Chapter 8
Indigenous Peoples in the Nuclear Age: Uranium Mining on Indigenous' Lands

Katja Göcke

Abstract A major part of the global uranium reserves are located on indigenous peoples' lands. Most indigenous peoples have strongly opposed uranium exploration and exploitation on their ancestral lands, given that many of the uranium mining projects carried out on their lands since the mid-twentieth century during the first uranium boom have led to devastating environmental and health effects. As the share of nuclear energy in global power generation and the demand for uranium had been in decline since the mid-1980s, the pressure on indigenous peoples to accept uranium mining on their lands has been lower in recent years. This began to change, however, with the reconsideration of the allegedly CO2-free nuclear energy as energy source due to increased concerns about global warming in the early 2000s. With the growth in demand, the prices for uranium have increased, and more and more mining companies have approached States—and indigenous peoples directly—for uranium mining permits on indigenous lands. This chapter looks at the potential impact of uranium mining on indigenous communities, examines national and international legal frameworks governing uranium mining on indigenous lands, and develops substantial and procedural rights of indigenous peoples under international law.

Contents

Katja Göcke, LL.M. (University of Sydney), Attorney at Graf von Westphalen, Hamburg (Germany).

K. Göcke (✉)
Graf von Westphalen, Poststr. 9, 20354 Hamburg, Germany
e-mail: katja.goecke@law-school.de

J. L. Black-Branch and D. Fleck (eds.), *Nuclear Non-Proliferation in International Law - Volume I*, DOI: 10.1007/978-94-6265-020-6_8,

8.1 Introduction

According to one of the Navajo creation stories, the Navajo people—or *Diné*, meaning 'the people', as they call themselves—when entering the world were asked by the gods to choose between two yellow powders: the yellow dust of corn pollen and the yellow dust from the rocks. The *Diné* chose corn pollen and were warned by the gods to leave the other yellow powder in the ground forever. If it were ever dug up, great evil would come.[1]

Sadly, with the beginning of the Nuclear Age in the mid-twentieth century, this prophecy has become a reality—not only for the Navajo Nation but for many indigenous peoples worldwide. Due to the fact that approximately 70 % of the world's uranium deposits are located on indigenous peoples' land,[2] these peoples have been particularly affected by the uranium mining industry.

As a consequence of the beginning of the Nuclear Age in the 1940s and the rise in uranium production from virtually zero in 1945 to almost 50,000 tonnes in the 1950s,[3] a great number of mining projects have been carried out on indigenous lands without the affected communities' consent or even knowledge. But even in case the respective government did recognise the right of indigenous peoples to their ancestral lands, indigenous peoples have often not been able to resist uranium mining on their lands. Corporations have regularly exploited the desperate financial and social situation of indigenous peoples. For centuries, indigenous peoples have been disadvantaged, neglected and marginalised, and, as a result, are among the world's poorest and most disadvantaged groups. They often have the highest unemployment rate, the shortest life expectancy, and the lowest income, health, housing and educational standards within their respective home States.[4] Hence when mining companies began to approach indigenous peoples in the 1940s and 1950s to negotiate with them over the extraction of uranium on their lands, many indigenous peoples agreed for bare sustenance.[5] The indigenous peoples' poverty and desperate need to generate income put them in a poor bargaining position. The

[1] See for example Eichstaedt 1994, p. 47; LaDuke 2009.

[2] According to Native American environmentalist Winona LaDuke; see for example Honor the Earth 2012; LaDuke 2010.

[3] World Nuclear Association 2012.

[4] See for example UN Department of Economic and Social Affairs 2009.

[5] Churchill and LaDuke 1992, p. 246.

weak position of indigenous peoples has not only led to extremely low royalty rates for the affected indigenous communities but also to the disregard of safety regulations by the mining companies. Since the unemployment rate within indigenous communities was—and remains[6]—extremely high, there is a guaranteed labour force, and for a long time corporations aimed at cutting costs by lax enforcement of worker safety regulations. In addition, mining companies tried to save costs by not maintaining the facilities properly, not storing and disposing of toxic nuclear wastes adequately, and by not cleaning up after the exhaustion of the mines.[7] Indigenous peoples were not aware of the dangers associated with uranium mining due to lack of information and misinformation by official bodies. Instead, governments generally turned a blind eye to the mining companies' behaviour since they were interested in cheap and compatible resource extraction for the economic benefit of the country. Furthermore, during the Cold War and the arms race, uranium mining was also regarded as a matter of national importance, and the governments were not interested in taking steps that could have negatively impacted mining operations.[8] The governments' seeming indifference towards indigenous peoples' safety and concerns is an indication of prevalent racism against indigenous peoples: a minority was endangered for the 'greater good' of the rest of the country.[9]

Ultimately, large-scale uranium extraction and subsequent nuclear waste dumping on their ancestral lands has left many indigenous peoples with contaminated soils, water and vegetation, thousands of abandoned mines, and continuing health problems. The probably best-known example is the Church Rock uranium mill tailings spill of June 1979—the worst nuclear accident in the history of the United States. Due to disregard of safety standards the dam of the disposal pond at a uranium mine in Church Rock (New Mexico) on the Navajo Reservation broke and released more than 100 million gallons of radioactive water into the Rio Puerco—the Navajo's single water source for irrigation and livestock.[10] There are other tragic examples of the consequences of uranium mining on indigenous lands, for example the several uranium mining projects elsewhere on the reservation of the Navajo Nation, which left the Navajo with highly toxic radioactive wastes on their lands, over 500 abandoned mines, a contaminated environment, a significant drop of the water table and thousands of sick former mine workers and families,[11] the Elliot Lake Uranium Mines in Ontario (Canada), which contaminated several lakes and the entire Serpent River system with 165 million tonnes of radioactive

[6] For example, the current unemployment rate on Indian reservations in the United States amounts to 50 % (US Congress—Senate 2010), and to 23 % on reserves in Canada (Statistics Canada 2009).

[7] See Churchill and LaDuke 1992, p. 247; Johansen 1997.

[8] Segal 2012, pp. 363–366.

[9] Ibid., p. 365.

[10] See Johansen 1997.

[11] See Segal 2012; Churchill and LaDuke 1992, pp. 248–249; Johansen 1997.

mining effluvia and thus deprived the local Anishinaabeg of their means of subsistence,[12] or the Rum Jungle Uranium Mine in the Northern Territory (Australia) whose acid mine drainage destroyed all plant and animal life for a 10 km stretch of the Finnis River.[13] The social and environmental costs of these accidents have exceeded the short-run benefits many times over.

The mid-1980s saw a decline of the share of nuclear energy in global power generation due to growing public opposition as a result of the accidents at Three Mile Island and Chernobyl.[14] With the nuclear industry in decline the pressure on indigenous communities to accept uranium mining on their lands diminished. Yet since about 2001 there have been talks about a potential uranium renaissance.

Whereas prices for uranium hovered around USD 10 per pound for decades, they skyrocketed in 2004 and peaked at USD 136 in June 2007 before levelling off at around USD 50 per pound.[15] Drivers for this development are natural and geopolitical supply disruptions, as well as increased concerns about global warming caused by the use of fossil fuels. Several States, *inter alia* China, India, Russia, the United States and several Eastern European countries, have announced their plans to build new plants and to dramatically increase their nuclear capacity. Hence it is expected that the project demand for uranium will rise significantly in the years to come.[16]

Therefore, the question if, and under what conditions, uranium mining on indigenous lands is acceptable has taken centre stage once again. Several mining companies have vowed to do better this time and follow high environmental and social standards. In order to win the support of the local indigenous communities, public relations campaigns are launched and promises are made to create well-paid jobs and generate huge cash flows through fair revenue sharing. What is ultimately promised to indigenous peoples is prosperity, development and self-reliance through uranium mining on their lands.

In the following, this chapter will provide an overview of indigenous peoples' attitude towards uranium mining on their ancestral lands today. Subsequently, it will look at national laws and regulations and analyse whether and under what conditions they allow for uranium mining on indigenous lands. For reasons of brevity, the chapter will limit the comparison of national legal frameworks to Canada, the United States of America and Australia as three of the world's top ten producers of uranium.[17] Next, the chapter will examine the international legal framework, and new developments under international law will be outlined. The chapter will conclude with a short appraisal.

---

[12] See McNamara 2009; Dowie 2009a, b.

[13] See Parliament of Australia—Senate Committee 1997.

[14] World Nuclear Association 2011.

[15] Cameco Corp. 2012.

