THIS EXAMINATION CONSISTS OF SIX (6) PAGES

PLEASE ENSURE THAT YOU HAVE A COMPLETE PAPER

THE UNIVERSITY OF BRITISH COLUMBIA

PETER A. ALLARD SCHOOL OF LAW

FINAL EXAMINATION – DECEMBER 2022

LAW 387C/587C

Environmental Law

Section 1

Professor Stepan Wood

**TOTAL MARKS**: 100

**TIME ALLOWED**: 2 HOURS, 30 MINUTES

Including reading and writing time

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

**NOTES:**

1. **This is an open book examination.** There are no restrictions on the printed materials you may consult during the examination.
2. **This examination is worth a total of 100 marks.** It contains two questions. You must answer both questions. Question 1 is worth 60 marks and is a fact pattern with four parts. You must answer all parts. Question 2 is worth 40 marks and is an essay question with two parts. You must answer one part of your choice.
3. **There is no dedicated reading period** but you are encouraged to use the first 20 minutes to read the questions carefully and plan your answers.
4. **Identify yourself only by your exam number**.
5. **Indicate the number of the question** you are answering at the start of each answer.
6. **All events and transactions take place in British Columbia today** unless otherwise specified.
7. If you believe you need more information to answer a question, **indicate what additional information you need and why.** If you assume additional information, **state your assumptions clearly and explain why you are making them**. Do not make any assumptions that avoid relevant legal issues.
8. **Try to avoid repeating information** you gave in your answer to one question when you answer another question.
9. When a question asks you to refer to **course materials**, this means any information conveyed in the course, including the assigned readings, lectures, guest lectures, class discussions, slides, handouts, and resources posted on the course website, except to the extent that I have indicated they are not examinable.

**ANSWER BOTH QUESTION 1 AND QUESTION 2.**

**MARKS**

**60 1. FACT PATTERN. Answer all parts of this question. (Roughly 90 minutes, including reading time)**

**Fish River First Nation (FRFN)** has occupied its traditional territory in the southwestern part of what is now called British Columbia (BC) for millennia. Like most BC First Nations, it never signed any treaty with the British Crown. It was allocated a small reserve within its traditional territory, along the banks of the Fish River. The majority of its roughly 700 members live on this reserve. Members of the FRFN continue to exercise their inherent rights to fish, hunt, trap, and gather foods and medicines from the lands and waters of their traditional territory.

The Fish River is one of the last remaining free-flowing rivers in BC. For millennia FRFN members have fished the river for salmon and bull trout. Such fishing is central to FRFN’s traditional culture and economy and remains an important source of sustenance for its members.

The FRFN claims aboriginal title to its entire traditional territory and an aboriginal right to fish in the river. These rights have not been proven in court or otherwise conceded by the Crown. They do not overlap or conflict with those of any other First Nations.

A Vancouver-based mining company, **Future Minerals Inc. (FMI)**, wants to open a new copper mine and smelter in the FRFN’s traditional territory to serve an anticipated surge in global demand for copper, which industry analysts consider vital to the transition to low-carbon technologies. FMI portrays itself as a leader in responsible mining and the transition to a low-carbon economy.

To power its mine and smelter, FMI proposes to install a hydroelectric dam across the Fish River. An independent panel assessed the dam’s impacts as part of the regulatory approval process.

The panel concluded that the dam would fundamentally alter the river’s flow pattern and habitat structure. Downstream of the dam, increased fluctuations in water flow and river levels would cause some salmon and bull trout habitat to dry out. Upstream, a 15 km-long reservoir would permanently submerge roughly 30 km2 of FRFN’s traditional territory, including a portion of its reserve and some prime FRFN fishing spots. The still, deep waters of the reservoir would be less hospitable to salmon and bull trout than the shallow, running water of the river.

The dam itself would totally obstruct upstream fish migration. Salmon and bull trout migrate up the river to spawning grounds in headwater and tributary streams in the FRFN’s traditional territory. Fish of both species spend their early lives in the river. Salmon then live in the ocean before returning to the river to spawn, while bull trout spend their entire lives in the river.

The height of the dam would preclude installation of a “fish ladder” allowing migrating fish to bypass the dam. The assessment panel concluded that the only feasible alternative would be to capture migrating fish below the dam and transport and release them above the dam. The panel concluded that this would result in a small reduction in the numbers of mature salmon and bull trout returning to their spawning grounds each year.

