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Canadian Regulation of Uranium Tailings Disposal: A Glowing Controversy

*Stewart Elgie**

I. INTRODUCTION

At four o'clock in the morning, the phone rang.

"Get up here as quickly as possible. It's flooding over the containment wall."

"How much has gotten out?"

"Must be over a thousand gallons so far."

The provincial official arrived at about six a.m. In the early prairie dawn he could see the pool of thick, greenish sludge. He knew that it contained a high level of radioactive and toxic materials. The official also knew that with every minute he waited, the hazard increased. Analyzing the situation, he quickly formulated a cleanup plan and soon began to implement it.

Several days later, when it looked as though the cleanup might be effective, federal inspectors arrived from Ottawa. They claimed authority over the problem and sought to implement a different cleanup plan. After some time, the federal inspectors were persuaded to relent since a new plan could mean serious delays in completing the cleanup.

Fortunately, a serious environmental problem was avoided in this spill at the Key Lake Uranium Mine in northern Saskatchewan, Canada.¹ However, the incident illustrates the jurisdictional confusion that exists between Canada's federal and provincial governments over the regulation of waste from uranium mining, and the environmental problems which can result.

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1. Telephone interview with Robert Sentis, Director of the Mines Pollution Control Branch of the Saskatchewan Environment Ministry (Apr. 23, 1986).

Uranium is the substance most commonly used as fuel in nuclear reactors. Much of the world's uranium is mined in Canada, particularly in the provinces of Ontario and Saskatchewan. One of the main drawbacks of uranium mining is that less than one percent of the ore extracted is pure uranium,² so that the remaining ninety-nine percent (the "tailings") consists of waste materials. The tailings contain many hazardous materials, including acids and low-level radioactive substances.³ In the past, tailings disposal usually has been done either by stacking the tailings in huge piles near the mine or by pumping the tailings into nearby water bodies which were then sealed with crude dams. The waste product often worked its way into the environment by spilling over the dam or by leaching through the containing wall.

The presence of radioactive substances, some of which will remain dangerously radioactive for thousands of years, distinguishes uranium tailings from other mine tailings.⁴ In their natural state, these radioactive substances are shielded from the surface environment by tons of rock and present little hazard. Once they are released into the environment, however, these substances present a serious threat to humans and to various forms of plant and animal life.

Over 100,000,000 metric tonnes of these tailings are present in Canada today. This figure is expected to triple by the turn of the century.⁵ Unless present disposal practices change significantly, radiation from uranium tailings will cause thousands of premature cancer deaths in North America by the year 2000.⁶

In addition to radioactive materials, uranium mining generates many other hazardous substances which are at least as dangerous as the radioactive ones.⁷ If properly applied, existing technology can

2. ONTARIO ROYAL COMM'N ON ELECTRIC POWER PLANNING, REPORT OF THE COMMISSION ON ELECTRIC POWER PLANNING 27 (hereinafter PORTER COMM'N).

3. For a complete list, see Torrie, *What the Record Shows: Uranium Mine Tailings*, 10 ALTERNATIVES 15, 15-16 (1982). The principal radioactive contaminants are radium-226 and thorium-230. The principal non-radioactive contaminants are sulfuric acid, ammonia and various heavy metals.

4. *Id.* at 16.

5. 1 PORTER COMM'N, *supra* note 2, at 66.

6. TORRIE, *supra* note 3, at 17; ONTARIO SELECT COMM. ON ONTARIO HYDRO AFFAIRS, MINING, MILLING AND REFINING OF URANIUM IN ONTARIO (Sept. 16, 1980) (hereinafter SELECT COMMITTEE) (paper presented by Norman Rubin, Energy Probe).

7. A.B. DORY, ENVIRONMENTAL IMPACT OF URANIUM MINING AND MILLING—A CANADIAN EXPERIENCE 1 (1981); ONTARIO ENVTL. ASSESSMENT BD., THE EXPANSION OF THE URANIUM MINES IN THE ELLIOTT LAKE AREA: FINAL REPORT 122 (May 1979) (hereinafter E.A.B. FINAL REPORT).

adequately contain these hazards in the short term. The real danger, however, is that current technology will not be able to contain these hazards in the long term.⁸ This threat is not limited to Canada. For example, one of the most heavily mined regions in Canada, Elliott Lake, is just north of Lake Superior. Tailings disposal in this region threatens the headwaters of the Great Lakes, North America's largest supply of fresh water.

In order to properly deal with the environmental hazards, the jurisdictional confusion surrounding Canadian regulation of uranium tailings must be resolved. This is not likely to occur until the legislative powers of the Canadian federal and provincial governments are clarified.⁹ This article seeks to clarify these powers.

Part II of the article sketches the political background which has led to the current jurisdictional confusion. Part III outlines the process the courts use to resolve disputes over constitutional legislative authority. Part IV uses this process to determine the federal government's power to legislate on uranium tailings. Part V examines the provincial government's power to legislate on uranium tailings. Part VI establishes the method used to solve problems of overlapping federal/provincial legislation and applies this method to uranium tailings legislation. The Conclusion delineates the scope of federal and provincial legislative authority over uranium tailings, and examines possible political actions supported by the article's findings.

II.

THE POLITICAL BACKGROUND¹⁰

In 1946, the Canadian federal government passed the Atomic Energy Control Act (AECA or Act).¹¹ The Act gives the Atomic Energy Control Board (AECB or Board) jurisdiction over promotional, security and safety issues associated with the production of atomic energy. The Board's main task is to regulate nuclear generating stations.

In 1956, the Ontario Supreme Court concluded that uranium

8. A.B. DORY, AECB AND ITS ROLE IN THE REGULATION OF URANIUM AND THORIUM MINES 10, 13 (AECB, May 1980); Torrie, *supra* note 3, at 17; E.A.B. FINAL REPORT, *supra* note 7, at x, 136, 139, 256.

9. I. ROBINSON, THE COSTS OF UNCERTAINTY: REGULATING HEALTH AND SAFETY IN THE CANADIAN URANIUM INDUSTRY 1-2 (Centre for Resource Studies Working Paper No. 24, 1982).

10. For an excellent discussion of the problem, see I. ROBINSON, *supra* note 9.

11. Atomic Energy Control Act, R.S.C. ch. A-19 (1970).

mining also fell within the AECB's jurisdiction.¹² Until 1976, the Board had limited its involvement in the uranium mining sector to security concerns. This left environmental protection to the provinces. During this time, only Ontario was heavily involved in uranium mining. Whether due to ignorance of the problem, uncertainty over the scope of its powers, or a desire to minimize the costs of nuclear energy, the Ontario provincial government did little to address the environmental effects of uranium tailings.

