AgriInvest and Kickstart may constitute collateral benefits. Like the other generally available programs, in my view the funds were "intended to indemnify the plaintiff for the sort of loss" resulting from BSE that cattle farmers were still facing in 2007: see *IBM*, at para. 28.

[948] As to the "deposit" argument, Dr. Hedley confirmed that the provincial and federal governments had deposited $110,585,749 into AgriInvest accounts for cattle farmers in 2007 which was available to them immediately. Similarly, with Kickstart, the federal government had deposited $190,875,614 into accounts that were also available to cattle farmers during that year.

[949] The evidence respecting AgriInvest and Kickstart lacked some clarity at the trial. There is no evidence as to how much was actually paid to cattle farmers from either fund in 2007. However, as Dr. Hedley testified, the funds were available to cattle farmers in 2007, and mitigation principles apply to reduce damages where funds are available, whether the plaintiff takes them or not. As Kickstart was intended to provide seed money to make the AgriInvest program available right away, I infer that those funds were likely received by farmers in 2007, or in respect of 2007, together with at least some of the AgriInvest funds.

[950] In my view, therefore, it is appropriate treat the AgriInvest and Kickstart amounts of $110,585,749, rounded to $110.6 million, and $190,875,614, rounded to $190.9 million, as offsets.

[951] In reaching this conclusion, I have rejected Dr. Groenewegen's position that only 42% of the funds available to cattle producers should be offset on the basis that only 42% of deposits related to cattle. As I have discussed, there is no connection between the commodities that support a deposit to the account, or the pay-in, and the reason or reasons for a withdrawal. A producer can

withdraw the money for any reason, and the intention is that it be withdrawn when there is a need, as there would have been in 2007 due to continuing effects of the border closure.[36]

GOPP

[952] This program aided farmers with grain and oil seed crops. Dr. Hedley allocated $28,949,512 in payments made to farms that had at least 50% of their cash receipts attributable to cattle.

[953] In my view this program is also appropriately treated as an offset to the extent it made payments to farmers raising cattle. As Dr. Hedley noted, many cattle farmers had grain and oilseed operations. The first representative plaintiff, Mr. Sauer, obtained assistance through this program in 2006. The amount calculated is limited to such cattle farmers, which provided them with assistance when they needed it, just as whole farm programs did. The funds were received therefore as either mitigation or as a collateral benefit.

[954] Accordingly, the amount of $28,949,512, rounded to $28.9 million, paid to cattle farmers under the GOPP shall be included as an offset to the losses of the plaintiff Class.

Conclusion on offsets

[955] The plaintiff has agreed that $1.942 billion should be applied as offsets from the BSE-specific programs. The plaintiff has also agreed that $1.642 billion should be applied as offsets from generally available programs. This totals $3.584 billion.

[956] I have concluded, however, that the offsets for the generally available programs should include AgriInvest, Kickstart and GOPP in the amounts of $110.6 million, $190.9 million and $28.9 million, respectively. The CITI program should be increased by $341.5 million, from $247.3 million accepted by the plaintiff to $588.8 million. This results in a total for generally available programs of $2.314 billion (rounded to the nearest million). When added to the BSE-specific programs, this results in total offsets of $4.256 billion.

Conclusions on damages

[957] The economic losses suffered by the plaintiff Class due to the border closure are $5.419 billion. The defendant should be credited with offsets totalling $4.256 billion. Accordingly, had I

[36] In argument, I raised the concern that if I were to conclude, as I have, that the losses calculated by Dr. Groenewegen should be reduced for the period following the reopening of the border to cattle under 30 months in July 2005, this might have an impact on offsets due to program payments received after that date. However, as counsel for the defendant noted, I have no evidence on this point as neither expert addressed that scenario. Indeed, it may have no effect since, even accepting that losses should be reduced after July 2005, losses did continue through 2007. I must therefore take the case as presented to me, which is to determine the losses in aggregate, and to determine the appropriate offsets, based on the evidence.

found the defendant liable for negligence, I would have awarded damages to the Class in the aggregate amount of $1.163 billion. There should be no award for general or aggravated damages.