The panel concluded that the upshot of all these impacts would likely be a moderate decline in the stocks of Fish River salmon and bull trout available for harvest by the FRFN.

Both species are already endangered and their overall numbers are declining. The main threat to both species is human-induced habitat disruption. The Fish River has so far escaped this trend. Its salmon and bull trout populations remain abundant and healthy.

The dam would also cause levels of mercury in fish to increase. When vegetation and soils are submerged by a dam reservoir they decompose rapidly, releasing methylmercury into the aquatic environment. Methylmercury is a powerful neurotoxin even in very low concentrations. It builds up in the tissues of organisms that ingest it and can cause a range of neurological symptoms. Methylmercury concentrations increase up the food chain.

Fish methylmercury levels rise for several years after reservoir creation and return to levels typical of natural lakes after a few decades. The current methylmercury level is 0.15 parts per million (ppm) for bull trout in the Fish River and 0.05 ppm for salmon. The panel predicted that these levels would roughly quadruple to 0.6 ppm for bull trout and 0.2 ppm for salmon before returning to the baselines after 20-30 years. By comparison, canned albacore tuna has around 0.4 ppm methylmercury.

Methylmercury elevation is an inevitable consequence of reservoir impoundment. The impacts on fish and aquatic ecosystems are understudied and poorly understood, but the impacts on the health of humans who consume methylmercury-containing fish are well known and serious. The main way to manage these risks is to limit consumption of affected fish.

Health Canada has set a legally binding maximum level of methylmercury of 0.5 ppm in salmon and bull trout offered for retail sale. It has also issued non-binding guidelines for safe levels of human consumption of fish containing mercury. These limits and guidelines are set with reference to human health, not harm to fish or ecosystems.

Based on these guidelines, the panel determined that people should eat no more than two servings of fish harvested from the reservoir per month to stay within Health Canada’s safe methylmercury levels. This is far below the amount of fish that most FRFN members consume from the river.

FMI is fully aware of the panel’s findings and recommendations.

After considering the panel report, the provincial and federal governments issued the relevant regulatory approvals for the dam. These approvals impose a range of conditions that FMI must meet in the construction and operation of the dam.

One of these approvals was issued under section 35 of the federal *Fisheries Act*, which provides:

35 (1) No person shall carry on any work, undertaking or activity that results in the harmful alteration, disruption or destruction of fish habitat.

(2) A person may carry on a work, undertaking or activity without contravening subsection (1) if … the carrying on of the work, undertaking or activity is authorized by the Minister and the work, undertaking or activity is carried on in accordance with the conditions established by the Minister.

This “harmful alteration, disruption or destruction” (HADD) permit authorizes FMI to destroy fish habitat in the Fish River in the course of constructing and operating the dam, provided that it complies with conditions including:

* To develop and implement a system to, in a timely manner, collect and transport all migrating salmon and bull trout above the dam by tanker truck and deposit them in the reservoir to continue their migration;
* To develop and implement various fish habitat monitoring and replacement projects;
* To develop and implement a program to monitor methylmercury levels in the reservoir and to educate people about safe fish consumption levels.

Section 36(3) of the *Fisheries Act* provides that, subject to exceptions set out in regulations,

… no person shall deposit or permit the deposit of a deleterious substance of any type in water frequented by fish or in any place under any conditions where the deleterious substance or any other deleterious substance that results from the deposit of the deleterious substance may enter any such water.

The HADD permit issued to FMI does not require FMI to prevent methylmercury from being released into the reservoir or prevent fish or people from being exposed to methylmercury. Nor does it or any *Fisheries Act* regulation authorize the deposit of methylmercury into the reservoir.

FRFN and its elected chief, **Lan D. Fender,** participated fully in the impact assessment process, but the federal government refused to hear their submissions at the Cabinet decision stage about whether to approve the HADD permit or what conditions to include.

The FRFN and Fender have a long history of active involvement in public debate, government decision-making, and litigation on issues that affect their territory and interests.

Since the dam was first proposed, the FRFN and Fender have led a grassroots campaign to oppose it. Among other things, they made the following statements on their social media accounts (which have thousands of followers) and in national news media (which have millions of readers): “Fish River Dam is a Dam(n) Crime!” and “FMI is an environmental criminal.”

FMI sued FRFN and Fender for defamation. In an oral examination for discovery, its chief executive officer said that statements like this have no place in public discourse on environmental issues and that the purpose of the lawsuit was to force FRFN and Fender to confine their expression to forms that FMI considers legitimate.