In 1974, the Ontario government appointed the Hamm Commission to examine health and safety problems associated with uranium mining. The Commission found that jurisdictional uncertainty was contributing to the problems.¹³ In response, the federal government sought to expand the AECB's role to include environmental, health and safety concerns. It also proposed to transfer control over the AECB from the Ministry of Energy, Mines and Resources to the Ministry of the Environment. In 1978, the federal government introduced new legislation to effect these changes.¹⁴ The provinces objected to the bill's erosion of their jurisdiction, however, and the bill was never passed.¹⁵

Instead, the federal government decided to expand the role of the AECB within the existing legislation to include environmental, health and safety concerns. Many speculate that the Board has inadequate funding and expertise to perform its new functions, and that expanding the Board's mandate has exacerbated the confusion over its role.¹⁶

The response of the provinces has varied. Ontario continues to deny that it has jurisdiction over any matters related to uranium mining,¹⁷ and has only published guidelines stating what the Onta-

12. *Pronto Uranium Mines Ltd. v. Ontario Labour Relations Bd.*, 1956 O.R. 862, 869 (Ont. H.C.). The Ontario Supreme Court (or High Court) is only the third highest court in Ontario, below the Court of Appeal and the Supreme Court of Canada. This issue has not been decided by a higher level court.

13. *ONTARIO ROYAL COMM'N ON THE HEALTH AND SAFETY OF WORKERS IN MINES*, REPORT 85-86 (1976) (hereinafter *HAMM COMM'N REPORT*).

14. Bill C-14, Nuclear Control and Administration Act (First Reading, Federal House of Commons, Nov. 24, 1977).

15. A Summary of Provincial Concerns, Principles and Recommendations Relating to Questions of Regulation and Control of Uranium, Thorium, Nuclear Energy and Matters Related Thereto—Bill C-14, at 2 (Oct. 1978). This Summary was a joint submission by the provinces.

16. See, e.g., Torrie, *supra* note 3, at 25-26; I. ROBINSON, *supra* note 9. See also R.S. BOULDER & K. BRAGG, *URANIUM TAILINGS IN CANADA—REGULATION AND MANAGEMENT I* (AECB, Sept. 1982).

17. *Hearings Before Select Comm.* 67 (Mar. 14, 1980) (testimony of Dr. Robert Elgie, Ministry of Labour for Ontario).

rio Ministry of Environment considers to be tolerable levels of emissions of certain radioactive materials into water.¹⁸ Saskatchewan, the second largest uranium-producing province, established the Bayda Commission in 1977 to examine environmental, health and safety concerns surrounding uranium mining. In response to the Commission's findings,¹⁹ the Saskatchewan government sought to expand the province's role in controlling the environmental effects of uranium mining. Accordingly, the government drafted legislation but has not yet introduced it due to concerns over its constitutionality.²⁰ Instead, it has achieved control by attaching conditions to surface lease agreements with uranium mining companies. The governments of British Columbia and Newfoundland, in the wake of the controversy surrounding the long-term safety of tailings disposal and the jurisdictional confusion, imposed moratoriums on the development of uranium mining.²¹ In British Columbia the moratorium lapsed in February 1987, and the government is presently concerned about its jurisdiction to impose more stringent regulations in areas where it finds the AECB's standards are insufficient.²²

III.

CONSTITUTIONAL ANALYSIS

The purpose of this article is to determine the constitutional powers of the Canadian federal and provincial governments to deal with the environmental protection aspects of uranium mining. The most obvious method of control is through legislation. In Canada, the power to legislate derives from the Constitution Act, 1867.²³ Federal powers are found primarily in the preamble to the Act and the twenty-nine heads of power listed in section 91. The provincial

18. See I. Robinson, *supra* note 9, at 40.

19. SASKATCHEWAN CLUFF LAKE BOARD OF INQUIRY, FINAL REPORT 119-20 (1978) (hereinafter BAYDA COMM'N).

20. Telephone interview with Robert Sentis, *see supra* note 1.

21. K. BRAGG, RECENT DEVELOPMENTS IN THE REGULATION AND MANAGEMENT OF CANADIAN URANIUM TAILINGS 5 (AECB, May 1982). In British Columbia, the moratorium was imposed following the report of the Bates Commission, a provincial inquiry into uranium mining.

22. Conversation with Terry Vaughn-Thomas, Manager of Inspection Services of British Columbia's Ministry of Energy, Mines and Petroleum Resources (Oct. 5, 1987). In a conversation with David Jeans, Assistant Deputy Minister, Newfoundland Ministry of the Environment (Oct. 6, 1987), he indicated that the Newfoundland moratorium has not been tested in recent years due to a lack of interest in uranium mining in the province.

23. Constitution Act, 1867, 30 & 31 Vict., ch. 3.

powers are found primarily in the sixteen heads of power listed in section 92.

When determining the constitutionality of a piece of legislation, the first step is to identify the "pith and substance" (or "matter") of the legislation.²⁴ The second step is to see if the matter falls under one of the federal heads of power in section 91. The third step is to decide if the matter comes within one of the provincial heads of power in section 92. It would be impossible to divide neatly all the activities in a society so that each activity clearly fell within only one heading. Many subject matters, when viewed from one perspective, fall within the federal list, yet when viewed from a different perspective, come within the provincial list. Municipal zoning by-laws, for example, are clearly within the provincial power over local matters, yet when these by-laws affect the location of airports, the matter seems to fall within the federal power over aviation.²⁵ When a matter has such a double aspect, both governments may legislate on the subject unless the laws conflict. If a conflict arises, the federal law prevails to the extent of the conflict.

When the *subject matter* of an act is found to fall within its enacting government's constitutional jurisdiction, it may still be necessary to determine whether certain provisions of the act exceed the government's jurisdiction. Courts allow a provision to touch on matters beyond the strict limits of that government's power if the provision is necessarily incidental to achieving the legislation's purpose.²⁶ Courts consider two factors in making this determination. First, is the provision related²⁷ to achieving the purposes of the leg-

24. For the framework of constitutional problem-solving, see N. FINKELSTEIN, *LASKIN'S CANADIAN CONSTITUTIONAL LAW* 242-91 (5th ed. 1986) and J.E. MAGNET, *CONSTITUTIONAL LAW OF CANADA* 312-40 (2d ed. 1985).

25. *Johannesson v. West St. Paul*, [1951] 4 D.L.R. 609 (S.C.C.).

26. Also known as the ancillary doctrine. The root case for this doctrine is *Attorney-General, Canada v. Attorney-General, British Columbia*, 1930 A.C. 111, 118 (P.C.). For a list of cases in which the Supreme Court of Canada has applied the doctrine, see L. DAVIS, *CANADIAN CONSTITUTIONAL LAW HANDBOOK* 420-24 (1985).

27. There is conflicting authority as to what *degree* of "relation" is required in order for a provision to be found necessarily incidental to achieving the purpose of legislation.

In several recent decisions, the Supreme Court of Canada has clearly stated that a provision must be "essential" or "truly necessary" to achieving the purpose of the legislation. See *Regina v. Thomas Fuller Constr. Co.*, [1980] 1 S.C.R. 695, 713; *Regional Municipality of Peel v. MacKenzie*, [1982] 2 S.C.R. 9, 18, 19; *Fowler v. The Queen*, [1980] 2 S.C.R. 213, 220, 224, 226. The Court's 1988 decision in *Regina v. Crown Zellerbach*, 49 D.L.R. (4th) 161, 176-77, favours this version of the test.

However, in two recent decisions the Court has concluded that all that is required is a rational, functional connection between the provision and the purpose of the legislation. See *Multiple Access v. McCutcheon*, [1982] 2 S.C.R. 161, 204; *Attorney-General, Canada v. Canadian Nat'l Transp. Ltd.*, [1983] 2 S.C.R. 206, 243-44.

islation? Second, to what extent does the provision invade the jurisdiction of the other level of government?²⁸ If a court finds that a provision creates powers which are not necessarily incidental to achieving the legislation's purpose then, if possible, the provision will be read not to include such powers.²⁹ If this is not possible, the court will sever the provision from the act or deem the entire act invalid.³⁰

IV.

