
MAKING IT HAPPEN: THE EVOLUTION OF PULP AND PAPER MILL COMPLIANCE IN BRITISH COLUMBIA

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SUMMARY

Compliance with environmental law by British Columbia pulp and paper mills has evolved through four distinct phases, each phase driven by growing public awareness of environmental issues and government response to public demand. Phase 1 was characterized by low public awareness, almost no regulation and even less enforcement. The industry was free to grow and operate, unencumbered by environmental concerns. In Phase 2, growing public awareness of the health hazards of pollution drove government to set emission standards. Still, no significant enforcement was carried out and industry complied with the law at its discretion. In Phase 3, the public demanded and government delivered tighter emission standards and tough enforcement. Industry at first resisted and paid dearly in fines which finally led to improved compliance. In Phase 4, the industry is substantially in compliance with stringent emission standards, the public continues to press for a cleaner environment and government encourages industry to move "up the pipe" to a new environmental management regime.

The turning point in industry compliance occurred at Phase 3 when the government implemented an aggressive enforcement program.

1 INTRODUCTION

In November of 1988, the federal Minister of Fisheries and Oceans announced the closure of commercial fisheries for prawn, shrimp and crab in the vicinity of three coastal pulp mills in British Columbia. Further monitoring led to additional commercial shellfish closures and announcement of consumption advisories for a number of coastal and inland waters.¹ While regulation of pulp and paper mills in British Columbia had begun 20 years previously, the closures and the significant human health concerns they represented, sparked an urgent call to government to implement an effective environmental compliance and enforcement program.

2 BACKGROUND

British Columbia is a large Canadian province of approximately 95 million hectares. It is bounded, for the most part, by the 49th parallel on the south, the 60th parallel on the north, the Pacific Ocean on the west and the height of the Rocky Mountains on the east. 78% of British Columbia is publicly owned, government managed, forest land.² Forest harvesting and the production of forest products, such as pulp and paper, constitute the backbone of the provincial economy.

Canada is the world's largest producer of market pulp, producing one-third of the world's total in 1991 and the single largest supplier of newsprint, with 56% of the 1991 world total. British Columbia is a large contributor to Canada's output of these products, producing 29% of the Canadian pulp output in 1992.³

The first pulp and paper mills in British Columbia began operations in the early 1900's. Because they need water, wood and shipping routes, the earliest mills were established along the Pacific coast. Later, during rapid expansion in the 1960's and 1970's new mills opened on the coast and also on major inland rivers. There are now 26 pulp mills in the province, 23 of which release effluents directly into the environment.

Compliance with environmental law by British Columbia pulp and paper mills has evolved through four distinct phases, each phase driven by growing public awareness of environmental issues and government response to public demand.⁴ Phase 1 was characterized by low public awareness, almost no regulation and even less enforcement. The industry was free to grow and operate, unencumbered by environmental concerns. In Phase 2, growing public awareness of the health hazards of pollution drove government to set emission standards. Still, no significant enforcement was carried out and industry complied with the law at its discretion. In Phase 3, the public demanded and government delivered tighter emission standards and tough enforcement. Industry at first resisted and paid dearly in fines which finally led to improved compliance. In Phase 4, the industry is substantially in compliance with stringent emission standards, the public continues to press for a cleaner environment and government encourages industry to move "up the pipe" to a new environmental management regime.

The turning point in industry compliance occurred at Phase 3 when the government implemented an aggressive enforcement program. In this paper I will describe the four phases, but will focus attention on Phase 3 as this is the phase when British Columbia "made it happen".

3 PHASE 1

The first 60 years of pulp and paper mill operations in British Columbia passed with almost no reference to the environment. The public was largely unaware of environmental concerns and the mills discharged wastes with little or no regulation by government. In the late 1960's the provincial government enacted the first legislation that required pulp and paper mills to obtain wastewater discharge permits to control and reduce the types and quantity of wastes released to water. The site specific permits also introduced legal requirements to monitor the impact of pulp mill discharges on the receiving environment⁵ but no formal enforcement was carried out. Industry viewed the controls as a nuisance and paid scant or no attention to compliance.

4 PHASE 2

The 1970's and early 1980's saw growing public awareness to the health hazards of pollution. Accordingly, government sought public input to environmental policy development. In 1971, pollution control objectives were introduced.⁶ In 1976, a public inquiry was conducted to review the objectives and ensure they served the public good. Public and industry meetings were held around the province. The resulting *Pollution Control Objectives for the Forest Products Industry of British Columbia* were published with a view to reducing the volume, concentration and toxicity of waste discharges from pulp and paper mills and

also as an attempt to standardize permitting practices across the province. Pulp and paper mill operations require at least three waste discharge permits, one for effluent discharges to water, one for emissions to air and a third for discharging refuse to land. The new objectives addressed the complex issue of operating one phase at the expense of the others and sought to balance air, water and land discharges to ensure the effluents are disposed to the various media within the assimilative capacity of each.⁷