Part XIV - Conclusion

[958] My responses to the Common Issues are as follows:

1. Does section 9 of the *Crown Liability and Proceedings Act* bar the class members' claim against the government of Canada?

   Answer: Yes.

2. Were the defendants negligent and if so, when and how?

   Answer: No.

3. Can the amount of compensatory damages, if any, be reasonably determined on an individual basis? If so, how should individual damages be determined?

   Answer: As requested, I have not addressed this question.

4. If the answer to question 3 is no, can the amount of compensatory damages, if any, be determined on an aggregate basis? If so, what is the amount of damages and how should they be distributed?

   Answer: Had I answered questions 1 and 2 differently, I would have awarded $1.163 billion as compensatory damages to the Class. I have not addressed how damages should be distributed.

[959] It follows that the action is dismissed. Should the parties be unable to agree on costs within 45 days of the release of these Reasons, they may contact my assistant to arrange an appointment to address the procedure for their determination.

Paul B. Schabas J.

Date: 28 January 2022

Appendix - Glossary of acronyms and terms

AAFC - Agriculture and Agri-Food Canada, also known as Agriculture Canada or the Department of Agriculture

AAFC Report - "Economic Impacts of BSE and Programs on the Canadian Agricultural Markets", prepared in 2008

AAFRD - Alberta Agriculture, Food and Rural Development

ADPA - *Animal Disease and Protection Act*, R.S.C. 1985, c A-13

ADRI - AAFC's Animal Disease Research Institute

Agriculture Canada – the federal Department of Agriculture

APHIS - United States Animal and Plant Health Inspection Service

APHRAN - Animal and Plant Health Risk Assessment Network

APHRAN 1994a – quantitative risk assessment relating to importations of cattle from France, Switzerland and the UK, May 1994

ASA - *Agricultural Stabilization Act*, 1957-59 (Can.), c. 22 [now R.S.C. 1970, c. A-9]

Australian risk assessment – prepared in 2001

BSE – Bovine Spongiform Encephalopathy – the TSE affecting cattle

BSE Inquiry – UK government Inquiry which produced a 16 volume report in 2000.

BSE Recovery Program – Financial assistance programs established by Order-in-Council in July 2003 pursuant to s. 12 of *FIPA* following

BSE-specific programs – includes programs under the BSE Recovery Program and provincial programs to address BSE between 2003 and 2007

CAHCC - Canadian Animal Health Consultative Committee – the successor to the CAHCCC after producers of livestock other than cattle joined the committee in the early 1990s

CAHCCC - Canadian Animal Health Consultative Committee on Cattle

CAIS – Canadian Agricultural Industry Support Program

CCA - Canadian Cattlemen's Association

CFIA - Canadian Food Inspection Agency

CITI – CAIS Inventory Transition Initiative

CJD – Creutzfeld Jacob Disease, a rare TSE disease in humans

Class – the plaintiff class consisting of all Canadian farmers who raised cattle in May 2003

CLPA **-** *Crown Liability and Proceedings Act*, R.S.C., 1985, c. C-50

Code **-** *Terrestrial Animal Health Code* published by OIE containing standards to facilitate trade in animals

Code Commission – committee of the OIE which drafts and considers revisions to the *Terrestrial Code*

COPP – Cost of Production Program

CPP **-** *Canada Pension Plan*, R.S.C. 1985, c. C-8

CVL – Central Veterinary Laboratory, Weybridge, UK

CVO – Chief Veterinary Officer

DAAA **-** *Department of Agriculture and Agri-Food Act*, R.S.C., 1985, c. A-9

Defendant – Canada, AAFC, Agriculture and Agri-Food Canada, Agriculture Canada, Department of Agriculture, Department

DePalme cow – UK import confirmed to have BSE and destroyed in November 1993

Department – the federal Department of Agriculture

EEC – European Economic Community

EFSA – the EU's European Food Safety Authority

EU – European Union

Feed Ban – the Canadian ban on feeding ruminant protein to ruminants introduced in August 1997

