

ONTARIO
SUPERIOR COURT OF JUSTICE

B E T W E E N:

MISSISSIPPI WATERSHED SETTLERS,
through its representative Plaintiff David Martin and
OTTAWA WATERSHED SETTLERS,
through its representative Plaintiff Jeremy Wright

Plaintiffs

- and -

HER MAJESTY THE QUEEN IN RIGHT OF ONTARIO

Defendant

NOTICE OF INTENDED CLAIM

Proceedings under the Class Proceedings Act 1992, S.O. 1992, C6

TO THE DEFENDANT:

TAKE NOTICE that the Plaintiffs intend to commence a claim against Her Majesty the Queen in the Right of Ontario for declaratory relief regarding the unconstitutionality of the *Mining Act*, R.S.O. 1990 C.M.14 as it relates to uranium mining and all phases of mining operation as it relates to uranium mining. The Plaintiffs contend that the Government of Ontario is failing in its duty to protect its citizens against the clear and present dangers of uranium exploration, mining and processing. Furthermore, the Plaintiffs intend to seek current and future damages for: (a) loss of value to property owned, occupied or used by Class Members, including the complete devaluation of certain properties, and loss of the ability to sell, finance or mortgage numerous properties; (b) health & environmental impacts, and (c) lost potential income from traditional land uses, including eco-tourism, hunting, fishing, agriculture and other recreation. Additionally, the Class Members will seek punitive and/or aggravated damages, along with costs of the action on a substantial indemnity basis.

Particulars of the Claim

1. The Plaintiffs will seek the following in a claim to be commenced within sixty(60) days of this Notice pursuant to the *Class Proceedings Act* 1992, S.O. 1992, C6:

- a) an Order certifying the intended proceeding as a Class Proceeding and appointing the Plaintiffs as the representative Plaintiffs for the class and any appropriate subgroup thereof;
- b) a declaration that the *Mining Act*, R.S.O. 1990 C.M.14 and regulations thereunder (“Mining Act regime”), as it applies to uranium exploration, mining and processing activity is unconstitutional as it violates the Plaintiffs’ rights expressed in Section 1(a) of the *Canadian Bill of Rights*, where, “It is hereby recognized and declared that in Canada there have existed and shall continue to exist without discrimination by reason of race, national origin, colour, religion or sex, the following human rights and fundamental freedoms, namely,... (a) the right of the individual to life, liberty, security of the person and enjoyment of property, and the right not to be deprived thereof except by due process of law.”;
- c) a declaration that the Mining Act regime as it applies to uranium exploration, mining and processing activity is unconstitutional as it violates the Plaintiffs’ rights expressed in Section 7 of the Charter of Rights and Freedoms, which state: “Everyone has the right to life, liberty and security of the person and the right not to be deprived thereof except in accordance with the principles of fundamental justice.”;

- d) the Plaintiffs claim entitlement to a remedy pursuant to Section 24 of the Charter, including a moratorium on uranium mining in the Province of Ontario, allowing for the environmental and health impacts of uranium mining to be the matter of a public inquiry;
- e) a declaration that the Crown was negligent in being silent on uranium in the Mining Act regime, in that uranium is capable of radioactivity at every stage of the mining scheme, yet the hazards are neither identified nor dealt with anywhere in the Mining Act regime;
- f) a declaration that the purpose of the Mining Act regime, to wit: "... to encourage prospecting, staking and exploration for the development of mineral resources and to minimize the impact of these activities on public health and safety and the environment through rehabilitation of mining lands in Ontario" does not adequately address the special properties of uranium and is silent on the known hazards of uranium throughout the Mining Act regime;
- g) general damages based on the tort of nuisance for loss of value of properties owned, occupied or used by Class Members, including: (a) the complete devaluation of certain properties, and loss of the ability to sell, finance or mortgage numerous properties in amounts to be proved at the trial of this matter; (b) health & environmental impacts; and (c) lost potential income from traditional land uses, including eco-tourism, hunting, fishing, agriculture and recreation.

- h) punitive or aggravated damages for the failure of the Crown to address the issue of uranium exploration, mining and processing anywhere in the Mining Act regime, given that uranium exploration and mining poses very high health and safety risks for ordinary citizens in proximity to this type of activity;
- i) punitive or aggravated damages for having to come to the assistance of the Algonquin Nation while the honour of the Crown and its obligation to the First Nation and in particular, its duty to consult, is at issue;
- j) costs of the action and costs of preparation of the Notice of Intended Claim on a substantial indemnity basis; and
- k) such further and other relief that a Superior Court of Justice may provide.

2. The Plaintiff, David Martin, resides at 1076 Carson Trail Palmerston Highlands, near Snow Road Ontario, on the Mississippi River Watershed, in close proximity to the proposed uranium mine known as Robertsville mine, operated by Frontenac Ventures Corporation and licenced by the Crown pursuant to the Mining Act regime and is representative of many residents of the Mississippi River Watershed system who are directly impacted by the current and future airborne pollution hazards of uranium exploration, mining and processing the impact on the water (surface and underground) in the area by uranium mining and exploration, the short and long term health hazards, such as cancers, bone decay, leukemia, and anaemia brought on by the fallout from uranium mining, exploration and processing.