THE FEDERAL POWER

The Canadian federal government currently regulates tailings disposal under the AECA. Therefore, it is first necessary to determine if authority for such regulation exists under the AECA. If it does not, the next inquiry will be whether the federal government could legislate on tailings disposal under a different head of power.

A. Federal Authority under the AECA

The first step is to clarify the pith and substance of the AECA. The Act's preamble and two Ontario Supreme Court decisions indicate that the pith and substance of the AECA is "the control of atomic energy."³¹ Next, it must be determined if the pith and substance of the Act falls within the list of federal powers. Not surprisingly, the Fathers of Confederation did not include "the control of atomic energy" as a separate heading. Courts have derived federal legislative authority for the AECA under two different heads of power:³² first, the federal government's general power "to make laws for the Peace, Order and Good Government of Canada,"³³ (otherwise known as the POGG power); and second, sections 91(29) and 92(10)(c) of the Constitution Act, 1867, which give the Federal Parliament jurisdiction over "such works as . . . are . . .

28. It is submitted that this is an implicit step in the courts' reasoning. A provision which is unrelated to an act's purpose, but does not invade provincial jurisdiction, is unlikely to be struck down. The more serious the invasion of the other government's jurisdiction, the less likely the provision will be found "necessarily incidental." In *Crown Zellerbach*, LaForest, J., dissenting on other grounds, recognizes this principle. 49 D.L.R. (4th) at 203.

29. See J.E. MAGNET, *supra* note 24, at 327-28.

30. See *id.* at 325-27.

31. *Pronto Uranium Mines Ltd. v. Ontario Labour Relations Bd.*, 1956 O.R. 862, 869 (Ont. H.C.); *Denison Mines Ltd. v. Attorney-General, Canada*, 32 D.L.R. (3d) 419, 428, 430 (Ont. H.C. 1972).

32. *Id.* In *Pronto*, the AECA was upheld under POGG. In *Denison*, the AECA was upheld (in *obiter*) under POGG and the declaratory power.

33. Preamble to Constitution Act, 1867, 30 & 31 Vict., ch. 3.

declared by the Parliament of Canada to be for the general advantage of Canada" (also known as the declaratory power).³⁴

1. The POGG Power

Courts have determined that a legislation's subject matter must pass one of three tests to derive its authority under POGG.³⁵ The first test is the "gap" test. If a subject matter was probably contemplated by the Fathers of Confederation but was not included within any list, there is said to be a gap, and jurisdiction is given to the federal government under POGG.³⁶ This test has been applied narrowly by restricting it to matters which were clearly contemplated at the time of Confederation. The second test is the "emergency" test. In times of national emergency, the federal government may legislate on matters which would otherwise be exclusively within provincial authority. Such legislation must be enacted to deal with the emergency and so must be necessarily temporary in nature.³⁷

The final test is the "national concern" test. Viscount Simon originally enunciated this test in the *Canada Temperance* case: "If [a subject matter] is such that it goes beyond local or provincial concern or interests, and must from its inherent nature be the concern of the dominion as a whole . . . then it will fall within the competence of the Dominion Parliament."³⁸ This test requires first that a subject be a matter of national concern, and second that the subject "have an identity and unity that is quite limited and particular in its extent."³⁹ In other words, a subject matter should not be classified so broadly that if it were deemed to be a national concern it could seriously erode provincial jurisdiction.⁴⁰ A broad subject,

34. Section 92(10) gives the provinces control over local works and undertakings. Section 92(10)(c) creates an exception for works which Parliament declares to be in Canada's national interest. Section 91(29) establishes that exceptions to provincial powers are federal powers.

35. For the tests, see J.E. MAGNET, *supra* note 24, at 373-91.

36. An example is the power to incorporate companies with federal objects. Aviation, on the other hand, does not meet this test since it was not contemplated in 1867.

37. Reference *Re Anti-Inflation Act*, [1976] 2 S.C.R. 373, 427, 437, 461, 467.

38. Attorney-General, Ontario v. Canada Temperance Found., 1946 A.C. 193, 205 (P.C.). Viscount Simon went on to note that this does not preclude the provincial government from legislating on the provincial aspects of the subject matter.

39. Lederman, *Unity and Diversity in Canadian Federalism*, 53 CAN. BAR. REV. 597, 606 (1975). This view was adopted by Beetz and de Grandpre, JJ., in the *Anti-Inflation Reference*, [1976] 2 S.C.R. at 458. See also *Crown Zellerbach*, 49 D.L.R. (4th) at 184.

40. Except during times of emergency, when temporary intrusions are permitted. See, e.g., *Anti-Inflation Reference*, [1976] 2 S.C.R. 373.

then, should be divided into its component parts and separate legislation should address each part.

It is necessary to elaborate upon the meaning of "national concern." The phrase could be interpreted to mean "of national importance." This interpretation would include many subjects which are otherwise within provincial jurisdiction, such as education or civil rights. The mere fact that uniform legislation is desirable is not enough. In a federal system, uniformity must often give way to provincial autonomy. The Supreme Court has recently adopted the view, long expounded by constitutional scholars, that the true test is whether a subject is of national concern geographically, so that it affects two or more provinces.⁴¹ Such a situation occurs when a subject matter goes beyond the ability of a single province to deal with it. In such a case, the actions or inactions of one province could injure residents of another or frustrate an interprovincial project.⁴²

In order for an act to fall within the POGG power, the subject matter of the legislation must meet the "gap," "emergency," or "national concern" test. Presently, uranium tailings are regulated under the AECA. The applicable test for this Act is the "national concern" test.⁴³ Therefore, to uphold the AECA as valid federal legislation under the POGG power, the subject matter of the Act must be limited in its scope and must be of national concern such that no one province can adequately deal with the matter.

The subject matter of the AECA is "the control of atomic energy." This passes the test of limited scope.⁴⁴ The next step is to determine whether controlling atomic energy is a matter of national concern and, if so, to identify the national concern. The one decided case on this point, *Pronto Uranium Mines Ltd. v. Ontario Labour Relations Board*, is of little help.⁴⁵ In determining that atomic

41. See *Regina v. Crown Zellerbach Corp.*, 49 D.L.R. (4th) 161, 184-85 (1988). See also J.E. MAGNET, *supra* note 24, at 379-80; Gibson, *Measuring "National Dimensions,"* 7 MAN. L.J. 15, 31-32 (1976).

42. This rule explains almost all the decided cases. See Gibson, *supra* note 41, at 32-34.

43. The AECA is not emergency legislation, and it cannot be a "gap" since atomic energy was unknown in 1867.

44. In the *Anti-Inflation Reference*, Beetz, J., in dissent, states that subject matters such as inflation or pollution are characterized too broadly to pass the limited scope test, whereas aeronautics or radio communication would pass the test. See [1976] 2 S.C.R. at 457-58. The control of atomic energy would, by analogy, seem closer to the latter two characterizations.

