

1. ENVIRONMENTAL ISSUES AS AN ARENA FOR THE EXERCISE OF BUREAUCRATIC POWER

Disasters of imagination

The Port of Naantali sits at the heart of an industrial center on the southwestern coast of Finland, ringed by an oil refinery, a coal-fired power plant, grain silos, a shipyard, and a host of industrial infrastructure.

In the early 1990s, the City of Naantali, in cooperation with the local business community, undertook an ambitious plan to develop its port area to promote commerce and create jobs. The project called for the dredging of 560,000 m³ of harbor bottom sediment, mostly virgin clay.

The permitting process for the harbor dredging started in 1995 (see Appendix 1). A permit was granted in 1996, only to be disputed on the grounds of ostensibly high concentrations of contaminants measured in sediment samples. Dredging of the channel to the repair yard was performed in 1998–1999 under an older permit.

In the meanwhile, guidelines for the dumping of dredging spoils were somehow lifted from the OSPAR Convention covering the Northeast Atlantic and the North Sea and incorporated into the Convention of the Protection of the Marine Environment of the Baltic Sea (HELCOM). Finland's environmental administration then referred to these guidelines when it demanded a monitoring study of the impacts of this minor dredging operation. The new study detected traces of tributyltin (TBT), an antifouling agent used in paints for ships and other vessels, in the topmost sediment layer near the mouth of the shipyard basin.

While most aspects of the dredging permit were readily resolved, the phrase “significant amounts of tributyltin” crept first into the correspondence of official agencies, including the Finnish Environmental Institute, the Turku environmental board, the fisheries unit for the Southwestern Finland Employment and Economic Development Centre, and then into lead stories in the local press. Concerns over TBT led to several rounds of rejection and appeal of the permit application.

In 1999 and 2000, the City of Naantali presented expert findings to Finland's Supreme Administrative Court along with statements from the environmental administration. The sediment dredged from the channel (about 100,000 tons dry weight) contained a total of about 400 grams of TBT and TBT content in the dredged sediment averaged about 4 µg/kg of dry weight solids. This average concentration was an order of magnitude below typical TBT concentration of surface sediments in Finnish harbor basins and channels, as well as two orders of magnitude below the limit value for organotins (612 µg/kg of dry weight) applied at the time for sediments in Germany and the Netherlands.

Indeed, the amount of TBT suspended into the water during a couple of months of dredging and dumping activity in the harbor area were equivalent to the legal TBT emissions from a grain ship sitting in the same harbor just for a couple hours (Appendix 2).

At first glance, one might conclude that Finland's environmental administration was merely a zealous adherent to the precautionary principle. However, this view reconciles poorly with the parallel case of the contamination of the Kymijoki River in eastern Finland.

The Kymijoki incident resulted from an industrial explosion in 1960 that released some 20 kilograms of dioxins and furans (PCCD/DF) into the river. Most of the PCCD/DF compounds initially settled in the sediment below the Kuusankoski rapids. The highest measured concentration in the sediment ran as high as 350,000 ng I-TEq/kg (international toxic equivalent quantity). Over the decades, these toxic compounds have been washed downstream into the Gulf of Finland with the sediment.

The Kymijoki River annually deposits about 60,000 tons of suspended solids with a PCCD/DF content of 2,300 ng I-TEq/kg into the Baltic Sea /74/. This concentration is over four times above the limit of 500 ng I-TEq/kg set by the environmental administration.

Comparing the environmental impacts of toxic compounds in suspended solids in the case of Naantali Harbor and the Kymijoki River, we get:

	Kymijoki River	Naantali harbor dredging
Suspended solids	60,000 tons/year	6,000 tons total
Duration of impact	48 years to date	2 months
Harmful substance content	>4 times the limit value	0.01 times the limit value

In other words, the dioxins and furans in the suspended solids from the Kymijoki River flowing into the Baltic in a single year constitute an environmental impact over 4,000 times greater than the TBT release from the Naantali harbor dredging. Adding in the durational dimension, the Kymijoki incident has already had an impact roughly 200,000 times greater than the proposed Naantali harbor dredging might have had.

The City of Naantali had to pay about €100,000 for studies of the potential impacts of the dredging operation. Some of the studies had no relation to the project's impacts (e.g. assessment of fish stocks outside the area affected by dredging). The hardly surprising finding was that no impacts from dredging could be detected. Even if there had been detectable impacts, the specific effects of dredging could not have been differentiated from other sources using the methods applied.

Finland's Ministry of the Environment is legally responsible for dealing with the Kymijoki dioxin problem. The Ministry and the Finnish Environmental Institute spent about €200,000 on the KYPRO research project into the Kymijoki problem during the years 1996 to 1998. However, to proportionally match the assessment response that officials required of the City of Naantali, the state would have had to expend around €800 million a year.

The costs of remediating the Kymijoki dioxin-furan spill were studied in the planning for the Kymijoki Canal Project. Remediation budgets begin at around €10 million depending on the strategy selected. All proposed remediation techniques are familiar and in wide use. Rather than move ahead, however, the environmental administration has sat on the matter for over a decade. During that time, over 600,000 tons of polluted suspended solids has drifted into the Baltic Sea.

The environmental administration's distinctly different responses to these environmental regulation issues suggests it applies different criteria when the problem lies within its sphere of responsibility and when there is the possibility for compelling others to pay.