3. The Plaintiff, Jeremy Wright resides in Ottawa, Ontario on the Ottawa River, which has the Mississippi River and Rideau Rivers flowing into it. He is representative of

people who live downwind and within the water system that would potentially be affected by the adverse impacts of uranium exploration and mining.

Description of Class Members

4. The representative plaintiffs will bring this action on behalf of all those affected by uranium exploration, mining and processing in the Mississippi watershed zone and the Ottawa River watershed zone where the Mississippi River flows into it, south to Ottawa and thence into the St Lawrence.

5. The present exploration and potential uranium mine by Frontenac Ventures Corporation, known as the Robertsville mine is the catalyst for this action.

6. The exploration and proposed uranium mining in the area by other mining companies is also contemplated in this notice and subsequent class action. The Class Members are mindful of the concerns of ordinary people in the Rideau Lakes and the Rideau River watershed, and in Western Quebec and more generally throughout Eastern Ontario and Western Quebec.

Uranium and its Unique Properties

7. It is submitted that uranium is quite unique in its properties when compared with other minerals that may be the subject of mining activity in Ontario. It is submitted that the Mining Act regime does not take the effects of toxic substances on people or the environment into account, unfairly exposing the Class Members to unusual risks not addressed by the legislation, adversely affecting public health, safety and the environment. Worse, uranium is radioactive with a half life measured in thousands and millions of years. While some uses of radio-active materials under carefully controlled conditions in the medical field are clearly beneficial, its principal uses are for fuel for

nuclear reactors, nuclear bombs, and weapons using depleted uranium (DU). Public scepticism of the nuclear industry claims that uranium is safe began with Hiroshima and Nagasaki and has been growing due to the massive and increasing medical and scientific evidence to the contrary. The public has noted the lack of any effective regulatory and inspection systems in the public interest with respect to safe mining, processing, transportation, use, and ultimate disposal of the tailings and spent waste.

8. Uranium as a pure element exists naturally in three forms; uranium-238, uranium-235 and uranium-234. Each of these forms, called isotopes, acts chemically similar, but has a different number of neutrons in the nucleus of the atom. These three isotopes of uranium have the following characteristics:

Uranium Isotope	% in natural uranium	# of protons	# of neutrons	Half life (in years)
U238	99.27%	92	146	4.46 billion
U235	0.72%	92	143	704 million
U234	0.00055%	92	142	245,000

Each of these three isotopes is radioactive. When a mineral is radioactive, it means that the nucleus of each atom is unstable and, by giving off particles, it is transformed into other elements. Radioactive decay is a spontaneous process in which an atom of one element decays or breaks down into a different element or isotope by losing atomic particles, that is protons, neutrons or electrons. This atomic decay process is often accompanied by a release of penetrating electromagnetic energy in the form of gamma radiation, which is similar to x-rays.

9. When two neutrons bound together with two protons are released in radioactive decay, this cluster is called an *alpha particle*. A released electron together with a neutron changing into a proton is called a *beta particle*. As radioactive particles are given off, the

number beside the next element in the sequence decreases to indicate a lower atomic structure.

Each of these types of radiation, that is, alpha, beta and gamma radiation, have the power to break down chemical bonds and thereby damage or destroy living cells. Alpha particles can be blocked with something as thick and heavy as a sheet of paper or skin and are thus mainly a threat when inhaled or ingested. Although they do not penetrate far because of their large mass, alpha particles plough into adjacent living tissue with a great deal of energy and cause major disruption to cells. Beta particles (electrons) can be blocked by something as thick and heavy as sheet aluminium. These particles can penetrate tissue a bit further than alpha particles but have less mass. They can cause damage to the skin and in the body when ingested. Like X-rays, gamma rays can pass through more than a foot of solid rock. Gamma rays can penetrate from an outside source into organs deep within the body, and require lead shielding to reduce exposure.

10. Exploration of uranium can cause health risks to communities, especially those that already have high background levels of radiation. Taking rock samples can disturb uranium ore and release radon gas and uranium particles into the biosphere. Once exposed to air and moisture, the composition changes - radioactive dust particles are spread by water and air. When drilling occurs, the exploration may disturb underground uranium deposits, which then can leach out into underground water reservoirs, potentially contaminating drinking water aquifers. At this point in time there is no requirement by federal or provincial legislation to monitor exploration for uranium in Ontario.

11. Uranium ore is either dug out of the ground or the uranium is leached from the ore in the mine. Typically these mines are built to last in the order of 15 years. Drilling and

blasting are used in either open pit (strip-mining) or underground mines. Because uranium deposits found in Ontario are generally found in such low concentrations, huge amounts of rock must be mined. For every one tonne of uranium ore produced, there are 55 tonnes of tailings produced; when there is a concentration of 1.8 percent (1 tonne equals 1,000 kilograms). In Ontario and Quebec, the uranium content of the ore is often between only 0.1 percent and 0.2 percent.

Before the uranium metal is extracted, the ore must be crushed into finer and finer fragments. After primary crushing, the ore is passed into a rotating ball mill, which grinds the rock into a fine powder. This powder is then treated to remove the uranium. The powder left over from the extraction of the uranium is called *tailings*. The minute size of these particles makes it impossible to keep them completely isolated from workers and the surrounding environment. In addition, the release of decay products of uranium into the biosphere is greatly accelerated.