45. 1956 O.R. 862 (Ont. H.C.). *Denison Mines v. Attorney-General, Canada*, [1973] 1 O.R. 797 (Ont. H.C.) also dealt with this issue but everything said about the

energy is of national concern, Justice McLennan simply quoted Viscount Simon's test and stated that, in his opinion, atomic energy satisfied the test.⁴⁶ But he did not identify the national concern. Therefore, one must look elsewhere to determine why atomic energy might be of national concern.

The most likely answer lies in the preamble to the AECA, which states that one purpose of the Act is "to enable Canada to participate effectively in measures of international control of atomic energy."⁴⁷ These measures are set by the International Atomic Energy Association (IAEA), of which Canada is a founding member. Does the existence of an international agreement on a particular issue necessarily mean that this subject is of national concern? After all, the power to enter into international agreements is not specifically included in the Constitution Act, 1867.⁴⁸ In addition, the *Labour Conventions*⁴⁹ case held that the authority to implement an international agreement lies with whichever government—federal or provincial—has jurisdiction over the subject of the agreement.⁵⁰ Subsequently, however, the Supreme Court of Canada has retreated somewhat from this strict position and indicated that the presence of an international agreement may be evidence that a subject has extra-provincial dimensions.⁵¹ Therefore, the existence of the IAEA does not automatically make atomic energy a national concern but the IAEA's goals may provide evidence that atomic energy has a national dimension.

The IAEA has two main goals: 1) to ensure that atomic energy is

constitutional issue is *obiter* since Justice Donnelly first determined that he had no jurisdiction to hear the case.

46. 1956 O.R. at 869. "In this day it cannot be said that the control of atomic energy is merely of local or provincial concern, and in my opinion it is a matter which from its inherent nature is of concern to the nation as a whole." *Id.*

47. *Denison Mines*, in *obiter*, found that this was indeed a national concern underlying the AECA. *Pronto* also mentioned the preamble but did not rely on it as establishing a national concern.

48. The *Labour Conventions* case, *Attorney-General, Canada v. Attorney-General, Ontario*, 1937 A.C. 326, 349, decided that section 132 of the Constitution Act, 1867, 30 & 31 Vict. ch. 3, no longer applies since Canada is not a colony.

49. 1937 A.C. at 350-51.

50. The rationale was that if the signing of an international agreement automatically vested Parliament with control over the area, the provinces would soon lose much of their powers. However, in an earlier decision, the Privy Council suggested that the power to implement treaties may exist as a separate head of federal power. *Re Regulation and Control of Radio Communication in Canada*, 1932 A.C. 304, 312 (P.C.) (hereinafter *Radio Reference*).

51. See especially *Johannesson v. West St. Paul*, [1952] 1 S.C.R. 292, 303. See also *Francis v. The Queen*, 1956 S.C.R. 618, 621; *MacDonald v. Vapour Canada Ltd.*, 66 D.L.R. (3d) 1, 27-29 (S.C.C. 1976).

generated safely and 2) to ensure that atomic fuels (especially uranium) are not used for military purposes.⁵² Is the safe generation of atomic energy a matter of national concern? A major accident at a nuclear generating station would probably cause the release of large amounts of radiation over an area hundreds of miles in radius.⁵³ Therefore, it passes the “geographic” test for a national concern since the actions of one province could cause serious harm to the residents of another province or country. Similarly, the second goal of the IAEA—ensuring that uranium and other fissionable materials are not used for military purposes—also satisfies the geographic test for a national concern.

Since it deals with an identifiable national concern, the AECA appears to be valid federal legislation under POGG. The *scope* of federal jurisdiction under the AECA, however, can only extend as far as is necessary to address the national concern. If the safe generation of atomic energy is selected as the national concern, then federal jurisdiction extends to nuclear generating stations, but probably not to uranium mining. An accident at a nuclear generating station could endanger the safety of persons outside the province. But the mining of uranium has little to do with this safety concern, and the mine’s method of waste disposal is even less related to safety concerns. If ensuring the non-military use of uranium is selected as the national concern, then federal jurisdiction encompasses only the security aspects of uranium mining. The AECB apparently shared this view, since during the first thirty years of its existence it dealt with only the security aspect of uranium mining. The disposal of tailings does not relate to this security concern since none of the materials in tailings can be used for military purposes. Thus, regardless of which national concern is chosen, the federal government’s direct jurisdiction does not appear to extend to the disposal of uranium tailings.

The final issue is whether tailings disposal is necessarily incidental to federal powers under the AECA. Federal jurisdiction under POGG probably extends only to the security aspect of uranium mining. It is difficult to see how tailings disposal could be related to any security concerns at a uranium mine. It is particularly important that federal legislation on uranium mining be limited to addressing the applicable national concern since any expansion of federal jurisdiction occurs at the expense of provincial authority

52. See IAEA CONST.

53. 7 PORTER COMM’N, *supra* note 2, at 34. The actual effects would largely depend on wind speed and direction.

over mining.⁵⁴

Under POGG, therefore, the federal government's power to legislate in the atomic energy field is limited to dealing with the safety of nuclear power generation and to ensuring that uranium (and other fissionable materials) are used for non-military purposes. Parliament may address matters which are necessarily incidental to these concerns, but probably is not empowered to regulate the disposal of uranium tailings.

2. The Declaratory Power

There still exists another argument that federal power over atomic energy is broad enough to include tailings disposal. Under sections 91(29) and 92(10)(c) of the Constitution Act, 1867, Parliament has jurisdiction over "such Works as . . . are . . . declared by the Parliament of Canada to be for the general Advantage of Canada."⁵⁵ This is known as the declaratory power. A declaration made under these sections transfers control over a work from provincial to federal jurisdiction. The words of the declaration then define the scope of federal legislative jurisdiction over the work.

The AECA contains such a declaration. Section 17 provides that:

All works . . .

(a) for the production, use and application of atomic energy,

(b) for research and investigation with respect to atomic energy,

(c) for the production, refining, or treatment of prescribed substances [including uranium] are . . . declared to be works for the general advantage of Canada (emphasis added).

It appears that there are only three grounds upon which the courts will review the validity of a declaration.⁵⁶ First, the declaration must be in the proper form—that is, it must be express, because it will not be implied from other sections or the preamble of an act.⁵⁷ Second, the subject of the declaration must be a "work." A work means a physical thing, "not an arrangement under which physical things are used."⁵⁸ Third, Parliament must make the dec-

54. See the discussion of provincial mining authority, *infra*.

55. Constitution Act, 1967, 30 & 31 Vict., ch. 3, § 92(10)(c). Section 92(10) gives the provinces control over local works and undertakings. Section 92(10)(c) creates an exception for works declared by the federal government to be in Canada's national interest. Such declarations become federal matters under § 91(29).

56. See N. FINKELSTEIN, *supra* note 24, at 627-28.

57. *Montreal v. Montreal Street Ry.*, [1912] 1 D.L.R. 681 (P.C.).

58. *Radio Reference*, 1932 A.C. at 315. The latter defines an "undertaking," which

laration in good faith. The courts will not review the merits of Parliament's declaration unless there is evidence of bad faith.⁵⁹

Section 17 of the AECA seems to pass all three requirements, and is therefore a valid declaration. It is in the proper form. It deals only with classes of "works"⁶⁰ and there is no evidence of bad faith on Parliament's part.