There is another aspect to the environmental administration's inaction in the face of decades of PCCD/DF contamination. The Kymijoki River has yet to manifest signs of ecological catastrophe or consequences for human health. Current science suggests that limit values for dioxins and furans in sediments may be overly cautious as these substances, when attached to sediment particles, possess low bioactivity. Whether this applies in the specific instance could readily be resolved in bench-top laboratory studies.

While the Kymijoki case remains open, the Naantali case is essentially moot. Upon receiving the expert statement commissioned by the City of Naantali in 2000, the Supreme Administrative Court ducked the issue by remanding the dredging permit decision to the West Finland environmental permit office. The court noted merely that the 1996 permit was issued without sufficient information of TBT and polycyclic aromatic hydrocarbons (PAH) compounds, the boundaries of the impacted area, and the suitability of the dumping site.

When the West Finland environmental permit office finally issued a dredging permit in 2004, it generated a further appeal by the Western Finland environmental center and the fisheries unit of the Southwestern Finland Employment and Economic Development Centre. In 2006 – more than eleven years after the permit application was submitted – the Vaasa administrative court finally cleared the permit.

Of course, the ambitious port development plan of the City of Naantali and its partners already died long before the permitting process was completed. The money and time invested in the project was lost, no jobs were created. In the end, the project had diminished from a major development project to a mere 50,000 m³ maintenance dredging effort.

Framing the inquiry of this book

Finland's mass media, based in Helsinki, devotes considerable space to environmental topics such as climate change, pollution, eutrophication, resource depletion, mountains of waste, recycling, environmental protection, environmental crime, and the state of the environment. Within this cacophony, it is virtually impossible for an average person to judge the relative significance of these issues.

Even the notion of what makes a good environment is hard to agree upon. People tend to form their views and positions based on vague images. Most people are ready to use environmental arguments to promote their own views and interests. They are happy to eat the lunch when somebody else is paying.

But in reality, how serious is the threat that we or our descendents will succumb to a toxic dystopia? Will we drown in mountains of waste? How likely is the loss of our ecological inheritance? And what is the magnitude of the ecological threats we face compared to the social, economic, and military threats?

Whether the environmental threats are real or imagined, the regulatory burden of environmental policy grows heavier as new rules are added at all bureaucratic levels. Given the potential for perverse incentives and outcomes that violate the long-term interests of the society, the lack of attention paid to the distorting effects of environmental regulation is somewhat surprising.

“Environmental justice” is a new term used in environmental circles as a justification for the assertion of authority and power. But whence is such power derived? What is the basis for exercising such power?

In this study, we analyze environmental policy in the context of bureaucratic thinking and the mankind’s never-ending struggle for power and resources. In addition, we consider the effects of environmental policy on the economy and fundamental rights of Finnish citizens. Finally, we outline a roadmap to rational environmental policies that might benefit society as a whole.

As a matter of fact we are not talking about Finland alone. We are talking about the outcome of Finland’s interaction with European Union in the field of environmental policy. Furthermore, the issues discussed in this study repeat themselves in a very similar manner all over Europe and the Western world. While we are analyzing examples from Finland, we are actually talking about a sociological problem that is threatening the well being of present and future European generations. That problem is the build-up of unjustified bureaucratic power.

The need for assessment of scale in environmental issues

Article 2 of the consolidated version of the Treaty Establishing the European Community (Treaty of Rome) lists its goals. It now reads:

Article 2

The Community shall have as its task, by establishing a common market and an economic and monetary union and by implementing common policies or activities referred to in Articles 3 and 4, to promote throughout the Community a harmonious, balanced and sustainable development of economic activities, a high level of employment and of social protection, equality between men and women, sustainable and non-inflationary growth, a high degree of competitiveness and convergence of economic performance, a high level of protection and improvement of the quality of the environment, the raising of the standard of living and quality of life, and economic and social cohesion and solidarity among Member States.

These goals are often in conflict with each other.

When Finland began to implement new environmental policies largely based on EU directives and international environmental agreements, conflicts arose that violently pitted environmental values against other fundamental rights in the society. The Naantali harbor development project is only one example.

For example, nearly half of the area of Finnish Lapland is now classified as protected. The protection decisions were made in Helsinki and Brussels, and overlooked the unemployment and social distress common to residents of Lapland. The fight for further protection of

Lapland's supposedly primeval forests takes place far away, is based on manufactured images, and infringes on local people's right to make a living.

In southern Finland, burdensome permitting processes and ambiguous environmental standards have increasingly become impediments to industrial activity and infrastructure development. This reflects gradually on work opportunities, incomes and quality of life.

A great deal of new environmental legislation and administrative practices are currently under development to regulate social and private-sector activities. Ecoideology is invading many aspects of endeavor, from industrial production, consumption, agriculture, forestry and construction to consumption, waste management, and transportation. It is starting to have an increasing influence on our freedom to choose where and how we live our lives.

It would be beneficial if the magnitude of environmental impacts and other ecological issues could be evaluated in a common-sense manner. Situations could be compared against each other and the desired environmental benefit compared to the costs of achieving it. Conflicts could be resolved and legislation could be developed in a rational and balanced manner. Companies could focus their core activities and marshal their resources for lowering environmental impact in a cost-effective way. People would be protected from bureaucratic excess. They would have a concrete basis in forming their views on environmental matters.

Above all, by quantifying environmental issues the European Union and our own societies would have a rational basis for focusing on the essential and for seeking balances between environmental and other goals.