12. *Tailings* are the left-over sludge after the uranium metal is extracted from the uranium ore. The half-lives of the principal radioactive components of mill tailings, Thorium-230 and Radium-226 are long, 75,000 and 1,600 years respectively. These tailings are pumped into tailing ponds and covered with water to reduce radioactive emissions and to prevent oxidation of sulphide-bearing rock. Some tailings are covered in clay for long-term storage. The clay sill keeps oxygen out of the tailings and reduces the amount of groundwater moving through the radioactive area. In addition to the radioactive hazards, tailings may contain chemically hazardous substances including cyanide, arsenic, lead and mercury, which are able to get into the environment by seepage, leaching and blown dust.

Uranium in eastern Ontario is estimated to be between 0.1 percent and 0.2 percent. This means that for every kilogram of eastern Ontario uranium oxide produced, about one million (1,000,000) kilograms of ground up rock will be dumped into manmade lakes, also call *tailing ponds*.

Radon Gas

13. During uranium exploration and mining, huge quantities of radon gas are released into the air and dissolved in surface waters. Dr. Gordon Edwards, a world-recognized expert in nuclear issues, states: “Mining uranium releases large amounts of radioactive radon gas, which is much heavier than air. The radon will follow the path of the prevailing winds in eastern Ontario, from west to east, depositing solid radioactive fallout (mainly radioactive lead and polonium) on a wide swath of land from Sharbot Lake to the City of Ottawa and beyond. Such radioactive deposits, entering into the food chain, will pose a gradually accumulating health risk to the population – especially children.”. The US Surgeon General has determined that radon is the second leading cause of lung cancer after cigarette smoking. In fact, thousands of Canadians die every year from exposure to radon gas. Exposure to radiation is damaging to health, affects reproductive capability and shortens life expectancy.

When Radon-222 gas is released from a uranium exploration site or mine, it deposits solid radioactive dust on the ground for hundreds of miles downwind from the mine site. The Radon-222 and all of its radioactive decay chain products release twelve times as much radiation as is in the Uranium-238 itself. These solid particles that form when Radon-222 decays quickly become Lead-210 which has a half-life of 22.3 years.

This results in radioactivity that will be measurable in the area for more than 100 years after the mine is closed.

14. When uranium deposits are disturbed by exploration, mining extraction or processing, uranium and its “daughter” products are released through radioactive decay processes. These products include thorium, polonium, radium, radon gas and others. Each of these daughter products is more deadly than the uranium itself. These decay products are normally released extremely slowly over ten of thousands of years, but disturbing uranium deposits causes the decay to occur immediately.

15. Focusing on radon gas, Dr. Gordon Edwards, an internationally recognized expert on nuclear issues states: “mining uranium releases large amounts of radioactive radon gas, which is much heavier than air. In eastern Ontario, the radon gas will follow the path of the prevailing winds, from west to east, depositing solid radioactive fallout (mainly radioactive lead and polonium) on a wind swath of land from Sharbot Lake to the city of Ottawa and beyond. Such radioactive deposits, entering into the food chain, will pose a gradually accumulating health risk to the population- especially children. When radon gas is allowed to build up in an enclosed space, such as a mineshaft or basement, the radioactive hazard increases enormously because of the build-up of radon progeny. Conversely, when radon gas migrates through the atmosphere, the solid radon progeny are deposited on the soil and water below, entering into the food chain and hence the bodies of birds, animals fish and insects”.

Potential Health Hazards

16. When alpha emitters are taken into the body by inhalation or ingestion and moved around by the bloodstream, they can sit within the tissues and organs and cause

cumulative damage over years and decades. Alpha, beta and gamma radiation can have a number of effects on human cells, and the cells of other living organisms. These include but are not limited to:

- i. Cell death.
- ii. Irreparable damages, particularly of genetic material, leading to death upon subsequent attempts at cell division.
- iii. Imperfect repair leading to faulty function.
- iv. Imperfect repair involving genetic material, leading to proliferation of altered cells during cell division.
- v. Damage to an imperfect repair of germ cells leading to transmission of damage to succeeding generations.

17. Accelerated cell death from any cause generates the necessity for accelerated cell division to effect repair of the damaged tissue or organ. If surrounding cells, attempting to effect this repair, are damaged genetically, their progeny will carry this damage. This is one of the mechanisms involved in the production of cancers. Alpha emitting substances within the body are well designed to create this scenario and are known to do so.

18. In addition to undergoing radioactive decay, uranium and many of its progeny are toxic in their own right as heavy metals, affecting the kidney, brain and other organs. In nature, uranium occurs buried in rock formations, exposed only at their surfaces to leaching and transmission by air and water. Radon gas, produced by decay of uranium, is trapped within rock until it decays further into Lead 206, as are other radioactive decay products. As soon as this rock is disturbed, by drilling, blasting, crushing or other

processes, these trapped radioactive substances are free to migrate through air and water into the environment. They cannot be put back.

19. Mining exploration can be instrumental in releasing these substances, as can the mining process itself. Drill holes penetrating rock up to 200 metres can allow the release of radon gas, and can link uranium bearing strata with aquifers. Allowing the migration of soluble uranium compounds into groundwater. Mining, including open pit mining as proposed in eastern Ontario, and milling, which typically occurs at or near the mine site, and deposition of tailings in tailing containments will release into the environment many times background levels of radioactive and heavy metal contamination.