Feeds Act **-** *Feeds Act*, R.S.C., 1985, c. F-9

FIP – Farm Income Payment Programs (FIP-Direct and FIP-General)

FIPA – *Farm Income Protection Act*, S.C. 1991, c. 22

FMD Commission – committee of the OIE to address Foot and Mouth and Other Epizootics

FPIB - Food Production and Inspection Branch

GATT – General Agreement on Tariffs and Trade

GOPP – Grains and Oilseeds Program

HAA **-** *Health of Animals Act*, S.C. 1990, c. 21

ICDC - Industry Compensation Development Committee

Jerram cow – UK import that may have had symptoms of BSE slaughtered and rendered in the fall of 1992

MAFF – Ministry of Agriculture, Fisheries and Food (UK)

MBM – rendered protein ground into meat and bone meal, included in animal feedstuffs as a protein supplement

McCrea cow – Canadian born cow determined in May 2003 to have BSE

Mirabel cattle – 14 UK cattle destroyed by order of AAFC in March 1990

Monitoring Program – program to check on UK imports every six months, established in the spring of 1990

NISA – Net Income Stabilization Accounts Program

NPU - Neuropathogenesis Unit of the Institute for Animal Health in Edinburgh

OAE Report - "Evaluation of AAFC's Responses to the BSE Crisis", prepared by the AAFC's Office of Audit and Evaluation in August 2008

OIE - L'Office Internationale des Epizooties, now known as the World Animal Health Organization

Oxford dead stock – MBM containing protein from a UK import ordered destroyed in January 1994

PCN – potato cyst nematode

Prion – a proteinaceous infectious particle, or a protein associated with infectivity, which causes TSEs

PPA – *Plant Protection Act*, S.C. 1990, c. 22

RMBM –meat and bone meal (MBM) containing ruminant protein

SBO Ban - November 1989, UK ban on the inclusion of specified bovine offals in human food. This included material from the brain, spinal cord, tonsils, spleen, thymus and intestines, considered most likely to be infective, from cattle over 6 months of age.

Scrapie – at TSE disease that affects small ruminant, sheep and goats

SEAC – UK Spongiform Encephalopathy Advisory Committee ("SEAC"), often referred to as the Tyrrell Committee, published its final report in July 1990

Southwood Report – UK expert working group that produced a report in February 1980

SPS Agreement - WTO Agreement on the Application of Sanitary and Phytosanitary Measures

SRM - Specified Risk Materials – certain organs or tissues in cattle in which prions concentrate.

Terrestrial Code – *Terrestrial Animal Health Code* published by OIE containing standards to facilitate trade in animals

TISP – Transitional Income Support Programs (TISP-Direct and TISP-General)

TSEs - Transmissible Spongiform Encephalopathies – progressive, life-terminating neurological diseases occurring in ruminants (sheep, goats and cattle), humans and cervids (deer and related species)

Titre – level of concentration in a solution – in this case used to address level of infectiousness in tissue

Tyrell Report – July 1990 report of the SEAC

UK – United Kingdom

UK Feed Ban – the ban on feeding ruminant protein to ruminants introduced in the UK in 1988

UK imports – approximately 182 cattle imported into Canada from the UK and Ireland between 1982 and 1990

US or USA – United States of America

USDA - US Department of Agriculture

vCJD – a variant of CJD in humans that may be linked to BSE

Washington cow – Canadian-born cow that was exported to Washington State found in December 2003 to have BSE

WHO – World Health Organization

WNV - West Nile Virus

WTO – World Trade Organization

CITATION: *Flying E Ranche Ltd. v. Attorney General of Canada, 2022 ONSC 601*
COURT FILE NO.: 05-CV0287428CP
DATE: 20220128

ONTARIO

SUPERIOR COURT OF JUSTICE

FLYING E RANCH LTD.

– and –

THE ATTORNEY GENERAL OF CANADA on behalf of HER MAJESTY THE QUEEN IN RIGHT OF CANADA as represented by THE MINISTER OF AGRICULTURE

REASONS FOR JUDGMENT

Schabas J.

Released: January 28, 2022