[16] Xemplar Energy Corp. 2007; Dowie 2009a, b; World Nuclear Association 2011.

[17] See World Nuclear Association 2012.

8.2 Indigenous Peoples' Attitude Towards Uranium Mining

In order to be able to analyse indigenous peoples' attitude towards uranium mining, one fundamental issue must first be addressed: the definition of the term 'indigenous peoples'. The question 'Who is indigenous?' is difficult to answer. There is no universal or generally accepted definition of the term. Such a definition seems almost impossible considering the diversity of indigenous peoples. Their traditional habitats range from Arctic permafrost zones to deserts and tropical rainforests. Indigenous peoples have adapted to these diverse living conditions, and therefore their cultures, societies and ways of life differ significantly. In addition, indigenous peoples disapprove of a general definition. They claim that the question of who is indigenous is best answered by the indigenous communities themselves. Since several international rights and corresponding duties of States are directly linked to the status of indigeneity, indigenous peoples fear that a definition would be abused by governments to arbitrarily exclude certain groups.[18] The right to self-definition has been stressed in several international legal instruments concerning the rights of indigenous peoples.[19] Such instruments only list certain objective criteria which are generally but not necessarily fulfilled by an indigenous people.[20] Yet, there is one objective criterion, which has repeatedly been mentioned to be essential in order for a group to be regarded as indigenous: the special and spiritual connection to its ancestral lands.[21] This connection, which is also reflected etymologically in the original Latin word *indigena*—a fusion of the words *indu* (in, within) and the root of *gignere* (to beget)[22]—lies at the core of the concept of indigeneity.

All indigenous peoples have in common that over the millennia they have developed a deeply felt spiritual relationship to their lands, which forms the basis of their identity. Since indigenous peoples define themselves as peoples through their common genealogical descent from their ancestral lands and its continuous collective use by the group, indigenous cultures cannot be preserved once the ties to their traditional lands and resources are permanently severed.[23] Uranium mining on their ancestral land poses the danger of such a permanent severance.

---

[18] Simpson 1997, pp. 22–23.

[19] See for example Cobo 1986, para 369; Article 1(2) of ILO Convention 169 concerning Indigenous and Tribal Peoples in Independent Countries (adopted 27 June 1989, entered into force 5 September 1991) 1650 UNTS 383; International Law Association 2012, pp. 2–3. Regarding the United Nations Declaration on the Rights of Indigenous Peoples (UNGA Res 61/295 (13 September 2007)), see also Cole 2009, pp. 201–205.

[20] See for example Cobo 1986, paras 379–380; Daes 1996; World Bank 2005, para 4; International Law Association 2012, pp. 2–3; see also Kingsbury 1998, pp. 453–455.

[21] See for example International Law Association 2012, p. 2; African Commission on Human and Peoples' Rights 2005, p. 89.

[22] Barnhart (ed), 2003, p. 521.

[23] See for example Dannenmaier 2008, pp. 84–88.

The problem with uranium extraction is that it produces large amounts of radioactive wastes, in particular waste rock and tailings but also waste water and radon.[24] Waste rock is the material mined in order to get to the ore. Typically, the uranium content of the ore is as low as 0.1–0.2 %. Therefore, well over 99 % of the ore mined has to be disposed of. Once mined, the ore is milled, i.e., it is grinded and chemicals are added in order to extract its uranium content. By-product of this process is a huge amount of mill tailings in form of toxic sludge and waste water. Since long-lived decay products such as thorium-230 and radium-226 are not removed, the sludge contains 85 % of the initial radioactivity of the ore plus 5–10 % of the uranium initially present in the ore as due to technical limitations not all the uranium content can be extracted. In addition, in its decay process, radium-226 continuously releases the radioactive and carcinogenic noble gas radon.[25] Since the half-lives of the principal radioactive components of mill tailings are several thousand years,[26] these radioactive wastes can make whole areas unusable and uninhabitable for millennia if not properly stored and managed. Consequently, indigenous peoples would be deprived of their physical and cultural means of survival and eventually cease to exist as separate peoples.

In addition, indigenous peoples also refer to moral issues associated with uranium mining. In particular, they point out that no government or organisation can guarantee that uranium mined on its territory will only be used for peaceful purposes, and they allude to the fact that there is still no satisfactory answer to the question how to permanently store the highly radioactive wastes from nuclear power plants safely.[27]

Because of these moral issues and the immanent risk indigenous peoples have for a very long time almost unanimously rejected uranium mining on their lands. This attitude, which has decisively been fuelled by negative experiences of the past, is reflected in several statements and declarations issued by indigenous peoples.

The first international meeting to exchange information on experiences with uranium mining—the World Uranium Hearing—was held in Salzburg (Austria) from 13 to 19 September 1992. During this meeting 80 indigenous persons representing 25 indigenous nations and 30 non-indigenous participants from all continents gave testimony. In its outcome document, the Declaration of Salzburg which was accepted by the United Nations Working Group on Indigenous Populations,[28] the World Uranium Hearing called upon governments, corporations, organisations, communities and individuals to ensure that '[r]adioactive minerals are no longer exploited'.[29] In the accompanying Statement of the Indigenous Participants at the

[24] Frost 1998.

[25] Ibid.; Diehl 2011.

[26] Diehl 2011.

[27] See for example CBS News 2011; Bernauer 2012.

[28] UN Doc. E/CN.4/Sub.2/AC.4/1994/7 (6 June 1994), pp. 3–7.

[29] Ibid., para 12(a).

World Uranium Hearing, the indigenous representatives demanded that exploitation of indigenous land and peoples by uranium mining be stopped and called upon the whole world 'to use sustainable, renewable and enhancing energy alternatives'.[30] This demand was reaffirmed at the Indigenous World Uranium Summit held in Window Rock, Arizona, from 30 November to 2 December 2006. In their Declaration of 2 December 2006, the more than 300 participants from 14 countries and various indigenous nations reiterated the position of indigenous peoples that 'uranium and other radioactive minerals must remain in their natural location'.[31]

At a regional level, the Inuit Circumpolar Conference,[32] a non-governmental organisation representing the Inuit living in Alaska (USA), Canada, Greenland (Denmark) and Chukotka (Russia), issued a declaration in 1983, which declared the Arctic a nuclear-free zone and demanded that exploration and exploitation of uranium in their homeland be prohibited.[33] Furthermore, several indigenous peoples, for example the Navajo,[34] Hualapai,[35] Havasupai, Kaibab-Paiute and Hopi Nations,[36] have explicitly banned uranium mining on their territories.

Yet, there is also a recent trend in the opposite direction. For example, in 2007, Nunavut Tunngavik Inc., the representative organisation of the Inuit of Nunavut (Canada), adopted a policy that supports 'sustainable' uranium mining on Inuit lands,[37] in 2010 the Government of Greenland—a *de facto* Inuit-governed autonomous territory within the Danish Realm—relaxed its zero-tolerance on uranium mining and allowed mining companies to explore uranium deposits in Greenland,[38] and in March 2012 the Nunatsiavut government, a regional Inuit government within the Province of Newfoundland and Labrador (Canada), lifted its three-year moratorium on uranium mining on Labrador Inuit lands.[39] These institutions argue that indigenous peoples are nowadays in a much stronger position to negotiate fair terms and conditions and to supervise the exploration projects. Hence, it was very unlikely that disasters of the past would repeat themselves.[40] They further stress that the money generated from uranium mining

[30] www.nuclear-free.com/english/indig.htm.

[31] Declaration of the Indigenous World Uranium Summit (Window Rock, Navajo Nation, USA; 2 December 2006). www.miningwatch.ca/sites/www.miningwatch.ca/files/IWUS_Declaration_0.pdf.

[32] Now the Inuit Circumpolar Council.

[33] ICC Resolution on a Nuclear Weapon Free Zone, Point 4 (adopted 1983). www.arcticnwfz.ca/documents/I%20N%20U%20I%20T%20CIRCUMPOLAR%20RES%20ON%20nwfz%201983.pdf.

[34] Diné Natural Resources Protection Act (2005) enacted by the Navajo Nation Council. www.navajocourts.org/Resolutions/CAP-18-05.pdf.

[35] Hualapai Department of Natural Resources.

[36] Southwest Research and Information Center 2008.

[37] Nunavut Tunngavik Inc. 2007.

[38] Vestergaard and Bourgouin 2012.

[39] Paladin Energy 2012.