The opposition campaign notwithstanding, the dam has been constructed and is operating. All the impacts predicted by the impact assessment panel have materialized. FMI has complied with the terms of its regulatory approvals with one possible exception: the program for transporting migrating fish above the dam has not gone as planned.

FMI solicited three bids for this work and chose the cheapest one, without investigating why the others were more expensive. The successful bidder had no prior experience and did things that fell below industry standards for this kind of work. It did not train its employees properly. It used an unproven “fish cannon” to suck up fish and shoot them into tanker trucks. It filled the tanks with water that was the wrong temperature. Sometimes, easily predictable bad weather prevented it from collecting fish, leaving them to languish below the dam. Other times, it collected fish but failed to equip the trucks for the weather conditions, preventing numerous trucks from completing the journey. All of these errors substantially reduced the number of live, healthy fish migrating upstream.

The contractor failed to disclose these problems to FMI, and FMI failed to supervise the contractor’s work. It relied on the contractor to carry out the work properly and took the contractor’s reports at face value. It did not have its own system in place to ensure the safe and timely transportation of migrating fish. In fact it decreased its budget for fish transportation, habitat monitoring and replacement during this period.

On the methylmercury issue, the federal government has made no representations to FMI or other hydroelectric dam operators that regulatory approval of a dam would preclude subsequent regulatory prosecution for violating section 36(3) of the *Fisheries Act*, or that fulfilling the conditions of such approval would constitute due diligence to avoid committing that offence.

FRFN and Fender have retained you as their legal counsel. **Please advise them on the following questions:**

1. **Can they sue FMI for damages in private nuisance, grounded in their aboriginal title, aboriginal right to fish and/or their interest in their reserve land?** In answering this question, please also advise them whether they would have had a better chance of success had they sued for a *quia timet* injunction to prevent the dam from being constructed in the first place.
2. **Can they have FMI’s defamation lawsuit dismissed as a strategic lawsuit against public participation (SLAPP) and collect damages from FMI for launching it?**
3. **Can they prosecute FMI for violating section 35(1) and/or 36(3) of the federal *Fisheries Act*?** In answering this question, be aware that the Act defines “deposit” as “any discharging, spraying, releasing, spilling, leaking, seeping, pouring, emitting, emptying, throwing, dumping or placing.”
4. **Do they have standing to apply for judicial review of the federal government’s decision to issue the HADD permit?**

**EXAM CONTINUES ON NEXT PAGE**

**40 2. ESSAY QUESTION. Answer either Part (a) or Part (b). (Roughly 60 minutes, including reading time)**

**(a)** In their article “Where is the Environment?” Usha Natarajan and Julia Dehm claim:

Law plays a crucial role … in converting nature into exchangeable property, in turning interconnected ecosystems into realms of infinite commodification and exchange, and in extracting and conceptually separating an atomized human individual from the intertwined mesh of life. Law not only enables environmental destruction but understands the natural environment in a manner that ensures the impossibility of remedy. To remedy this conceptual dislocation of nature requires an exit from the confines of Western modernity.”

**Evaluate this claim, with a focus on Canadian environmental law, and outline what should happen to Canadian environmental law in light of your evaluation.** Your answer should draw on materials from a variety of course units, be supported with concrete illustrations, and be restricted to the examinable course materials. Please avoid repeating information included in your answer to Question 1 (Fact Pattern Question).

**OR**

**(b)** Nathalie Chalifour and Dayna Scott open their chapter “Environmental Justice” with the following statement:

The term “environmental justice” is used to describe a rapidly evolving set of ideas, theories, debates, and principles that examine and critique the connection between environmental burdens and identity factors such as race, gender, and socioeconomic status. It is as much a grassroots movement for change as it is a framework through which to understand the distribution of environmental harms and benefits …. It is a critical study of the hegemonies and colonialist power structures that enable environmental discrimination, as well as a push for change.

**Evaluate Canadian environmental law from an environmental justice perspective, and outline what should happen to Canadian environmental law in light of your evaluation.** Your answer should draw on materials from a variety of course units, be supported with concrete illustrations, and be restricted to the examinable course materials. Please avoid repeating information included in your answer to Question 1 (Fact Pattern Question).

**DID YOU ANSWER ALL OF QUESTION 1 AND ONE (1) PART OF QUESTION 2?**

**Then you are done. Happy Holidays!**

END OF EXAMINATION