The courts' refusal to review the merits of a declaration in determining its validity means that, effectively, Parliament is the sole judge of what works are for the general advantage of Canada. The Supreme Court has noted with concern that this gives Parliament a very broad, unfettered power to usurp provincial jurisdiction.⁶¹ Nevertheless, courts probably will not diverge from such a well-established practice. Still, when it appears that there has been an overly broad use of the declaratory power, courts should interpret such a declaration narrowly and thereby minimize the intrusion upon provincial authority. In the author's opinion, for reasons to be stated below, this is such a case.

Since the declaration itself is valid, it is necessary to determine if the AECA is valid federal legislation under the declaratory power. One must first identify the pith and substance of the Act. As already stated, the pith and substance of the AECA is "the control of atomic energy." Then, one must decide whether this falls within a head of federal jurisdiction. The subject matter of a valid declaration is, in effect, added to the list of heads of federal jurisdiction. Consequently, in order for the AECA to be valid, the pith and substance of the Act must relate to the works described in the section 17 declaration.

It is therefore necessary to determine what works fall within the AECA declaration. Sections (a) and (b) of the declaration are broad enough to cover nuclear generating facilities. Section (c), which includes "works for . . . the production, refining and treatment of prescribed substances," covers uranium mines since uranium is a prescribed substance,⁶² and covers mining since

means an "organization" or "enterprise." An "undertaking" cannot be the subject of a declaration, per section 92(10)(c).

59. In the sense that Parliament did not actually believe that the work was for the general advantage of Canada. *The Queen v. Thumlert*, [1960] 20 D.L.R. 335, 337.

60. Class declarations are permissible. *Jorgenson v. Attorney-General, Canada*, 1971 S.C.R. 725.

61. In the *Matter of the Incorporation of Companies in Canada*, [1913] 48 S.C.R. 331. The absence of recent challenges to the declaratory power is due to the fact that Parliament has not used it since 1960.

62. See definition of "prescribed substance," AECA R.S.C. ch. A-19, § 2 (1970).

“production, refining and treatment” are broad enough to include mining activity. However, section (c) probably does not cover a tailings disposal site *per se* because the materials in tailings do not meet the definition of prescribed substances,⁶³ and the disposal of tailings probably does not amount to “treatment” of uranium.

In partial summary, then, the pith and substance of the AECA—the control of atomic energy—clearly relates to works described in the declaration, so that the AECA is valid federal legislation under the declaratory power. The scope of direct federal jurisdiction under the Act, however, can only extend to works covered by the AECA declaration. These works include nuclear facilities and uranium mines but probably not tailings disposal sites.⁶⁴

Nevertheless, the AECA may still be able to regulate tailings disposal if tailings disposal is found to be necessarily incidental to the pith and substance of the Act. In making this determination, the first factor to consider is how relevant tailings disposal is to achieving the purposes of the legislation. There are good arguments for and against relevance. The purpose of the AECA is the control of atomic energy, and under the declaratory power, this control extends to the uranium mining operation. The fact that tailings disposal is an unavoidable by-product of uranium mining argues for its relevance. But the method of disposing of tailings has no effect on the mining operation *per se* and does not involve the control of atomic energy, suggesting that it is not relevant.⁶⁵

The second factor to consider is the extent to which provincial jurisdiction would be invaded by allowing federal regulation of uranium tailings. The disposal of tailings from mines other than uranium mines is a provincial matter. This suggests that the federal government should only be allowed to deal with tailings disposal under the AECA if there are compelling reasons for its doing so.

Whether tailings disposal would be found necessarily incidental to the pith and substance of the AECA is an understandably diffi-

63. Most of the elements do not fall within the definition of “prescribed substances.” See AECA § 2. Of those which do, many are present in less than the minimum levels of concentration required for the AECA to apply. See AECA regulations, CAN. CONS. REGS. (1978), v. 3, ch. 365, § 6(2)(a).

64. It is possible that a disposal site could be considered part of the mine. However, this seems unlikely given the geographic and functional distinctions between the mining and tailings disposal operations. Tailings disposal sites are often two or three kilometers from a mine. In some instances, such as El Dorado’s refinery near Port Hope, the waste product is transported and disposed of a long distance away from the “work” itself.

65. The answer would probably depend on whether a court adopted the broad or narrow test of relevance. See note 27 for a discussion of these two tests.

cult question. In the author's opinion, two main policy reasons favor a narrow interpretation of federal jurisdiction under the AECA. First, in section 17 of the Act, the federal government has used the declaratory power to assume control over all aspects of atomic energy anywhere in Canada. But section 92(10) of the Constitution deals with transportation and communications, and although not clarified by the words of the section, evidence suggests that the Fathers of Confederation intended declarations under section 91(10)(c) to be restricted to these two areas.⁶⁶ Indeed, almost every declaration to date has dealt with works relating to transportation and communications.⁶⁷ Thus, section 17 of the AECA may exceed the intended use of the declaratory power.

The second policy favoring a narrow interpretation is that the POGG analysis performed above determined that tailings disposal was unrelated to any apparent national concern which the federal government might have regarding uranium mining. Given the provinces' general authority over mine tailings, there are good reasons to interpret the AECA to not include jurisdiction over uranium tailings disposal.⁶⁸

In summary, if authority for the AECA exists under the POGG power, then the scope of federal jurisdiction probably extends only to the security aspect of uranium mining. The argument for federal jurisdiction over uranium tailings strengthens if authority for the AECA is found under the section 92(10)(c) declaratory power. In that case, the scope of federal jurisdiction would depend on whether the courts interpret the AECA's scope broadly or narrowly. In the

66. N. FINKELSTEIN, *supra* note 24, at 627. Hanssen, *The Federal Declaratory Power under the British North America Act*, 3 MAN. L.J. 87, 88-89 (1968). The only clue as to the *raison d'être* of the declaratory power seems to come from the Confederation Debates of 1865. John A. MacDonald makes a brief reference to the power:

[a]ll such works as shall, although lying within any province, be specially declared by the Acts authorizing them, to be for the general advantage, shall belong to the General government. For instance, the Welland Canal, though lying wholly within one section and the St. Lawrence Canals in two only, may be properly considered natural works, and for the general benefit of the whole Federation.

Id. at 40. Although it would seem that the purpose of § 92(10)(c) was a concern on the part of the drafters of the BNA Act that works of national significance involving transportation and communications should come within the legislative sphere of the federal government, in actual fact its scope is far broader than that.

67. Hanssen, *supra* note 66, at app., lists almost all the declarations made to date.

68. The Supreme Court's recent decision in *Commission de la Santé et de la Sécurité du Travail v. Bell Canada*, 1988 S.C.C. 10, lends support to this view. The Court indicated that Parliament's exclusive authority over federal works is limited to the "specifically federal nature" of such works. Federal legislation under section 92(10) such as the AECA which extends beyond the federal aspects of declared works ought to be read narrowly.

author's opinion, policy reasons favor a narrow interpretation of the Act. Under such an interpretation, it is questionable whether the AECA confers jurisdiction on the AECB to regulate the disposal of uranium tailings.