[40] See for example Nunavut Tunngavik Inc. 2007.

could not only be used to tackle the immense social and financial problems indigenous communities are faced with but also to preserve and strengthen indigenous culture and identity.[41] The proposal to allow uranium mining on their ancestral lands is, however, often met with fierce opposition by large sections of the local indigenous population, whom these organisations are meant to represent.[42]

8.3 National Laws and Regulations

Since most indigenous peoples and communities oppose uranium mining, it needs to be examined whether and to what extent indigenous peoples can prevent uranium mining on their ancestral lands under the legal regimes of their respective home States. For reasons of brevity, the comparison is limited to Canada, the United States of American and Australia, which are all among the world's top ten producers of uranium.[43]

8.3.1 United States of America

In the United States, indigenous peoples' land rights are virtually synonymous with the reservation or tribal trust land system. As a general rule, Indian tribes hold legally protected Fifth Amendment[44] rights only to those areas of land, which have been 'reserved' for the respective tribe, either by treaty or by presidential decree. Although the legal title to a reservation is generally vested in the government,[45] the indigenous groups as the beneficial owners hold quasi-property rights to the land.[46] Like other property owners in the US, the tribes as trustees may

[41] See for example Rogers 2011, quoting the president of Nunavut Tunngavik Inc., Cathy Towtongie.

[42] See for example CBS News 2011.

[43] See World Nuclear Association 2012.

[44] According to the Fifth Amendment '[n]o person shall […] be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation'.

[45] There is, however, a distinction between 'reservations' and 'tribal trust lands'. Whereas initially, the term 'reservation' was synonymous with 'tribal trust land', this has changed in the course of the allotment policy of the late nineteenth and early twentieth centuries. Under the General Allotment Act 1887 (Dawes Act) of 8 February 1887 (24 Stat. 388; now codified as 25 U.S.C. 331) reservations were to be divided into allotments for individual Indians. After a trust period of 25 years these allotments were to become freely alienable. Land exceeding the amount needed for allotment was to be opened up for settlement by non-Indians. Nowadays, some reservations are predominantly owned by private individuals while others are still entirely or predominantly held in trust by the federal government for the tribes; see Nash and Burke 2006, p. 125; Utter 2001, pp. 207–208.

[46] See *United States versus Sioux Nation* (1980) US Supreme Court, 448 U.S. 371, p. 408; Newton et al. (eds) 2005, pp. 1026–1030 with further references.

exclude third parties from using their lands. Therefore, mining on Indian tribal trust land may only take place with the tribes' express consent.[47] Yet, like all other property, tribal trust land may be expropriated for a public purpose and against adequate compensation—even if such an expropriation is in violation of a treaty concluded between the government and the Indian tribe.[48] In the past, there have been several such expropriations of reservations for the public purpose of carrying out mining projects on these lands. The best-known example is the taking of the Black Hills after the discovery of gold in the area in 1877. Although for political reasons it is unlikely that such expropriations would be carried out today, the federal government refuses to return lands expropriated under such circumstances in the past. For example, the claim of the Lakota for the return of the Black Hills—which also have large deposits of uranium—was turned down by the Supreme Court in 1980. Instead, it awarded monetary compensation to the Lakota and did not return the land as such.[49]

Furthermore, it should be noted that nowadays tribal trust lands cover only an area of approximately 180,000 km^2, i.e. 2.3 % of the total area of the contiguous states of the US.[50] This means that Indian tribes do not hold any legally secure rights to more than 97 % of their original land base, and therefore cannot effectively prevent mining on their ancestral lands. The US legal system recognises the legal institution of 'original Indian title', i.e. inherent rights of an indigenous people to its ancestral lands based on 'actual, exclusive and continuous use and occupancy [of the land] for a long time',[51] which have not been extinguished by treaty or other acts of the federal government.[52] However, this original Indian title is not regarded as constituting 'full proprietary ownership' or at least 'a 'recognised' right to unrestricted possession, occupation and use'[53] but it is merely seen as 'permissive occupation'.[54] Therefore, 'the taking by the United States of unrecognised Indian title is not compensable under the Fifth Amendment'.[55] Consequently, the federal government is neither obliged to ask for permission nor to pay compensation for exploiting resources on these indigenous peoples' ancestral lands.[56]

---

47 Newton et al. (eds) 2005, pp. 1086–1088 and pp. 1124–1126 with further references; see also Mitchell 1997, Appendix D-1; Utter 2001, pp. 218–221.

48 *Lone Wolf versus Hitchcock* (1903) US Supreme Court, 187 U.S. 553, p. 566.

49 *United States versus Sioux Nation* (1980) US Supreme Court, 448 U.S. 371.

50 An additional 180,000 km^2 are held by the Alaska Natives in form of Alaska Native Corporation Lands; see Utter 2001, p. 217.

51 *Sac & Fox Tribe of Indians of Oklahoma versus United States* (1967) United States Court of Claims, 383 F.2d 991, para 47.

52 *United States versus Santa Fe Pacific Railroad* (1941) US Supreme Court, 314 U.S. p. 339, p. 347.

53 *Tee-Hit-Ton Indians versus United States* (1955) US Supreme Court, 348 U.S. p. 272, p. 277.

54 Ibid., p. 279.

55 Ibid., p. 285.

56 Kelly Jr. 1975, pp. 671–672 and pp. 675–678.

8.3.2 Canada

The legal situation is different in Canada. Like in the US, there are reservations (or reserves as they are called in Canada) held in trust by the federal government for indigenous groups, who—in turn—have quasi-property rights to these lands.[57] Hence, resource exploitation on these lands can only take place with the consent of the tribes.[58] Yet, unlike in the US, indigenous land rights are not synonymous with the reserve system. In fact, Indian reserves in Canada cover an area of only about 27,000 km^2.[59] Instead, in Canada, it is the aboriginal title doctrine, which is the basis of indigenous land rights.

In *Calder versus Attorney-General of British Columbia*, which is generally regarded as the starting point of the modern aboriginal title doctrine, the Canadian Supreme Court stated that at the time of colonisation the indigenous peoples of British Columbia held inherent aboriginal rights to their lands, irrespective of the recognition of these rights by the Crown, and that these rights had not been automatically extinguished with the acquisition of British sovereignty.[60] In case these rights had not subsequently been extinguished by treaty between the Crown and indigenous groups or by clear and plain federal legislation,[61] they continued to exist until the present day.[62] According to the Canadian Supreme Court decision in *Delgamuukw versus British Columbia*, the Crown has a duty to consult the aboriginal title holders before projects may be carried out on their lands as soon as the existence of an aboriginal title has been established. This duty will vary with the circumstances and might in some cases amount to a right to veto.[63] But even

[57] *Wewaykum Indian Band versus Canada* (2002) Supreme Court of Canada, 4 S.C.R. 245, paras 74 and 86.

[58] See Section 53 Indian Act and Regulations Providing for the Disposition of Surrendered Minerals Underlying Lands in Indian Reserves (C.R.C., c. 956).

[59] Dow and Gardiner-Garden 1998; Indian and Northern Affairs Canada 1992, 177.

[60] *Calder versus Attorney-General of British Columbia* (1973) Supreme Court of Canada S.C.R. p. 313, 328, 375 and 390.

[61] *Guerin versus The Queen* (1984) Supreme Court of Canada, 2 S.C.R. p. 335, 349 and 352 (Wilson J) and pp. 376-378 (Dickson J); see also Slattery 1987, p. 731 and pp. 748–749.

[62] Since during the nineteenth and early twentieth centuries, cession treaties had been concluded over the whole area of Ontario and the Prairie Provinces, potential aboriginal titles and rights can only exist in the northern territories, British Columbia, Quebec, Newfoundland and Labrador, and the Maritime Provinces. Regarding the areas in the Northwest Territories claimed by the Dene and Métis, which are covered by Numbered Treaties No 8 (June 1899) and No 11 (June 1921) (printed in Reiter 1996, Ch. 7 pp. 42–59 and pp. 68–71) the Canadian federal government has concluded a CLC agreement based on the fact that these treaties have never been implemented; see also Isaac 2004, p. 94.

[63] *Delgamuukw versus British Columbia* (1997) Supreme Court of Canada, 3 S.C.R. 1010, para 168.

before the existence of an aboriginal title has been established, the government has a legal duty to consult with the indigenous groups, who might hold aboriginal rights and titles to an area, and, if appropriate, accommodate their interests before projects potentially affecting these rights might commence.[64] This means, that if an indigenous group has a strong claim to an area and the potentially adverse effects upon the right or title claimed are serious, 'deep consultation, aimed at finding a satisfactory interim solution, may be required'.[65] Since uranium mining projects generally carry the risk of permanent, non-compensable damages, it is unlikely that such a project will be approved against the will of an indigenous group with a strong *prima facie* claim to the land.