20. From the Mississippi Watershed this contamination will be spread downstream and downwind to population centres including the city of Ottawa. The abundant lakes and rivers west of Sharbot Lake include the Rideau Lakes and the Rideau River, while those north of Sharbot Lake drain into the Mississippi River, which itself empties into the Ottawa River, upstream from the City of Ottawa. This is a natural highway for water-borne radioactive materials, which will end up in Ottawa's drinking water. There is little evidence that current "best mining practices" will be able to prevent this, although they may slow it down. The half-life of thorium, the principal radioactive contaminant left behind in tailings after uranium is extracted, and which bears most of the original radioactivity of the rock, is 77,000 years. During this time it will continuously release radiation and replenish populations of all its radioactive progeny. All currently available tailings disposal protocols require long term maintenance to ensure adequate containment of dangerous material. One period of social unrest or collapse, or one natural disaster in a

7,000 year period will potentially result in massive escape of radioactive material into the environment, or many smaller, slower escapes.

21. Damage due to radiation exposure is cumulative. Individuals experiencing genetic damage due to increased exposures from this project will pass this damage on to their children. This will be added to the damage their children experience from continued environmental exposure. This damage constitutes an unfair burden placed upon individuals and health care systems for many generations to come, for the short term profit of a small number of persons and a society which will soon exhaust the benefit of the uranium extracted. It is generally agreed by the medical community that there are no safe levels of radiation exposure, and that any increased exposure can be expected to result in an increased incidence of cancer and other radiation related illness. In 2005, the US National Academy of Sciences released results of a study reporting: “there is no safe level of exposure to radiation—that even very low doses can cause cancer. Risks from low dose radiation are greater than previously thought.”

22. Current allowable exposure levels are based on “acceptable harm” and do not guarantee safety, either for workers or the general public. Allowable exposure levels have been revised downwards many times since the discovery of radioactivity in the late 19th century, as evidence of harm at yet lower levels comes to light. We have no logical basis on which to assume we have sufficient expertise at our disposal now to plan the future safe radiation exposure of mankind for generations to come. We do not have the knowledge base nor the insight to understand how these exposures will eventually affect all the biological systems they enter, including livestock and crops. Nor are there currently, or foreseeably, any adequate or proven methods of cleanup. To set up this

source of future harm for nearby residents, nearby population centres and our descendants without meaningful means of redress therefore appears unsafe, negligent and irresponsible. We claim that there is a fundamental duty of care which prevails in both the public and private sectors.

23. The uranium which will be extracted from eastern Ontario has two principal uses in our society today: fuel and weapons. These are not mutually exclusive. If we are to accurately assess the damages to ourselves of taking it out of the ground, we must factor in these endpoints. Contamination from these uses will affect but not be limited to local populations. All nuclear reactors currently in use for electrical power generation release radioactive isotopes routinely into the air and into the water that is used as coolant. In addition to this there are non-routine or accidental releases.

24. Preparation of uranium as fuel for reactors or for weapons production can involve the process of enrichment. In this process the isotope U235, which makes up about 1% of natural uranium is concentrated. The remaining uranium, mostly U238, is given the somewhat deceptive label “depleted uranium”, even though it is almost as radioactive as its parent compound, and quite capable of decay. This is currently being used in conventional weaponry, e.g. for armour piercing bullets, in military situation. Bullets containing this material combust on impact and release uranium as an aerosol into the atmosphere, i.e. the environment, where it remains mobile and radioactive for thousands of years. It will contribute to the background exposure of populations for generations to come.

25. One of the many radioactive by-products of uranium used as fuel is plutonium, highly prized for its role in the production of nuclear weapons. Explosion of a nuclear

weapon releases essentially all of its radioactive content and its many daughter isotopes into the environment, quite apart from the damaging effects of the blast. The fission reaction involved in the explosion generates a host of new radioactive isotopes, some of them not found in nature. Spent fuel rods from reactors used in power generation require supervised short term and long term storage. These spent rods are far more radioactive than they were going into the reactor and require cooling for several years with circulating water to avoid a “meltdown” situation, i.e. an uncontrolled fission reaction and resulting explosion. No satisfactory method of long term storage has yet been devised. All of the spent fuel rods used to date are piling up in short term storage facilities, with significant potential for accidental contaminant release. All released contaminants will remain free and mobile in the environment and will contribute to background levels of radioactivity for generations to come.

26. In the exploration process, the release of radon gas, mentioned above, and a widely-recognized carcinogen that affects people and causes lung cancer is present at a mine site for tens of thousands of years. Radon gas has been described as a “polonium delivery system” - a means by which the lethal element polonium (a by-product of radon gas decay) is spread by the wind into the surrounding ground and the water. The release of radioactive matter, into the environment presents a special class of environmental protection problem because radiation cannot, in any known practical way, be neutralized or altered from its natural decay sequence, and it can cause permanent, cumulative, or delayed but irreversible harmful effects in all living organisms. Thus, radioactive materials would require containment during their hazardous lifetime to allay health and environmental concerns.