B. *Federal Authority Under Other Heads of Power*

The Canadian federal government, however, may still be able to legislate on tailings disposal under two other headings of section 91 of the Constitution Act, 1867.⁶⁹ The first possible heading is the federal power over fisheries.⁷⁰ Parliament has used this power to enact legislation preventing the introduction into waterways of any substances which may harm fish.⁷¹ Such legislation could also address the effects of tailings disposal areas, since most of the hazardous substances emitted are also harmful to fish.

The second possible basis for federal legislation on tailings disposal is pollution control. This would involve arguing that pollution is a matter of national concern and, therefore, subject to federal authority under the POGG power. Is pollution "a matter in which the actions of one province could injure the residents of another province or country"?⁷² Clearly, the answer is yes. Radiation and other harmful substances emitted from tailings disposal areas could well find their way into interprovincial or international areas. But does the subject of pollution "have an identity and unity that is quite limited and particular in its extent"?⁷³ While not yet decided, the prevailing opinion on this point appears to be "no."⁷⁴ Therefore, pollution must be subdivided into more clearly defined components. Growing authority supports the proposition that federal jurisdiction is limited to the pollution of interprovincial and international waters, while intraprovincial pollution is a provincial matter.⁷⁵ Nonetheless, even this limited power would confer on Parliament a significant degree of control over tailings disposal.

69. In the two constitutional challenges to the AECA, neither of these two heads were argued in support of the Act. See *Pronto Uranium Mines v. Ontario Labor Relations Bd.*, 1956 O.R. 862 (Ont. H.C.); *Denison Mines v. Attorney-General, Canada*, [1973] 1 O.R. 797 (Ont. H.C.). This omission occurred probably because the words of the preamble and the circumstances of the Act's inception make it clear that the AECA was not legislation applicable to fisheries or pollution.

70. Section 91(12) of the Constitution Act, 1867, 30 & 31, Vict., ch. 3.

71. Fisheries Act, 1970, ch. E-14.

72. For the origins of this test, see text accompanying note 41.

73. Lederman, *supra* note 39, at 606, and cases cited therewith.

74. *Id.*

75. *Regina v. Crown Zellerbach*, 49 D.L.R. (4th) 161, 173, 187-88 (S.C.C. 1988). See also *Interprovincial Co-operatives Ltd. v. The Queen*, 53 D.L.R. (3d) 321, 330-332,

By virtue of these two heads of power, Parliament could enact regulations governing the discharge of harmful substances into most waterways. Although this may not enable the federal government to regulate the emission of radon gas and radioactive particles into the air, that is a far less serious concern than water pollution.

In summary, uranium tailings are presently regulated under the AECA. A challenge to the constitutionality of this regime might well be successful. On the other hand, the federal government's authority to regulate uranium tailings under general water pollution legislation seems much more secure.

V.

THE PROVINCIAL POWER

Having examined the basis of the federal government's authority in the uranium tailings disposal area, the analysis now shifts to the authority of the provinces to legislate in this area. The provinces most likely derive this authority from either the mining or the intraprovincial pollution head of power. They could also attempt to indirectly regulate tailings disposal by attaching conditions to lease agreements signed with mining companies.⁷⁶

A. *The Mining Power*

The 1982 amendment to the Constitution clarified the provinces' authority to legislate on the mining of natural resources.⁷⁷ Pursuant to this amendment, the provinces have exclusive jurisdiction over the management, development and conservation of natural resources, enabling a province to legislate on most aspects of uranium mining.

The question remains, however, whether such legislation could encompass tailings disposal. The answer is "yes" if tailings disposal is necessarily incidental to the pith and substance of the statute. The pith and substance of a statute, in this case, would be the control of mining, and, as discussed in the federal section, it is questionable whether tailings disposal is necessarily incidental to uranium mining. Courts would probably reach the same conclusion on provincial authority under mining as on federal authority under the

346 (S.C.C. 1975); J.E. MAGNET, *supra* note 24, at 598; Lederman, *supra* note 41, at 614.

76. See O'Donnell, *An Inquiry into Provincial Jurisdiction over Uranium Development in Saskatchewan*, 48 SASK. L.R. 293, 320 (1984).

77. See, e.g., Canada Act, 1982, ch. 11, § 92A, sched. B; see also Constitution Act, 1867, 30 & 31 Vict., ch. 3, §§ 92(5), 92(13), 92(16).

declaratory power, since both depend on whether tailings disposal is necessarily incidental to uranium mining. Thus, provincial jurisdiction over tailings disposal may not exist under this head of power.

B. *The Power Over Intraprovincial Pollution*

The second possible head of power under which a province could legislate on tailings disposal is "intraprovincial pollution." This is not a specific head of provincial power. Still, the weight of authority strongly suggests that the provinces retain jurisdiction over this subject by virtue of sections 92(13) (property and civil rights) and 92(16) (matters of local or private nature).⁷⁸ Under these sections, then, the provinces may legislate to ensure the health of provincial residents by prescribing the levels of water and air emissions, including emissions from uranium tailings sites.

A possible objection to provincial regulation of uranium tailings is that provincial pollution legislation cannot set standards for radioactive substances within the AECB's jurisdiction.⁷⁹ The answer to this objection is that the double aspect doctrine permits valid provincial legislation to treat a subject which, when viewed from a different perspective, falls within federal jurisdiction. Otherwise, no province could pass a law prohibiting persons from bringing uranium into a provincial legislature, which is clearly not the case. It is equally incorrect to assert that a province may not regulate the level of uranium entering provincial drinking water. Furthermore, few, if any, of the substances in uranium mine tailings fall within the AECB's jurisdiction.⁸⁰

Thus, in the course of dealing with either air or water pollution, a province may prescribe standards for the emission of any radioactive substance. Such legislation may not only regulate present emissions, but it may also ensure that the management of tailings minimizes the risk of future emissions. This power is particularly important with respect to uranium tailings, since some of the substances therein remain dangerously radioactive for thousands of

78. *Regina v. Lake Ontario Cement Co.*, [1973] 2 O.R. 247, 254 (Ont. H.C.); *Interprovincial Co-operatives v. The Queen*, 53 D.L.R. (3d) 321, 330-32, 346 (S.C.C. 1973); *Anti-Inflation Reference*, [1976] 2 S.C.R. 373, 449-50.

79. The Ontario government has used this as a reason for its failure to set standards in this area. At present, some of these substances are covered by guidelines in Ontario. See I. ROBINSON, *supra* note 9, at 37-40. Any overlap between such provincial legislation and federal legislation would be resolved by the doctrine of paramourty, discussed *infra*.

80. AECA § 2 defines "prescribed substance." AECA § 3 establishes the minimum quantities for which a license is required.

years.⁸¹

C. *Application to Federal Works and Crown Corporations*

Some uncertainty exists as to what effect a federal declaration under 92(10)(c) has upon provincial jurisdiction over the affected work. The general wisdom is that the subject of the declaration "would be withdrawn from provincial jurisdiction by virtue of 91(29)."⁸² In other words, section 92(10) grants the provinces jurisdiction over local works and undertakings. Subsection (c) describes an exception to this power in the case of a federal declaration. When Parliament exercises its declaratory power under section 92(10)(c), it suspends provincial authority over that work *under section* 92(10). However, general provincial legislation affecting the declared work enacted under a *different* head of provincial power would remain valid.⁸³ Thus, the provinces may not legislate on uranium mining under their section 92(10) power over local works, but may do so under their powers over mining and intraprovincial pollution.