Based on the premise that aboriginal title and rights have potentially continued to exist in many parts of Canada, the Canadian federal government adopted the Comprehensive Land Claims (CLC) Policy in 1986 as a means to settle all open land claims. Under this policy, 23 agreements have been concluded so far between the federal government and indigenous groups, and about 611,600 km^2 land—that is 6.1 % of the total area of Canada—has been transferred to indigenous groups in form of fee simple title.[66] On these lands, indigenous peoples can effectively prevent mining by third parties. Yet, in return for the conveyance of fee simple title to parts of their traditional land base, the indigenous peoples' potential aboriginal rights and title to all of their traditional lands were extinguished or rendered permanently unenforceable in courts. Hence, on these parts of their traditional land base, mining can generally be carried out without their consent.

What needs to be stressed with regard to Canada is that since enactment of the Constitution Act, 1982, all existing aboriginal and treaty rights, including rights

---

[64] *Haida Nation versus British Columbia (Minister of Forests)* (2004) Supreme Court of Canada, 3 S.C.R. 511, para 10; see also *Taku River Tlingit First Nation versus British Columbia (Project Assessment Director)* (2004) Supreme Court of Canada, 3 S.C.R. 550, para 21.

[65] *Haida Nation versus British Columbia (Minister of Forests)* (2004) Supreme Court of Canada, 3 S.C.R. 511, paras 39-47 (44); *Taku River Tlingit First Nation versus British Columbia (Project Assessment Director)* (2004) Supreme Court of Canada, 3 S.C.R. 550, paras 29–32.

[66] James Bay and Northern Quebec Agreement 1975 (Quebec); Northeastern Quebec Agreement 1978 (Quebec); Inuvialuit Final Agreement 1984 (Northwest Territories); Gwich'in Comprehensive Land Claim Agreement 1992 (Yukon, Northwest Territories); eleven Yukon First Nations Final Agreements under the Council for Yukon Indians Umbrella Final Agreement 1993 (Yukon); Sahtu Dene and Métis Comprehensive Land Claim Agreement 1993 (Northwest Territories); Nunavut Land Claims Agreement 1993 (Nunavut); Nisga'a Final Agreement 1998 (British Columbia); Tlicho Land Claims and Self-Government Agreement 2003 (Northwest Territories); Labrador Inuit Land Claims Agreement 2005 (Newfoundland and Labrador); Nunavik Inuit Land Claims Agreement 2006 (Quebec, Nunavut, Newfoundland and Labrador); Tsawwassen First Nation Final Agreement 2007 (British Columbia) and the Maa-Nulth First Nations Final Agreement 2009 (British Columbia). For an overview of the several CLC Agreements, see for example Indian and Northern Affairs Canada 2011.

acquired by way of a CLC agreement, are constitutionally protected and therefore can only be extinguished with the consent of the indigenous people concerned.[67]

8.3.3 Australia

In Australia, the possibility for indigenous groups to stop uranium mining on their ancestral lands based on an inherent right to the respective area is very limited. Like in Canada, the existence of aboriginal (or native) title and rights has been recognised since the 1992 decision *Mabo versus Queensland (No 2)* in which the High Court of Australia held that aboriginal title to land has survived as a 'burden on the radical title of the Crown'.[68] Yet the rights conveyed by such an aboriginal title under the common law of Australia are rather weak.

Unlike in Canada, where aboriginal title is regarded as an exclusive title to the land itself, an aboriginal title in Australia gives indigenous peoples only the right to pursue certain activities, which themselves constitute traditional aboriginal rights—for example the right to hunt, fish, gather or perform cultural activities.[69] Consequently, a native title right does not enable its holders to veto mining on their traditional lands. According to the Native Title Act (NTA), which had been enacted in response to the *Mabo* decision, native title holders only have a right to negotiate before the government may grant a right to mine on native lands to a third party.[70] Under the right to negotiate, native title holders are to be notified of the proposed mining grant, and the government as well as the grantee must enter into negotiations in good faith with the affected native title holders with the intention of reaching an agreement.[71] If no agreement is reached within a six-month period, each of the negotiation parties may apply to the National Native Title Tribunal, which then determines whether the proposed grant may be issued.[72] In making the determination, the National Native Title Tribunal must take the effect

---

[67] Section 35 of the Constitution Act, 1982 (Schedule B to the Canada Act 1982 (UK) (1982, c. 11)) reads as follows:

(1) The existing aboriginal and treaty rights of the aboriginal peoples of Canada are hereby recognised and affirmed.
(2) In this Act, 'Aboriginal Peoples of Canada' includes the Indian, Inuit and Métis peoples of Canada.
(3) For greater certainty, in subsection (1) 'treaty rights' includes rights that now exist by way of land claims agreements or may be so acquired.
(4) Notwithstanding any other provision of this Act, the aboriginal and treaty rights referred to in subsection (1) are guaranteed equally to male and female persons.

[68] *Mabo versus Queensland (No 2)* (1992) High Court of Australia, 175 C.L.R. 1, para 62.

[69] *Western Australia versus Ward* (2002) High Court of Australia, 213 C.L.R. 1, paras 94–95.

[70] Sections 25–44 NTA; see also Stephenson 2002, pp. 57 and 73; Triggs 1999, pp. 405–409.

[71] Sections 29–31 NTA.

[72] Sections 35 and 38 NTA.

of the grant on native title rights and interests into account as well as its economic significance to Australia, the state or the territory and public interests.[73] A determination by the National Native Title Tribunal can be overridden by the Commonwealth minister in the national interest or in the interest of the respective state or territory.[74] If an existing mining lease is merely extended or renewed, even the right to negotiate is *a priori* not applicable.[75] Hence, even if an indigenous group can prove its native title to a certain area, it cannot effectively prevent uranium mining if the government is determined to carry out such projects.

Native title rights are, however, not the only rights to land held by the indigenous peoples in Australia. The federal or state governments have also conveyed a considerable amount of land to indigenous groups in form of reservations or collective freehold title. The total amount of such derived land rights adds up to 1.2 million km^2, i.e. 16 % of Australia. Approximately half of the land conveyed to indigenous groups is situated in the Northern Territory, 30 % in Western Australia and 17 % in South Australia.[76] In New South Wales, Victoria, Queensland and Tasmania, which are home to about one-third of Australia's indigenous population, hardly any land has been transferred to indigenous groups by the government.[77] In Western Australia indigenous groups hold land rights derived from the government still almost exclusively in form of reservations. Unlike in Canada and the US, however, the indigenous peoples' rights to these reservations do not amount to quasi-property rights and indigenous peoples cannot veto mining on reservation lands.[78] In the Northern Territory, indigenous groups hold most of the land conveyed to them by the government in form of freehold title under the Aboriginal Land Rights (Northern Territory) Act 1976 (Cth).[79] According to Section 40 of this Act, exploration and exploitation on aboriginal land may not commence without the indigenous owners' express consent. In South Australia, indigenous peoples hold the lands conveyed to them by the government also almost exclusively in form of freehold title. Yet, the rights of the indigenous peoples to these lands differ depending on the legislation applicable to the respective area. Whereas under the Aboriginal Lands Trust Act 1966 (SA) exploration and exploitation on aboriginal lands require only the consent of the governor,[80] mining activities on aboriginal lands to which the Anangu Pitjantjatjara Yankunytjatjara Land Rights Act 1981 (SA) and the Maralinga Tjarutja Land Rights Act 1984 (SA) are applicable shall

[73] Sections 39 NTA.

[74] Sections 42 NTA. Regarding the negotiation process, see also Stephenson 2002, pp. 57–59.

[75] Sections 26 and 26D NTA. Regarding the negotiation process, see also Nettheim 1999, p. 573; Triggs 1999, p. 406.

[76] McRae et al. 2009, pp. 208–209; Pollack 2001, pp. 29–30.

[77] Australian Bureau of Statistics 2009; McRae et al. 2009, p. 209.

[78] Section 24 (1)(f) and (7)(a) Mining Act 1978 (WA) (1978 No 107). See Tehan 1993, p. 38 and pp. 41–43.

[79] 1976 No 91.

[80] Section 16(9) Aboriginal Lands Trust Act 1966 (SA) (1966 No 87).

only be carried out with the consent of the indigenous owners. However, in case the indigenous owners withhold their permission, the mining application can be referred to an arbitrator for final determination.[81]

Taken all of this together, the indigenous peoples of Australia have little legal means to prevent uranium mining on their lands.