27. In his book, *Canada's Deadly Secret*, Professor Jim Harding observed as follows: "The hazards from tailings left after the production of yellowcake were thought in 1979 to present the greatest overall threat to public health in the whole nuclear fuel system. The renowned researcher John Gofman suggested that past estimates of the releases of radon gas from the nuclear fuel system may be understated by a factor of 100,000 [Shutdown: Nuclear Power on Trial, J. Gofman]. By 1979 there were already enough tailings in the U.S. to cover a four-lane highway coast-to-coast to a depth of one foot. When uranium mining began, the public was predictably assured that the radioactive tailings could simply be placed back in the mines, but these technological fixes lacked ecological common sense and foresight. Since the milling process increases the volume of material, it proved impossible to get them back into the mine holes."

Some Examples of Environmental Uranium Damage

28. An outline of the incredible damage caused by the tragic accidents at Chernobyl, Three Mile Island and Love Canal would require a book to be written to do justice to the unspeakable damage to public health, safety and the environment. Again, Professor Harding expresses it best when he observes in *Canada's Deadly Secret*:

Scientism is the ideology that turns self-critical scientific inquiry into a religion that worships a technological priesthood of corporate "experts" who are out the reach of the democratic process. The propaganda of the nuclear industry in both its energy and weapons manifestations, relies heavily on such rhetoric and on the collective historical and ecological amnesia of the general public which sustains it. This propaganda is rendered even easier by the largely invisible effects of nuclear development. Most of us never come into direct awareness of the uranium mines in Saskatchewan's north and if we do, these are described neutrally in terms of resource development bringing royalties to the province and employment to the region. They are not described as providing tailings or spent fuel for millennia or continuing nuclear weapons proliferation. And without deep curiosity and knowledge about the end uses of uranium mining, it will never be seen as anything other than just another resource industry.

29. The Key Lake uranium mine in Northern Saskatchewan began operating in October 1983. Within three months there had already been eight spills totalling over 1.5 million litres of radioactive liquid waste. The largest spill, of 100 million litres on January 1st, 1984 brought the mine to the attention of the national media.

30. In 1989 another major uranium spill occurred at Rabbit Lake, Saskatchewan mine. On November 6 and 7, 1989 2 million litres of contaminated water spilled at the Rabbit Lake mine from a pipeline that stretched 10 kms to the Collins Bay B open-pit mine, which was no longer being worked, to two settling ponds. The size of the spill was equal to 440,000 gallons, or 2000 cubic metres - the capacity of three Olympic-sized swimming pools. The flow in the pipeline was about 3,700 litres per minute.

31. We can go to any region of the world where uranium mining has occurred and find closer evidence that the nuclear industry threatens public health. In Ontario, the Serpent River basin is being contaminated by seepage from 130 million tonnes of tailings left from fourteen (14) decommissioned uranium mines near Elliott Lake. In 1993 a review panel agreed these constitute a long-term environmental hazard; however disputes continue over how to undertake restorative measures. The residents of Port Hope are presently reeling from the news that radioactive waste from emissions from the Cameco plant deeply threatens their health and well being.

32. The U.S. Environmental Protection Agency (EPA) had in a February 1978 Report "Natural Radioactivity Contamination Problems," noted that "public health problems" were usually the result of the "30 or more radio-nuclides in the uranium and thorium decay series because of their relative abundance and toxicity." The EPA specifically mentioned the risks to uranium workers and in a May 1976 report "Radiological Quality

of the Environment” highlighted “increased exposure from radon problems in Western states due to the use of radioactive tailings.”

33. New Mexico, like Northern Ontario and Northern Saskatchewan, has been selected as an international sacrificial area of the nuclear industry. Seventy (70) million tons of uranium tailings have already accumulated in New Mexico, where according to evidence given to the B.C. Uranium Inquiry, there were “three uranium tailing piles within 10 miles of each other, each one over 20 million tons.... leaking like sieves.” The evidence also showed a twelve-fold increase in alpha radiation and a two-fold increase in uranium concentrations in local groundwater. It is no happenstance that all these areas have a very heavy concentration of indigenous populations.

Spread of Radioactivity

34. In the fall of 2007, the Los Angeles Times published a graphic picture and outline of the spread of radioactivity. Beginning in 1994 and for decades thereafter, uranium ore was extracted from Navajo land in the Southwestern United States for the nation’s nuclear weapons program. Waste from the mines and processing mills entered the air, soil, water and homes. The outline dealt with a) the sources of contamination, b) how contamination spread, c) how humans were exposed:

a) Sources of contamination:

- i. Open tunnels and pits from abandoned mines often were not fenced off or otherwise restricted.
- ii. Waste ore was left piled at mine sites.
- iii. Huge piles of fine-grain sand, known as tailings, left over from uranium processing were exposed to the weather.

b) How contamination spread:

- i. Tailings were spread by winds across a wide area; radioactive dust settled in the soil.
- ii. Contaminated crops and other vegetation were consumed by wildlife and livestock.
- iii. Radioactive runoff percolated down to groundwater sources.

c) How humans were exposed:

- i. Navajos inhaled radioactive dust.
- ii. They drank contaminated water from abandoned pit mines that filled with rain or from drinking water supplies that had become tainted.
- iii. They butchered contaminated animals and ate the meat.
- iv. Children dug caves in piles of mill tailings and played in the mines.
- v. Families built homes using radioactive tailings and waste ore.