However, certain core aspects of a federal work or undertaking are immune even from valid provincial legislation: provinces may not regulate aspects of a federal work which involve its "specifically federal nature," and which are "vital or essential elements" of the work or undertaking.⁸⁴ Although the boundaries of this doctrine remain somewhat ill-defined, it seems unlikely that provincial regulation of uranium tailings disposal falls within the prohibited area because a uranium mine's waste disposal method would probably not be found "vital or essential" to the company.⁸⁵ More importantly, provincial tailings disposal legislation would not affect the "specially federal nature" of a uranium mine. As discussed above,

81. Thorium-230 requires 80,000 years to lose one-half of its radioactivity. Radium-226 requires 1,620 years to lose one-half of its radioactivity.

82. J.E. MAGNET, *supra* note 24, at 491.

83. Hanssen, *supra* note 66, at 92-93. This is the "double aspect doctrine." A province may not enact legislation for the specific purpose of regulating uranium mines. However, valid provincial laws of general application still apply to uranium mines (subject to paramountcy).

84. *La Commission de la Santé et de la Sécurité du Travail v. Bell Canada*, 1988 S.C.C. 10, 92, 96, 102, 104, 122, 123-127.

85. For the most part, this doctrine has been used to strike down provincial regulation of labor relations and working conditions in federal works because such legislation involves the "management and operation" of works. *See id.* at 53, 58, 65, 73-74. The Supreme Court has also indicated that central matters such as rates and the availability of services are off limits to provincial legislators. *Id.* at 103. By comparison, how a uranium mine disposes of its tailings is much less "essential" or "vital" than the above-mentioned functions.

security concerns account for the federal nature of uranium mines. But tailings disposal bears no relation to any security concerns, so uranium mines probably are not immune from provincial regulation of tailings disposal.

In the case of crown corporations,⁸⁶ however, a strong argument can be made that they need not comply with provincial legislation. In two recent cases, Eldorado Nuclear Ltd., a federal crown corporation involved in the mining and refining of uranium, was prosecuted under a federal and a provincial statute.⁸⁷ The principle which emerged from these decisions is that no statute—federal or provincial—is binding on a crown corporation unless the statute explicitly so provides or is interpreted to do so by necessary implication.⁸⁸ The AECA does not explicitly bind the crown, nor is there any implicit indication to that effect. Even if a provincial government expressly made a statute binding on crown corporations, *federal* crown corporations would still probably not be bound by such an enactment.⁸⁹

To summarize, a province may enact legislation dealing with uranium tailings disposal, and such legislation would likely apply to federal works. However, the legislation would probably not apply to federal crown corporations. Thus, the provinces must utilize other sources of legislative authority to deal with this problem.

D. *Indirect Provincial Power*

The Saskatchewan provincial government currently regulates uranium tailings disposal by attaching conditions to lease agreements for uranium mines. Authority for this practice derives from section 109 of the Constitution Act, 1867, which vests the provinces with ownership of mines. A federal declaration under section 92(10)(c) does not alter provincial ownership of the affected work.⁹⁰

It is important to determine what conditions a province, as owner of the property, may attach to a lease agreement. The case law on this point distinguishes two different situations. The province, acting as landowner, can *negotiate* any conditions it wishes into a lease

86. A crown corporation is a corporation owned by the federal or provincial government.

87. *Regina v. Eldorado Nuclear Ltd.*, 128 D.L.R. (3d) 82 (Ont. H.C. 1981); *Regina v. Eldorado Nuclear Ltd.*, [1983] 2 S.C.R. 551.

88. The Supreme Court of Canada has expressed reservations about the wisdom of applying this principle to modern commercial crown corporations. See *Eldorado Nuclear Ltd.*, [1983] 2 S.C.R. at 558.

89. J.E. MAGNET, *supra* note 24, at 238-39.

90. Hanssen, *supra* note 66, at 92; N. FINKELSTEIN, *supra* note 24, at 629.

agreement unless such conditions violate an existing law.⁹¹ However, if a province *by legislation* imposes any terms upon lessees, then it is no longer acting as a landowner, and such terms must then fall within the province's constitutional jurisdiction.⁹² Under this dichotomy, as owner of uranium mines a province can negotiate conditions into a lease agreement and impose detailed limits on the level of contaminants which can be emitted by the lessee's mining operation. The conditions could not, however, require the lessee to disobey an existing federal or provincial law. A province can use such lease agreements to ensure that crown corporations comply with provincial pollution standards. The only disadvantage is that, in enforcing these conditions, a province is limited to remedies for breach of contract.

The second stage of this article's analysis—examining the bases of federal and provincial power—is now complete and has revealed two general conclusions. First, the federal government has the power to enact legislation regulating the impact of uranium mine tailings on water quality. However, the Atomic Energy Control Act, as it now stands, might not empower the Atomic Energy Control Board to exercise this power. Second, the provinces have jurisdiction to enact legislation regulating the impact of uranium mine tailings on air and water quality. Such legislation would probably apply to all uranium mining operations, with the likely exception of federal crown corporations. This gap could be remedied by negotiating appropriate conditions in provincial lease agreements with such crown corporations.

VI.

PARAMOUNTCY

The final stage of analysis examines the legal effects of any overlap between federal and provincial regulation of uranium tailings disposal. This examination begins with the principles underlying Canada's Constitution. In Canada, there is a rough division of legislative power between the federal and provincial levels of government. In order to preserve the balance of power, each level of government should have complete authority to legislate on matters within its jurisdiction. However, due to a lack of precise boundaries

91. *Regina v. Smylie*, [1900] 31 O.R. 202, 222; *Brooks-Bidlake and Whittal Ltd. v. Attorney-General, British Columbia*, [1923] A.C. 340, 457-58.

92. *Attorney-General, British Columbia v. Attorney-General, Canada*, 1924 A.C. 203, 211; *Canadian Indus. Gas and Oil Ltd. v. Government of Saskatchewan*, 80 D.L.R. (3d) 449, 459 (1977).

between their respective areas of jurisdiction, valid provincial legislation and valid federal legislation sometimes both cover the same activity. Ideally, both laws should be allowed to stand whenever possible since each addresses a different concern, and the control imposed upon an activity by one government may not satisfy the other government's concerns.⁹³

An overlap between laws might occur in one of four ways.⁹⁴ First, provincial legislation might cover an activity over which Parliament could legislate but has not done so. In this case, the provincial law will stand. Second, provincial legislation might supplement federal legislation, as might happen, for example, if both governments set different standards for regulating the same activity.⁹⁵ In such a case, it is possible to comply with both standards by adhering to the stricter one. Third, provincial legislation may duplicate federal legislation. This is "the ultimate in harmony" for a federal state, according to the Supreme Court of Canada.⁹⁶ Fourth, the two laws may expressly contradict one another. This occurs when it is impossible to obey both laws.⁹⁷ In this case, the provincial law is inoperative to the extent that it is inconsistent with the federal law. This appears to be the only instance where a court will suspend valid provincial legislation.

What is the result when this analysis is applied to legislation governing uranium tailings disposal? Any such inquiry must be somewhat speculative since no current regulations cover the specific problems associated with uranium tailings. Rather, such standards exist as conditions in licenses or lease agreements.⁹⁸ But these standards are fairly consistent between mines and there is every indication that when regulations are passed they will closely mirror these

93. For example, federal legislation regulating emissions into water in the interests of protecting fish may well set different standards than similar provincial legislation protecting humans.