8.4 The International Legal Framework

Since the possibility for indigenous peoples to prevent uranium mining on their ancestral lands differ significantly in the US, Canada and Australia, it needs to be determined whether there is in fact an international legal rule that obliges States to obtain an indigenous people's consent before uranium mining on its lands may commence, and hence whether the respective States act in accordance with their obligations towards indigenous peoples under international law. Whether, and to what extent, indigenous peoples have to be involved in decisions regarding mining projects on their lands is generally discussed under the heading of 'the right to free, prior and informed consent (FPIC)'. If, under what circumstances, and to what extent such a right exists is controversially discussed among legal scholars. The universal and regional legal instruments and documents pertaining to the right of indigenous peoples to FPIC do—at first glance—not create a uniform picture on the content and extent of this right.

When addressing indigenous peoples' rights under international law, the first reference is generally to the International Labour Organization Convention No. 169 concerning Indigenous and Tribal Peoples in Independent Countries (ILO Convention 169) of 1989. Besides International Labour Organization Convention No. 107 concerning the Protection and Integration of Indigenous and Other Tribal and Semi-Tribal Populations in Independent Countries (ILO Convention 107),[82] which is nowadays regarded as outdated due to its assimilationist approach, ILO Convention 169 today remains the only binding international instrument which focuses exclusively on the rights of indigenous peoples.[83] To date, ILO Convention 169 has only been ratified by 22 States,[84] yet its relevance goes beyond the limited number of ratifications. This is evidenced by the fact that

[81] Section 20 Anangu Pitjantjatjara Yankunytjatjara Land Rights Act 1981 (SA) (1981 No 20); Section 21 Maralinga Tjarutja Land Rights Act 1984 (SA) (1984 No 3).

[82] Adopted 26 June 1957, entered into force 2 June 1959, 328 UNTS 247.

[83] Convention concerning Indigenous and Tribal Peoples in Independent Countries (27 June 1989), http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C169. Although ILO Convention 107 remains binding on those 17 States which have ratified it, it was declared closed for ratification after the adoption of ILO Convention No 169. In case a State has ratified both ILO Convention 107 and ILO Convention 169, ILO Convention 107 is completely replaced by the latter.

[84] The list of Member States is available under www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:11300:0::NO:11300:P11300_INSTRUMENT_ID:312314:NO.

national and international organisations and courts consult the convention on a regular basis where rights of indigenous peoples are concerned—even if the State in question has not ratified it. This is a strong indicator that at least the central provisions of the ILO Convention 169 may, arguably, be considered as customary international law.[85]

ILO Convention 169 contains four provisions pertaining to the concept of FPIC: Articles 2, 6, 7 and 15. Article 2(1) ILO Convention 169 lays down the general principle that States have a duty to protect indigenous peoples' rights 'with the participation of the peoples concerned'. Articles 6 and 7 ILO Convention 169 lay down general principles regarding the participatory rights of indigenous peoples, which are applicable to all subsequent provisions of the Convention.[86] According to Article 6(1) lit. a, governments shall '*consult* the peoples concerned […] whenever consideration is being given to legislative or administrative measures which may affect them directly'[87] and according to Article 6(2), these consultations 'shall be undertaken, in good faith, […] *with the objective of achieving* agreement or consent to the proposed measures'.[88] Article 7 ILO Convention 169 lays down the duty of States to cooperate with indigenous peoples and the indigenous peoples' 'right to decide their own priorities for the process of development'. With regard to the potentially particularly adverse consequences of the exploitation of natural resources on indigenous peoples' land, ILO Convention 169 endorses these rights and duties by stipulating that 'governments shall establish or maintain procedures through which they shall *consult* these peoples […] before undertaking or permitting any programmes for the exploration or exploitation of such resources'.[89] Hence, whereas under ILO Convention 169, States are obliged to involve indigenous peoples in all decision affecting them, this duty is merely a duty to consult and does not amount to a right of indigenous peoples to veto mining projects on their land.

More far-reaching is the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) adopted by General Assembly Resolution 61/295 in 2007. Although this Declaration is not *per se* legally binding on States,[90] the fact that it is one of the most-discussed texts in the history of the United Nations[91] and has been supported by a broad majority of States[92] indicates that many of its

[85] Anaya 2004a, p. 40; Anaya 2004b, p. 61.

[86] Baluarte 2004, p. 10.

[87] Emphasis added by author.

[88] Emphasis added by author.

[89] Emphasis added by author.

[90] See Articles 10 and 11 Charter of the United Nations.

[91] Barelli 2009, pp. 969–970.

[92] In the General Assembly 143 States voted in favour of UNDRIP with four States (Australia, Canada, New Zealand and the USA) voting against and 11 abstaining. 34 States did not participate in the vote. All four States opposing UNDRIP have since then changed their vote in favour of the Declaration; see UN News Centre 2010.

provisions constitute customary international law.[93] According to its Article 19, 'States shall consult and cooperate in good faith with the indigenous peoples concerned […] *in order to obtain their free, prior and informed consent* before adopting and implementing legislative or administrative measures that may affect them'.[94] Regarding projects affecting their lands, territories or other resources, Article 32(1) UNDRIP recognises the indigenous peoples' right 'to determine and develop priorities and strategies for [their] development or use' and obliges States '*to obtain their free and informed consent prior* to the approval of any project […], particularly in connection with the development, utilization or exploitation of mineral'.[95] Whether 'to obtain consent' imposes an absolute obligation not to proceed with a project before the indigenous peoples concerned have given their approval or whether it suffices if the States have made sincere attempts to find a mutually acceptable solution is not clear from the wording. However, regarding uranium mining on indigenous lands, another provision of UNDRIP has to be taken into consideration: Article 29(2). According to Article 29(2) UNDRIP, 'States shall take effective measures to ensure that no storage or disposal of hazardous materials shall take place in the lands or territories of indigenous peoples without their free, prior and informed consent'. Here, the wording is unambiguous. An actual consent is required before hazardous materials may be stored or disposed of on indigenous lands—hence, indigenous peoples have a right to veto such activities on their lands. As explained above, uranium mining unavoidably generates large amounts of radioactive waste which is typically stored on lands near the mines. Hence, the storage and disposal of hazardous waste on indigenous lands are inevitable by-products of uranium mining on indigenous lands. Therefore, under the UNDRIP, uranium mining on indigenous lands must not be carried out without the express informed consent of the indigenous communities concerned.

That indigenous peoples shall have the right to veto at least those projects with potentially far-reaching adverse consequences on their lands—a risk that is inherent to all uranium mining projects—is also mirrored in several other international legal documents. For example, the United Nations Development Group (UNDG) Guidelines on Indigenous Peoples' Issues define the right to FPIC generally merely as 'absence of coercion, intimidation or manipulation, that consent has been sought sufficiently in advance of any authorization or commencement of activities, that respect is shown for time requirements of indigenous consultation/consensus processes and that full and understandable information on the likely impact is provided'.[96] Accordingly, as a general rule, an actual consent is not required as long as there have been meaningful consultations in good faith. Yet, at the same time, the Guidelines stipulate that '[t]his process may include the option

[93] Barelli 2009, pp. 966–967; Charters 2007, p. 123.

[94] Emphasis added by author.

[95] Emphasis added by author.

[96] UNDG 2008, p. 13.

of withholding consent'.[97] Hence, they provide for a gradation of the requirements in regard to FPIC. The graver the consequences of a project, commensurately, greater the level of participation required on behalf of the indigenous groups concerned. In case of uranium mining on indigenous lands, this can only mean that without the express consent of the indigenous groups concerned, the project may not be carried out.

This gradation of requirements in regard to the right to FPIC depending on the potential adverse impact of a project can also be found in decisions and concluding observations of the UN human rights treaty bodies. For example, the UN Human Rights Committee in its decision *Ángela Poma Poma versus Peru* stipulated that measures 'which substantially compromise or interfere with the culturally significant economic activities of a minority or indigenous community […] require[s] not mere consultation but the free, prior and informed consent of the members of the community',[98] whereas in other cases, 'broad consultations' may be sufficient.[99] Likewise, the Committee on the Elimination of Racial Discrimination has in some of its decisions required that the consent of indigenous peoples has to be obtained,[100] whereas in other decisions, it merely required that the consent be sought[101]—depending on the impact of the respective project.[102]

On the regional level, such considerations also exist. The Asian Development Bank in its Safeguard Policy Statement of 2009 limits the right of indigenous peoples to FPIC to 'commercial development of natural resources within customary lands under use that would impact the livelihoods or on cultural, ceremonial, or spiritual uses of the lands that define the identity and community of Indigenous Peoples'.[103] The Inter-American Development Bank also generally requires merely consultations

---

[97] Ibid, p. 28.