35. In addition to the previous spills outlined above in Saskatchewan uranium mines, Professor Harding, under the title “The Impossible Happens Again,” observed:

The 2005 *Action Plan* highlighted uranium deposits as providing great job and business opportunities, saying “One of the richest uranium mines in the world is gearing up to go into production at Cigar Lake in 2007.” Within a year of this pandering to the uranium industry, Cigar Lake’s start-up date was postponed to 2009, or even later, after the underground tunnels being prepared to access the high-grade ore flooded and the mine had to be evacuated. The Cigar Lake mine has become the idol of the nuclear industry. With its estimated 230 million pounds of uranium, worth \$12 billion at today’s prices, it creates visions of gold bullion for its owners. It is also held up as a model and considered as a potential site for a nuclear waste repository. So the unexpected flooding of its underground tunnels wasn’t very reassuring. If Cameco couldn’t get the uranium out without massive

flooding imagine how safe we'd be if nuclear wastes were buried in the abandoned mine shafts.

...

The mine had to be evacuated and Cameco was unable to say anything about how it was to be “remedied and put into operation.” But we learned more about how the flooding occurred. Drilling within the granite under the rich ore deposit apparently got as close as eleven metres from the extremely porous, water-logged sandstone, which “exerts water pressure as great as ocean water at the same depth.” The rock collapsed, Cameco’s state-of-the-art contingency plan failed, and “the failure of the gasket within the giant doors, plus the lack of pumping capacity to keep up with the inflow, resulted in the decision to abandon the mine and let it flood.”

...

It took a *Toronto Star* story to put the flood into a clearer environmental and economic perspective. Apparently this wasn’t the first flood that Cameco’s mining ventures had caused; there had been a previous flood, though on a smaller scale, at its McArthur River mine site in 2003. And there was also flooding at Cigar Lake in April 2006, which had already pushed back the start-up date and raised estimated capital costs from \$520 to \$660 million. With this new disabling flood, it is clear Cigar Lake will not be able to begin contracted uranium exports in 2008 as planned. This postponement further pushed up the price of uranium: showing that what’s good for investors isn’t necessarily good for Mother Earth.

36. In July 2007, the president of the Canadian Nuclear Safety Commission said: “her organization has lost faith in Cameco management following the flooding at Cigar Lake mine” [Toronto Globe and Mail, July 24th 2007]. In December 2005, the Ontario Auditor General identified, out of 5600 abandoned mine sites in Ontario, 4000 are “potentially hazardous to public health and safety”, and at least 250 “might pose an environmental risk due to the potential for the leaching of minerals and other contaminants from mine tailings”.

Threat to the UNESCO World Heritage Rideau Canal/River System

37. Due to its location, uranium exploration and potential mining/processing in eastern Ontario could contaminate the UNESCO World Heritage Rideau Canal/River system, named as a heritage site in 2007.

The Mining Act regime

38. While there has been mining laws in Ontario dating back to 1864, the *Mining Act* of 1906 was a comprehensive revision and update to those laws and not much had been added to the Act since that time. Legislators looking for a suitable template for the Mining and Lands Commissioner turned to the legislation establishing the Drainage Reference [*The Drainage Trials Act, 1891*] for their inspiration. No one anticipated the mining of uranium at that time and this is the central problem with the Mining Act regime in Ontario today.

39. The Mining Act regime of Ontario is dangerous to the public health and the environment as follows:

- a) it does not deal with the special properties of uranium and how health and the environment are to be safeguarded as a result;
- b) there is no opportunity for risk assessment of the dangers associated with uranium exploration and mining as it relates to people, water, soil and the environment generally;
- c) at the exploration stage there is no environmental assessment opportunity in order for the public to have input and be allowed to voice their concerns;
- d) Environment Canada says, “The release of radioactive matter into the environment presents a special class of environmental protection problems because radiation cannot, in any known practical way, be neutralized or altered from its natural decay sequence, and it can cause permanent, cumulative, or delayed but irreversible harmful effects in all living organisms. Therefore radioactive materials would require containment

during their hazardous lifetime to allay health and environmental concerns.” The Mining Act regime is silent on this issue;

- e) a moratorium should be in place on uranium mining in the Province of Ontario in order to allow for informed opinion on the impacts on people, animals, water, soil and the air.

40. In the 2006/2007 Annual Report of the Environmental Commissioner of Ontario, the Commissioner, Mr. Gord Miller observed as follows:

The mineral strategy provides few details as to how the ministry will safeguard the environment, stating ambiguously that “the province needs clear targets and processes that will facilitate industry’s efforts to attain higher standards.” This lack of detail is not reassuring in light of the ministry’s promotional material targeted at international investment, which states that Ontario has a “streamlined process for obtaining mineral development permits.”

The mineral development strategy all but ignores that mining is but one of many possible land uses in northern Ontario. The strategy is silent on the need for planning beyond asserting that MNDM, in conjunction with MNR, is “exploring potential approaches for land-use planning in Ontario’s Far North.”

Mineral development does have an important role to play in Ontario, but the ministry must ensure that the ‘sustainability’ component of its mandate extends beyond solely economic interests, and that it dovetails with the broader responsibilities of the Ontario government.