94. These categories are set forth in Lederman, *The Concurrent Operation of Federal and Provincial Laws in Canada*, 9 MCGILL L.J. 199 (1962).

95. For example, in the cases of *O'Grady v. Sparling*, 1960 S.C.R. 804, and *Mann v. The Queen*, 1966 S.C.R. 238, three laws (two federal and one provincial) all set a different standard for regulating driving. The Supreme Court of Canada ruled that all three could operate concurrently.

96. *Multiple Access Ltd. v. McCutcheon*, 138 D.L.R. (3d) 1, 23 (1983).

97. *Id.* at 23-24. For example, this could occur where federal and provincial matrimonial laws gave different orders for child custody.

98. The AECB includes such conditions in its licenses to operate uranium mines. Saskatchewan includes such conditions in licenses which are required in order to discharge into the environment, or in leases of mining land. Ontario has only "guidelines" which deal with some of the hazards from tailings.

conditions.⁹⁹

At present, the regulation of uranium tailings disposal serves three main functions. The first function involves *setting standards* for the maximum levels of certain contaminants which a tailings site may emit. The second function is determining how, when, and where the *monitoring* of these standards will take place. The third function is the development of plans for the safe long-term *disposal* of tailings and for the cleanup of spills.

Will this regulatory scheme create an "express contradiction" between federal and provincial laws? If current Canadian regulatory practices are followed, the answer appears to be "no," at least with respect to the first two functions. Regarding the standards-setting function, once standards have been set, the onus is on the industry to furnish or develop technology which will meet these standards. Thus, where federal and provincial standards differ, the industry can comply with both by using technology which meets the more rigorous standards. Only if the regulatory body were to prescribe the technology which must be used would the possibility of conflict exist.¹⁰⁰ Since there is no reason to suspect a change in current regulatory methods, the existence of two sets of standards should not lead to an express contradiction between federal and provincial laws.

With respect to the monitoring function, concurrent legislation could mean that two different monitoring processes would take place. But there is nothing contradictory about such a requirement, although it would of course be a waste of time and money.

No express contradiction is created in most circumstances with respect to the third function of tailings disposal regulation, either. At present, both the federal and provincial governments require companies to comply with their instructions as to long-term tailings disposal and cleanup of spills. As a matter of practice, compliance with the more demanding plan often ensures that the objectives of the other plan are also met. However, the two plans could conceivably differ to such a degree that it would be impossible to satisfy the requirements of both. If such a conflict arose, the federal government's plan would prevail, although a province could supplement the plan in any way it saw fit.

If current practices are continued, then, federal and provincial

99. Telephone interview with Robert Sentis, *supra* note 1.

100. The former method is more effective since it places the research burden on the party who will benefit from cost savings.

legislation on tailings disposal will be able to operate concurrently. The only possible exception would arise when concurrent compliance with federal and provincial plans proves impossible, in which case the federal plan must prevail.¹⁰¹

VII. CONCLUSION

This analysis is intended to clarify the legal positions of the Canadian federal and provincial governments, in the hope that some of the jurisdictional confusion surrounding the regulation of uranium tailings disposal can be resolved. With this hope in mind, a review of the legal conclusions of this article and a formulation of possible political responses is in order.

First, the federal government has jurisdiction to regulate the water pollution aspects of uranium tailings disposal. This power may not arise from the AECA, but almost certainly does arise under the federal powers over fisheries and interprovincial pollution.

Hopefully, this elucidation will relieve the AECB of the responsibility for regulating the environmental hazards of uranium tailings and enable another part of the federal apparatus to address the problem. After all, the AECB's mandate was to address the safety and security aspects of atomic energy; this is its area of expertise. The AECB assumed the unnatural role of environmental regulator only in the political aftermath of the Hamm Commission in the mid-1970s.¹⁰² In reality, many of the standards which the Board sets to govern tailings disposal are established in consultation with the Environment Ministry.¹⁰³ Logically, responsibility for uranium tailings should lie with this ministry.¹⁰⁴ The Environment Ministry already deals with the general problem of regulating the emission of hazardous substances into waterways, and has both the expertise and the infrastructure to face the problems posed by uranium tailings disposal.

A second conclusion is that the provinces have power to legislate

101. It must be remembered that this is only a statement of what *may* be done. From an administrative viewpoint, it would be tremendously wasteful to operate such a concurrent regulatory process. However, that is a political, not a legal decision.

102. For more detail, see I. ROBINSON, *supra* note 9, at 4-14.

103. M.B. ZGOLA, A.E.C.B. AND ITS ROLE IN THE REGULATION OF URANIUM AND THORIUM MINING 6 (AECB, Feb., 1981).

104. The federal government apparently agrees with this view since it attempted to achieve this result and failed. See Bill C-14, The Nuclear Control and Administration Act (First Reading, Federal House of Commons, Nov. 24, 1977).

on the disposal of uranium tailings. This authority may arise from the power over mining but certainly arises from the power over intraprovincial pollution. For the reasons stated previously, it would be politically wise for the provinces to vest control over the disposal of uranium tailings with the environmental ministries.¹⁰⁵ This would also enhance the possibility of cooperation between federal and provincial governments.

In Saskatchewan, it appears that the government is legally able to implement the environmental protection regulations which it has drafted. Similarly, the British Columbia government will be able to establish its own regulations where it finds that the AECB standards are insufficient. In Newfoundland, where a moratorium on uranium mining has been imposed, governmental concern over the jurisdictional confusion in the area may be lessened. However, concern over the long-term safety of tailings disposal will remain. As for Ontario, the Government can no longer use a lack of jurisdiction as its excuse for failing to deal with the problem of uranium tailings.

The third and final conclusion is that provincial and federal laws regulating uranium tailings disposal may operate concurrently, although a possible exception involves developing plans for the long-term disposal of tailings and for the cleanup of spills.

This ability to regulate concurrently means that both levels of government could set up their own schemes for setting standards, monitoring compliance with standards and developing any required plans regarding uranium tailings disposal. However, such duplication of efforts would mean a tremendous waste of the taxpayers' dollars, and the uranium mining industry's time and money.

A better solution would be to incorporate the regulation of uranium tailings disposal into the existing federal-provincial environmental accord. Under this scheme, the federal ministry sets maximum pollution levels across the country. Any province is free to lower these standards, and the provincial ministries are responsible for monitoring and enforcing the applicable standards.¹⁰⁶ A similar system exists in Australia and apparently works quite well.¹⁰⁷

In conclusion, this article has attempted to clarify some of the legal issues surrounding uranium tailings disposal, in an effort to

105. This was also the finding of the Bayda Commission in Saskatchewan. BAYDA COMM'N, *supra* note 19, at 1119-20.

106. *Hearings Before Select Comm. 27* (July 29, 1980) (testimony of Ontario Ministry of Environment).

107. Telephone interview with Robert Sentis, *supra* note 1.

resolve the confusion over who has jurisdiction to regulate the area. This uncertainty must be resolved so that the real problem—developing the technology to ensure the safe storage and long-term disposal of uranium tailings—can be adequately addressed.