[98] *Ángela Poma Poma versus Peru* (2009) UN Human Rights Committee, Comm No 1457/2006, UN Doc. CCPR/C/95/D/1457/2006, para 7.6.

[99] *Apirana Mahuika et al. vs. New Zealand* (2000) UN Human Rights Committee, Comm No 547/1993, UN Doc. CCPR/C/70/D/547/1993, para 9.8.

[100] Concluding Observations on Ecuador (2003), UN Doc. CERD/C/62/CO/2, para 16; see also Concluding Observations on Australia (2000), UN Doc. CERD/C/304/Add.101, para 9; Concluding Observations on the United States of America (2001), UN Doc. CERD/C/59/Misc.17/Rev.3, para 21; Concluding Observations on Ecuador (2008), UN Doc. CERD/C/ECU/CO/19, para 16; Concluding Observations on the Philippines (2009), UN Doc. CERD/C/PHL/CO/20, para 24; see also CERD Early Warning Urgent Action Letters to Belize, Brazil, Botswana, India, Indonesia, Canada, Niger, Panama, Papua New Guinea, Peru, the Philippines and the USA (73th–80th meeting, 2008–2012), in which the CERD repeatedly demanded compliance with the principle of FPIC. www2.ohchr.org/english/bodies/cerd/early-warning.htm.

[101] See for example Concluding Observations on Russia (2008), UN Doc. CERD/C/RUS/CO/19, para 24, in which Russia requested '[t]o seek the free informed consent of indigenous communities and give primary consideration to their special needs prior to granting licences to private companies for economic activities on territories traditionally occupied or used by those communities'; see also Concluding Observations on Chile (2009), UN Doc. CERD/C/CHL/CO/15-18, para 16.

[102] See also International Law Association 2012, pp. 4–6.

[103] Asian Development Bank 2009, para 33.

'*with a view* to reaching agreement or obtaining consent'.[104] Yet, projects with 'particularly significant potentially adverse impacts' will only be approved if the project proponent can prove that consent of the affected indigenous peoples has been obtained.[105] The proposed American Declaration on the Rights of Indigenous Peoples (ADRIP) drafted by the Organization of American States does also not contain a general right to FPIC. Draft Article XXII(2) ADRIP merely obliges States to 'consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions *in order to obtain their free, prior and informed consent* before adopting and implementing legislative or administrative measures that may affect them'.[106] However, like the UNDRIP, the ADRIP envisages certain situations in which a project may not proceed without the express consent by the indigenous groups concerned. According to draft Article XVIII(6), 'States shall prohibit and punish, with the full and effective participation of indigenous peoples [and their consent], the introduction, abandonment, dispersion, transit, use, or deposit of any harmful substance, including […] nuclear, radioactive, chemical, and biological materials […] that can directly or indirectly affect indigenous communities, lands '[territories] and resources'. Hence, under the proposed ADRIP in its current version, uranium mining on indigenous land would only be permissible with the express consent of the indigenous groups concerned.

The Inter-American Court of Human Rights (IACtHR) has also tried to reconcile, on the one hand, the demands of indigenous peoples to have the right to say 'no' to projects on their lands that might affect them, and, on the other hand, the concerns of States to be unduly restricted in their autonomy of actions and decision-making, in particular their right to economic development. In its decision *Saramaka People versus Suriname*, the IACtHR stipulated that the right of indigenous peoples to effective participation was generally to be understood as a right to 'consultations […] in good faith, through culturally appropriate procedures and with the objective of reaching an agreement' but not as a duty on behalf of the States to refrain from approving projects the indigenous peoples concerned have not consented to.[107] However, the Court stated that the situation was different regarding 'large-scale development or investment projects that would have a major impact' within the respective indigenous peoples' territory. Regarding such projects, States were obliged 'not only to consult with the [indigenous peoples concerned], but also to obtain their free, prior, and informed consent, according to their customs and traditions'.[108] In its *Endorois* decision, the African Commission on Human and Peoples' Rights (ACommHPR) fully shared the IACtHR's view.[109]

---

104 Inter-American Development Bank 2006a, p. 6; emphasis added by author.

105 Inter-American Development Bank 2006b, p. 39; see also ibid. p. 43.

106 Emphasis added by author.

107 *Saramaka People versus Suriname* (2007) IACtHR, Series C No 172, para 133.

108 Ibid., para 134.

109 *Centre for Minority Rights Development (Kenya) and Minority Rights Group International on Behalf of Endorois Welfare Council versus Kenya* (2010) ACommHPR, Comm No 276 / 2003, para 291.

This balancing of interests has also been endorsed by two UN institutions established to protect and promote indigenous peoples' rights: the UN Special Rapporteur on the Situation of Human Rights and Fundamental Freedoms of Indigenous Peoples and the Expert Mechanism on the Rights of Indigenous Peoples. In his observations on the situation of indigenous peoples in Ecuador on the occasion of the constitutional amendment process in 2008, UN Special Rapporteur James Anaya stated:

> States have a firm obligation to undertake consultations with indigenous peoples before adopting measures that may directly affect their interests, and those consultations should be aimed at reaching a consensus concerning those measures […]. But what happens if consensus is not reached after a good faith procedure in which the indigenous party had participated fully and adequately? In general terms, in virtue of the principle of indigenous peoples' self-determination, as well as for practical reasons, the State should not proceed with a project that affects directly an indigenous community without their consent. However, this does not imply an absolute veto power. [Only] [i]n those situations in which the [proposed] measure may have substantial impacts that may endanger the basic physical or cultural well-being of the indigenous community concerned, [does the State have] the duty not to adopt a measure without the community concerned, as affirmed by the Inter-American Court of Human Rights in the *Saramaka versus Suriname* case.[110]

He confirmed this statement in his report to the Human Rights Council of 2009, in which he explained that 'the strength or importance of the objective of achieving consent varies according to the circumstances and the indigenous interests involved' and that '[a] significant, direct impact on indigenous peoples' lives or territories establishes a strong presumption that the proposed measure should not go forward without indigenous peoples' consent'.[111] Likewise, the Expert Mechanism on the Rights of Indigenous Peoples has referred to the particular significance of the principle of FPIC with regard to projects or measures that have a substantial impact on indigenous communities like, for example, large-scale natural resource extraction on their traditional territories.[112]

In summary, the right of indigenous peoples to FPIC is widely recognised under international law. Yet, not every project on indigenous peoples' land requires the affected communities' express consent. In most cases, good faith negotiations aimed at reaching a consensus suffice. In all cases, however, in which the proposed project has significant potential adverse impact on indigenous lands and—consequently—on the communities attached to these lands, the indigenous peoples' right to FPIC amounts to a right to veto the project and the corresponding duty of States not to approve it. A reoccurring example of projects with significant adverse influences are large-scale resource extractions. Uranium mining projects have to

---

[110] See *Observaciones del Relator Especial sobre la situación de derechos humanos y libertades fundamentales de los indígenas acerca del proceso de revisión constitucional en el Ecuador*, paras 39–40, printed in Anaya 2008, paras 39–40 (translation by Rodríguez-Piñero 2011, pp. 473–474; footnotes omitted).

[111] Anaya 2009, para 47; see also ibid., paras 48–49.