There are strong arguments that reforms to the *Mining Act* and its associated legal mechanisms are needed. The existing regulatory structure treats public land as freely open to mineral exploration. The consideration of other interests, such as the protection of ecological values, is reactionary, and the question of whether mineral development may be inappropriate is not answered upfront. Instead, it is assumed that mineral development is appropriate almost everywhere and that it is the “best” use of Crown land in almost all circumstances.

This century-old system continues to rely on principles that are no longer reflective of modern planning or resource management. As noted in a 2004 review of Canadian mining law by West Coast Environmental Law, “Once mine exploration has occurred, and there is a desire to build a mine, industry

pressure is such that it is virtually impossible to prohibit this development in order to respect other land uses and objectives.”

The ECO believes that ecological values that merit protection should be proactively identified by MNR, and that applicable lands should be withdrawn from eligibility for prospecting and staking by MNDM. This approach would give greater certainty to the mining industry, afford better protection for ecological values, and reduce the complexity of the development approvals process.

Mining “Best Practices”

41. Mining companies contend that “best practices” have improved since Elliot Lake in the 70’s. As the Mining Act is presently constituted it amounts to a license to allow for “unsafe mining practices” to flourish without precaution or regulation. As outlined previously, there have been three major spills in Northern Saskatchewan in the uranium mines in spite of these “best practices”. In July 2007, the president of the Canadian Nuclear Safety Commission said- “her organization has lost faith in Cameco management following the flooding at Cigar Lake mine”.

42. In Frontenac/Lanark, mining and processing of uranium ore is of special concern since a tailings pond failure or accidental spill could cause toxins to flow into the Mississippi River watershed, thereby impacting tens of thousands of people in villages, towns and cities downstream. A sufficiently large spill would impact the Ottawa Valley and the city of Ottawa. The exploration and drilling process itself has risks. Drill holes become “wells” which should be filled to prevent upflow of contaminated water into the watershed. Drilling can also affect the stability of underground water aquifers that supply clean drinking water to wells in the area. Radioactive ore contained in overburden removed during exploration can create health risks to workers and to humans living downwind from low-level radioactive waste piles.

43. There are hundreds of cases where mining companies have walked away from exploration sites, mines or processing facilities leaving a mess for the province to clean up with our tax dollars. In December 2005, the Ontario Auditor General identified out of 5600 abandoned mine sites in Ontario, 4000 are “potentially hazardous to public health and safety” and at least 250 “might pose an environmental risk due to the potential for the leaching of minerals and other contaminants from mine tailings”. The Deloro site is one of the worst in Ontario. Over 20 acres have been seriously contaminated by arsenic from gold processing and radioactive tailings from uranium processing. The Moira River is polluted. To date over 25 million has been spent on clean-up and the Province has no idea how to complete the clean-up.

44. Presently, there is a moratorium on uranium exploration and mining in the Province of Nova Scotia. In the public inquiry in Nova Scotia in 1982 on uranium mining, Phase One consisted of 44 public meetings across the province and took one year to complete. Of 244 briefs presented, 211 were opposed to uranium development. The only people who appeared to really want development were mining and nuclear industry professionals and some government officials, especially in the Nova Scotia Department of Natural Resources.

45. In 1990 and 1995, the uranium moratorium in Nova Scotia came up for review and debate in the provincial legislature. Despite strong pressure from the Department of Natural Resources, the government has left the ban in place. George O’Reilly, mineral deposit geologist for DNR, says that, as of February 2007, “there has been no change in the status of the uranium moratorium and it is still in effect. The moratorium will remain

in effect indefinitely and this status will only change if Cabinet makes a decision to do so.”

46. The Environmental Commissioner of Ontario offered an opinion regarding the environmental damage and one can conclude from his comment that it is implicit that safe mining practices must be addressed by the province of Ontario, particularly as it regards exploration and mining uranium. There is no comfort provided to the citizens of Ontario in the present Mining Act regime which would appear to be silent on the issue of safe mining practices as it relates to uranium exploration and mining.

First Peoples

47. The Plaintiffs herein are mindful of the honour of the Crown obligation to the First Peoples and in particular to the judicial expression of a duty to consult. The Plaintiffs herein are also mindful of the obligations of the Crown which are expressed in Section 109 of the *British North American Act* and which have never been dealt with by the Province of Ontario as it relates to the First Peoples. The Plaintiffs fully support First Nations’ core values with respect to duty to protect the environment through stewardship of the land, and to safeguard the health and well being of our children over seven generations.

48. The Mining Act regime did not anticipate the distinct measures that might need to be adopted in the mining of such a dangerous product such as uranium. In 1906 it was never anticipated that the issues of safe mining practices might require a risk assessment of the impact of the mining product on the water quality, soil quality and the health of the people and the animals in close proximity to a uranium mine. The Mining Act regime is

silent on these issues exposing a glaring derogation of duty incumbent upon the Crown to ensure the health and safety of its constituents.

Opposition to Uranium Exploration and Mining

49. Opposition to uranium exploration and mining in eastern Ontario is widespread. Ten (10) municipal Councils are petitioning the Province of Ontario for a moratorium and substantive changes to the Ontario Mining Act. These Councils include North Frontenac, Central Frontenac, South Frontenac, Tay Valley, Perth, Lanark Highlands, Lanark County, Beckwith, Carleton Place and the City of Kingston. Scores of landowner and business associations and thousands of eastern Ontario residents are also calling for a moratorium. Over 100 organizations in Canada and the US have written letters to the Premier and Prime Minister to call for a moratorium against uranium exploration, mining and processing in eastern Ontario.