[112] UN Expert Mechanism on the Rights of Indigenous Peoples 2010, para 34.

be subsumed hereunder. All uranium mining projects have in common that they pose a great potential danger to the environment, which can never be completely eliminated. Uranium mining inevitably produces large amounts of radioactive, carcinogenic wastes with a half-live of thousands of years. These wastes are typically stored near the mine sites. In case these hazardous wastes are released in the water, air or on the land—either by negligence or due to an unpredictable natural disasters—whole areas can become uninhabitable and resources, on which indigenous communities have physically and culturally depended for millennia, rendered permanently unusable. Since this poses an imminent risk of a permanent severance of the spiritual connection of an indigenous people to its ancestral lands and thus a threat to the survival of the indigenous people's culture *per se*, uranium mining may never be carried out on an indigenous people's ancestral land without its express prior and informed consent. That the inevitable generation of hazardous waste during the mining process and its storage on indigenous lands is only permissible with the consent of the indigenous communities concerned, today should be regarded as a principle of customary international law, which has—for reasons of clarification—also been included in the UNDRIP and the proposed ADRIP. That 'indigenous lands' cover all lands to which indigenous peoples still have a special spiritual connection and not only those lands which have been assigned to indigenous groups by the State is generally recognized.[113]

Consequently, the national legal systems of the US and Australia, which deny indigenous peoples the right to veto uranium mining projects on their ancestral lands or restrict this right to lands, which have been assigned to them by the State, are not in accordance with the States' obligations under international law. The Canadian legal system, on the other hand, needs to be commended. It not only recognises the potential existence of a constitutionally protected aboriginal title in all parts of Canada where this title has not been clearly and plainly extinguished by treaty or legislation in the past, but also allows for gradations of indigenous peoples' participatory rights depending on the severity of the potential consequences of a proposed project—even if the existence of an aboriginal title has not yet been definitely established. Therefore, with regard to uranium mining, the Canadian system seems to be in accordance with minimum requirements under international law. However, it remains to be seen how the obligations of the Crown (State) towards indigenous peoples will be applied and interpreted in practice if highly

[113] See for example Articles 13(1) and 14(1) ILO Convention 169 and ILO Committee of Experts, 'Observations on Peru' (adopted 2002, published 2003 (91st session)), para 7; see also Feiring 2009, p. 94; Articles 25 and 26 UNDRIP; Article XXIV(1); *Mayagna (Sumo) Awas Tingni Community versus Nicaragua* (2001) IACtHR, Series C No 79, paras 149 and 151; *Moiwana Community versus Suriname* (2005) IACtHR, Series C No 124, paras 130–135; *Sawhoyamaxa Indigenous Community versus Paraguay* (2006) IACtHR, Series C No 146, para 128; *Saramaka People versus Suriname* (2007) IACtHR, Series C No 172, paras 93 and 96; *Centre for Minority Rights Development (Kenya) and Minority Rights Group International on Behalf of Endorois Welfare Council versus Kenya* (2010) ACommHPR, Comm No 276 / 2003, paras 190 and 196–209; Cobo 1986, paras 511–520.

profitable uranium mining on lands, to which indigenous peoples hold a potential aboriginal title, is at stake in case the indigenous peoples concerned withhold their consent.[114]

8.5 Conclusions and Recommendations

Due to the many negative experiences of the past as well as the inevitable risks associated with uranium mining, exploitation of uranium on indigenous lands is a very sensitive issue. The rejection of uranium exploration and exploitation on its lands is an expression of an indigenous people's right to self-determination,[115] which has to be respected by the respective home States—not only for moral reasons but also as a legal obligation under international law.

This does not mean, however, that all uranium deposits on indigenous lands have to remain unexploited forever. Instead, it merely means that it should be up to indigenous peoples to decide on their path of development. With the recent dramatic increase in prices for uranium, several indigenous peoples might reconsider their position on uranium mining on their lands. The recent developments in northern Canada and Greenland indicate the likelihood of such a development. The revenues generated by uranium mining could be used to tackle the terrible social problems with which many indigenous communities are faced. Furthermore, their own source of income would invariably mean less financial dependency on the federal government and thus a greater degree of autonomy of the indigenous peoples concerned. In addition, the opening of mines generally leads to the creation of new jobs, the improvement of the regional infrastructure and improvements in the local economy. Yet, it has to be ensured that this time the affected indigenous communities adequately participate in the benefits. This includes adequate extraction royalty rates for the affected indigenous communities, the benefit of jobs for the local indigenous population in conjunction with the promotion of skills and training opportunities, and fair and decent wages and working conditions. Furthermore, indigenous peoples should have a greater say in the way uranium mining is carried out on their lands. Indigenous peoples' representatives should sit on boards

[114] Currently, the province of Saskatchewan is the only political unit within Canada with active uranium mines. Since the entire area of Saskatchewan is covered by colonial cession treaties, it is generally assumed that indigenous peoples cannot claim any aboriginal rights and titles within this province.

[115] Regarding the inherent right of all peoples to self-determination, see Articles 1(2) and 55 Charter of the United Nations; Article 1(1) and (2) International Covenant on Civil and Political Rights (adopted 16 December 1966, entered into force 23 March 1976) 999 UNTS 171; Article 1(1) and (2) International Covenant on Economic, Social and Cultural Rights (adopted 16 December 1966, entered into force 3 January 1976) 993 UNTS 3. That the right of peoples to self-determination extends to indigenous peoples is made clear in para 17 of the preamble of UNDRIP and in Article 3 UNDRIP.

established to supervise the compliance with safety standards, and the mining contracts should contain clauses stipulating that uranium mining companies will be held accountable for all potential environmental damages resulting from mining activities.

Whereas the indigenous peoples—and not the State—should lead the negotiations, be parties to the mining contracts and have the final say, the government should be involved in the negotiations since only States are equipped with the necessary financial and human resources to be on a level playing field with the financially strong mining companies and thus can ensure balanced and fair contracts.

Furthermore, the decision-making process within the affected indigenous communities must be in accordance with democratic standards. The decision, whether uranium mining should be permissible on an indigenous people's ancestral lands, has potentially far-reaching consequences for the entire community as a whole, and therefore such a decision should not be made by a small group of people, for example the tribal councils. Instead, uranium mining on indigenous lands should only be carried out following a majority vote in a referendum. Before such a referendum takes place, the indigenous communities should be adequately informed on the potential benefits and risks of uranium mining on their lands, and advised by independent experts.

Ultimately, it must be solely up to the indigenous peoples concerned whether they are willing to take the risk of uranium mining on their lands, or whether they prefer to leave uranium in the ground and forego the financial benefits associated with uranium exploitation. In any case, the previous situation, in which the mining companies and the society at large enjoyed the benefits of uranium mining, whereas the indigenous peoples bore the risks without receiving adequate consideration, must not repeat itself.

References

African Commission on Human and Peoples' Rights (2005) Report of the African commission's working group of experts on indigenous populations/communities. www.iwgia.org/iwgia_files_publications_files/African_Commission_book.pdf

Anaya J (2004a) International human rights and indigenous peoples: the move toward the multicultural state. Ariz J Int Comp Law 21:13–62

Anaya J (2004b) Indigenous peoples in international law, 2nd edn. Oxford University Press, Oxford

Anaya J (2008) Report of the UN special rapporteur on the situation of human rights and fundamental freedoms of indigenous peoples: addendum: summary of cases transmitted to governments and replies received. UN Doc. A/HRC/9/9/Add.1, Annex 1

Anaya J (2009) Report of the UN special rapporteur on the situation of human rights and fundamental freedoms of indigenous peoples. UN Doc. A/HRC/12/34

Asian Development Bank (2009) Safeguard policy statement. www.adb.org/sites/default/files/pub/2009/Safeguard-Policy-Statement-June2009.pdf

Australian Bureau of Statistics (2009) 3238.0: experimental estimates and projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2009. www.abs.gov.au/ausstats/abs@.nsf/ProductsbyReleaseDate/7B8E83A5E4FFADCCCA25762A001CFB79?OpenDocument

Baluarte DC (2004) Balancing indigenous rights and a state's right to develop in Latin America: the inter-American rights regime and ILO convention 169. Sustain Dev Law Policy 4(2):9–15

Barelli M (2009) The role of soft law in the international legal system: the case of the United Nations declaration on the rights of indigenous peoples. ICLQ 58:957–983
Barnhart RK (ed) (2003) Chambers dictionary of etymology. Chambers, Edinburgh
Bernauer W (2012) Uranium territory. The dominion. www.dominionpaper.ca/articles/4532
Cameco Corp. (2012) Uranium price: spot price history. www.cameco.com/investors/uranium_prices_and_spot_price/spot_price_complete_history/
CBS News (2011) Uranium mining rejected at Iqaluit public forum. www.cbc.ca/news/canada/north/story/2011/03/18/nunavut-uranium-iqaluit-forum.html
Charters C (2007) The road to the adoption of the declaration on the rights of indigenous peoples. NZYIL 4:121–133
Churchill W, LaDuke W (1992) Native North America: the political economy of radioactive colonialism. In: Jaimes MA (ed) The state of native America: genocide, colonization, and resistance. South End Press, Boston, pp 241–266
Cobo JRM (1986) Study of the UN special rapporteur of the sub-commission on prevention of discrimination and protection of minorities of the problem of discrimination against indigenous populations. UN Doc. E/CN.4/Sub.2/1986/7/Add.4
Cole MD (2009) Das Selbstbestimmungsrecht indigener Völker: eine völkerrechtliche Bestandsaufnahme am Beispiel der Native Americans in den USA. Duncker and Humblot, Berlin
Daes E-I A (1996) Working paper by the chairperson and special rapporteur of the UN working group on indigenous populations on the concept of 'indigenous peoples'. UN Doc. E/CN.4/Sub.2/AC.4/1996/2
Dannenmaier E (2008) Beyond indigenous property rights: exploring the emergence of a distinctive connection doctrine. Wash Univ Law Rev 86:53–110
Diehl P (2011) Uranium mining and milling wastes: an introduction. www.wise-uranium.org/uwai.html
Dow C, Gardiner-Garden J (1998) Background paper 15 1997–1998: indigenous affairs in Australia, New Zealand, Canada, United States of America, Norway and Sweden. www.aph.gov.au/library/pubs/bp/1997-98/98bp15.htm
Dowie M (2009) Harm subsidies. Guernica. www.guernicamag.com/features/enemy_mine/
Dowie M (2009) Nuclear caribou. January/February 2009 Orion. www.orionmagazine.org/index.php/articles/article/4247/
Eichstaedt PH (1994) If you poison us. Red Crane Books, Santa Fe
Feiring B (2009) Indigenous & tribal people's rights in practice: a guide to ILO Convention No. 169. www.ilo.org/wcmsp5/groups/public/—ed_norm/—normes/documents/publication/wcms_106474.pdf
Frost SE (1998) Waste management in the uranium mining industry. www.world-nuclear.org/sym/1998/frost.htm
Honor the Earth (2012) Annual report 2011–2012. www.honorearth.org/sites/honorearth.org/files/2011-12_HTE_AR%20final.pdf
Hualapai Department of Natural Resources (—) National Environmental Policy Act. hualapai.org/nepa.html
Indian and Northern Affairs Canada (1992) Schedule of Indian bands, reserves and settlements including membership and population, location and area, in hectares. Indian and Northern Affairs Canada, Ottawa
Indian and Northern Affairs Canada (2011) General briefing note on Canada's self-government and land claims policies and the status of negotiations. www.ainc-inac.gc.ca/al/ldc/ccl/pubs/gbn/gbn-eng.asp
Inter-American Development Bank (2006a) Operational policy 765 on indigenous peoples. http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=2032081
Inter-American Development Bank (2006b) Strategy 2387-5 for indigenous development. http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=2032081
International Law Association (2012) Final report Sofia (2012): rights of indigenous peoples. www.ila-hq.org/en/committees/index.cfm/cid/1024
Isaac T (2004) Aboriginal law: commentary, cases and materials. Purich, Saskatoon

Johansen BE (1997) The high cost of uranium in Navajoland. Akwesasne Notes New Series 2(2):10–12. Reproduced at www.ratical.org/radiation/UraniumInNavLand.html
Kelly DG Jr (1975) Indian title: the rights of American Natives in land they have occupied since time immemorial'. Columbia Law Rev 75:655–686
Kingsbury B (1998) Indigenous peoples' in international law: a constructivist approach to the Asian controversy. AJIL 92:414–457
LaDuke W (2009) Uranium mining, native resistance, and the greener path. Orion (January/Februray 2009), www.orionmagazine.org/index.php/articles/article/4248
LaDuke W (2010) Building a green economy (talk at Missouri State University, April 2010). www.youtube.com/watch?v=X50ke0xaxy4
McNamara P (2009) Nuclear genocide in Canada: part 1. www.porthopehistory.com/nuclear genocide/nuclear genocide_index.htm
McRae H et al (2009) Indigenous legal issues: commentary and materials, 4th edn. Reuters, Sydney
Mitchell J (1997) Forest Service national resource guide to American Indian and Alaska Native relations. www.fs.fed.us/people/tribal/
Nash DR, Burke CE (2006) The changing landscape of Indian estate planning and probate: the American Indian Probate Reform Act. Seattle J Soc Justice 5:121–179
Nettheim G (1999) The search for certainty and the Native Title Amendment Act 1998 (Cth). UNSW Law J 22:564–584
Newton NJ et al (eds) (2005) Cohen's handbook of federal Indian law, 3rd edn. LexisNexis/Matthew Bender, Newark
Nunavut Tunngavik Inc. (2007) Policy concerning uranium mining in Nunavut, http://makitanunavut.files.wordpress.com/2012/07/ntiuraniumpolicy.pdf
Paladin Energy, company profile (2012) Labrador: an emerging uranium district in Canada. Mining Journal (Supplement April 2012), www.nr.gov.nl.ca/nr/mines/investments/Uranium_2012_scr%2014.pdf
Parliament of Australia—Senate Committee (1997) Uranium mining and milling in Australia: indigenous concerns, www.aph.gov.au/Parliamentary_Business/Committees/Senate_Committees?url=uranium_ctte/report/d07.htm#52
Pollack DP (2001) Indigenous land in Australia: a quantitative assessment of indigenous land-holdings in 2000, http://caepr.anu.edu.au/sites/default/files/Publications/DP/2001_DP221.pdf
Reiter RA (1996) The law of Canadian Indian treaties, 2nd edn. Juris Analytica, Edmonton
Rodríguez-Piñero L (2011) The Inter-American system and the UN declaration on the rights of indigenous peoples: mutual reinforcement. In: Allen S (ed) Reflections on the UN declaration on the rights of indigenous peoples. Hart, Oxford, pp 457–483
Rogers S (2011) Rosy financial future lies ahead for NTI: Towtongie. Nunatsiaq Online, www.nunatsiaqonline.ca/stories/article/65674rosy_financial_future_ahead_for_nti_towtongie/
Segal A (2012) Uranium mining and the Navajo Nation: legal injustice. South Calif Rev Law Soc Justice 21:355–397
Simpson T (1997) Indigenous heritage and self-determination: the cultural and intellectual property rights of indigenous peoples. IWGIA, Kopenhagen
Slattery B (1987) Understanding aboriginal title. Can Bar Rev 66:727–783
Southwest Research and Information Center (2008) Communities and uranium: the work continues. 9(2) Voices from the Earth. www.sric.org/voices/2008/v9n2/Voices_Summer08_uranium.pdf
Statistics Canada (2009) Employment and unemployment rates for the First Nations identity population and the registered Indian population (aged 25 to 54) living on and off reserve, Canada, 2001 and 2006. www12.statcan.ca/census-recensement/2006/as-sa/97-559/table/t7-eng.cfm
Stephenson MA (2002) Resource development on aboriginal lands in Canada and Australia. James Cook Univ Law Rev 9:21–73
Tehan M (1993) Practising land rights: the Pitjantjatjara in the Northern Territory, South Australia and Western Australia. Aust Q 65(4):34–54

Triggs G (1999) Australia's indigenous peoples and international law: validity of the Native Title Amendment Act 1998 (Cth). Melb Univ Law Rev 23:372–415

UN Department of Economic and Social Affairs (2009) State of the world's indigenous peoples. United Nations, New York, UN Doc. ST/ESA/328

UN Expert Mechanism on the Rights of Indigenous Peoples (2010) Progress report on the study on indigenous peoples and the right to participate in decision-making. UN Doc. A/HRC/EMRIP/2010/2

UN News Centre (2010) United States' backing for indigenous rights treaty hailed at UN (press release 17 December 2010), www.un.org/apps/news/story.asp?NewsID=37102

UNDG (2008) Guidelines on indigenous peoples' issues, www2.ohchr.org/english/issues/indigenous/docs/guidelines.pdf

US Congress - Senate (2010) Hearing before the Committee on Indian Affairs: S. Hrg. 111-580: unemployment on Indian reservations at 50 percent—the urgent need to create jobs in Indian country (106th Congress, 28 January 2010), www.indian.senate.gov/public/_files/January2820102.pdf

Utter J (2001) American Indians: answers to today's questions. University of Oklahoma Press, Norman

Vestergaard C, Bourgouin F (2012) Should Greenland mine its uranium. April 2012 DIIS Policy Brief, http://subweb.diis.dk/graphics/Publications/Policybriefs2012/PB_should-Greenland-mine

World Bank (2005) Operational Policy 4.10: indigenous peoples, www.worldbank.org

World Nuclear Association (2011) The nuclear renaissance, www.world-nuclear.org/info/inf104.html

World Nuclear Association (2012) World uranium mining, www.world-nuclear.org/info/inf23.html

Xemplar Energy Corp. (2007) Uranium: the global energy market, http://xemplar.ca/uranium_global_energy.php