Mining of Uranium in the Province of Ontario

50. The Plaintiffs herein are directly affected by the proposed uranium mining exploration in the Sharbot Lake/Ardoch areas as it impacts the residents of the Mississippi Watershed and ultimately those living on the Ottawa River from the proposed mines to the city of Ottawa. As a result of proposed uranium mining on Crown land and private property, licenced by the Province of Ontario pursuant to the Mining Act regime, the Plaintiffs are adversely affected and have had their constitutional rights violated.

51. The overarching principle which must be understood by government is the protection of the public from the dangers of catastrophic harm. In the deficiencies of the Mining Act regime we find the Crown abdicating its responsibility to be a good neighbour. The use of Crown land for allowing the exploration of uranium is to witness

the Crown's sacrificing of the well-being of those it represents to the benefit of vested interests, thereby breaching the public trust for profit. Short term gain for long term pain.

52. In response to this overwhelming threat to ordinary citizens they have taken the following actions:

- a) engaged in peaceful demonstration in support of the Sharbot Obaadjiwan and Ardoch Algonquin Nations at Robertsville proposed mining site;
- b) supported the on-going hunger strike of Donna Dillman, first at the Robertsville mining site, now at Queen's Park;
- c) linked themselves with a sizeable coalition in the city of Ottawa;
- d) prepared presentations and obtained resolutions from ten municipal Councils in the area of petitioning the Province of Ontario for a moratorium against uranium exploration and mining in eastern Ontario;
- e) engaged legal counsel for the purposes of advancing their legal and constitutional rights;
- f) will make presentations to the Province and Cabinet for the purposes of obtaining relief without the need for further litigation.

Charter of Rights and Freedoms

53. Section 7 of the Charter states: "Everyone has the right to life, liberty and security of the person and the right not to be deprived thereof except in accordance with the principles of fundamental justice."

The Plaintiffs state that the Mining Act regime violates their constitutional right to "life, liberty and the security of the person" as set out in paragraphs 35, 36, 37 and 38

herein and given all the information regarding uranium contained herein which goes unaddressed in the present Mining Act regime in Ontario.

Canadian Bill of Rights

54. The *Canadian Bill of Rights* states: “It is hereby recognized and declared that in Canada there have existed and shall continue to exist without discrimination by reason of race, national origin, colour, religion or sex, the following human rights and fundamental freedoms, namely,... (a) the right of the individual to life, liberty, security of the person and enjoyment of property, and the right not to be deprived thereof except by due process of law.

The Plaintiffs herein submit that the Mining Act regime operates to remove enjoyment of property without due process of law, by ignoring the interest or trust established for First Peoples experienced in Section 109 of the *B.N.A. Act*, by allowing access to private property without consultation, by permitting exploration of uranium without hearing public opinion regarding its impact and having the effect of adversely impacting the value of real property and the ability to finance private property.

55. The Plaintiffs question the necessity of uranium mining in Ontario, when there is no national emergency, no urgent need to extract uranium when there is an abundance available domestically and when only a few jobs for a very short period of time would be created. The only people who will benefit from a uranium mine are the exploiters of the mine and the subsequent owners of the mine.

56. The Plaintiffs rely on the public statement expressed by Premier Dalton McGuinty when he expressed in a letter dated September 19th, 2007 to one of the Class Members herein, the following:

Strong environmental protection is the foundation of the high quality of life and sustainable economic growth we enjoy in our province. This is why it is one of the top priorities of our government. Ontarians deserve to live and work in clean, safe communities - communities in which the environment contributes to our health and quality of life.

57. The Plaintiffs would therefore claim entitlement to:
- a) a remedy pursuant to Section 24 of the *Charter of Rights and Freedoms*, in the nature of a declaration that the *Mining Act*, R.S.O. 1990 C.M.14 is unconstitutional as it relates to uranium exploration, mining and processing as being a violation of rights contained in Section 7 of the *Charter of Rights and Freedoms*;
 - b) a remedy pursuant to Section 24 of the *Charter of Rights and Freedoms*, in the nature of a declaration that calls for a moratorium on the exploration, mining and processing of uranium in Ontario;
 - c) a declaration that the Mining Act regime violates the Plaintiffs rights under Section 1(a) of the *Canadian Bill of Rights*, thus entitling the Plaintiffs to damages;
 - d) punitive and exemplary damages;
 - e) costs of the preparation of this Notice and subsequent Class Proceeding on a substantial indemnity basis;
 - f) such further and other relief as the Court may provide in the future action.
58. The Plaintiffs intend to commence a *Class Proceeding Act, 1992*, Statement of Claim within sixty days of the service of this Notice under the *Proceedings Against the Crown Act*.

DATED: December 10, 2007

On Behalf of the Plaintiffs and
Proposed Class Members

ELDERS WITHOUT BORDERS
Michael Swinwood LSUC14587R
Liza K. Swale LSUC49683H
1282 Thames Street
Ottawa, Ontario
K1Z 7N4
Ph: 613-852-8384
Fax: 613-594-5943
Email: swales@sympatico.ca