In 1982, a new *Waste Management Act* increased penalties for pollution, to a maximum of \$50,000. Nonetheless, enforcement activity remained very low key, with no major investigations or prosecutions. Negotiation and bargaining were the main techniques employed to achieve compliance. Informal sanctions such as sending a letter or scheduling a meeting with senior officers of the company were the harshest measures employed in most cases on non-compliance. Sometimes a conservation officer in uniform attended site visits. This was perceived to have an impact by suggesting that prosecution measures might be taken. During the years 1984 to 1986 the average fine imposed under the *Waste Management Act* was \$565. At the end of this phase, in 1987, the provincial government reported only 9 convictions under the Act for a total of \$4,900 in fines.⁸

The industry took notice of increasing government attention to environmental concerns by appointing environmental coordinators to work with government environmental protection staff, negotiating permit discharge limits and attending meetings to discuss compliance issues, but compliance remained low.

Lengthy and complex scientific studies were undertaken by governments to investigate effects that pulp mills were having on surrounding ecosystems. Dioxins and furans were linked to the use of chlorine bleaching in the pulp milling process. The discovery of dioxins and furans in marine environments around coastal pulp mills emphasized the need for improved wastewater treatment and process changes.

5 PHASE 3

The 1988 shellfish closures and public health advisories near pulp mills focused public attention on this industrial sector. The public had by this time developed a sophisticated understanding of environmental issues and environmental non-government organizations, known as "ENGOs", were effective at communicating public concern to government through lobbying efforts and communicating back to the general public through the media. Public meetings held on the fishery closures were well attended, by up to 5,000 people at a single meeting, who criticized government for not enforcing its laws.

Also in 1988, an environmental lawyer and law professor at a British Columbia university published a report that brought to light the failure of government to achieve compliance with its environmental protection legislation. The report begins "Regulators respond to most environmental ... violations by ordering offenders to obey the law. Sanctions are seldom invoked."⁹ The author's analysis of monitoring data showed that many industrial permittees were habitually and substantially out of compliance with their permitted discharge levels. Further, interviews with government staff revealed that persuasion was used almost exclusively over punishment and that many habitual offenders were never penalized. The report contended that sanctions hold great promise in the regulatory context. A monetary penalty can be expected to be more effective for companies in direct pursuit of profit than they are for those who commit more expressive crimes such as murder or illicit drug use because of the negative profit contingency presented.¹⁰

An important regulatory goal of the British Columbia government was to ensure all pulp mills employed acceptable pollution control technologies to meet new tougher standards. Careful attention was paid to permitting practices across the province and tracking compliance. Mills were required to install equipment to monitor their discharges and regularly provide the data to government. Regular meetings with company officials were held to review the data and discuss compliance issues. At one notable meeting, a table was presented showing the industry's own monitoring results. Each instance of non-compliance printed in red ink; the compliant discharges were printed in black. The table appeared almost entirely red and the company vice-presidents walked out of the meeting *en masse*¹¹. This behavior was a clear indication that if compliance was to be achieved, persuasion alone would not provide the means.

Government implemented an enhanced program of inspections to verify industry's monitoring data and made a bold decision to address habitual significant industrial non-compliance with prosecution.

Prince George, on the Fraser River, is a small interior city with four pulp mills impacting the same watershed and airshed. These four mills together produce more tons of pulp per day than anywhere else in Canada; second most only in North America. In 1987, ambient air and water monitoring revealed that, despite clear permitted discharge limits, one of the pulp mills was by-passing its pollution treatment works on a regular basis and releasing untreated waste directly to the environment. When questioned, the mill manager was unable to provide accurate information of the dates, times and levels of the untreated discharges. Clearly, more careful monitoring of the mill's discharges was required. Government officials amended the mill's permit to prohibit untreated discharges without first receiving permission from a government official. One evening the mill manager telephoned to seek permission for an untreated discharge to the air. As the ambient air quality that day had been poor, the official refused permission. The mill manager became indignant and informed the official that he would by-pass the works regardless, which he did. Government decided to take enforcement action and initiated charges; the senior prosecutor in Prince George took personal charge of the case. Charges were laid, not only against the mill but also against the mill manager, an action unheard of to that point under British Columbia's environmental legislation. The company received a \$65 thousand dollar fine and apologized for the violation. Charges against the mill manager were stayed.¹²

In 1989, penalties for pollution offenses were increased to a maximum of \$1 million per day, \$3 million per day for intentional damage and provisions were added that attached liability to Directors and imposed the potential for jail sentences of up to three years. Environmental Enforcement Units of inspectors and investigators and an Environmental Prosecution Group of lawyers specializing in environmental law, were posted in key locations throughout the province. Specialized training courses were developed and delivered to inspectors, investigators, prosecutors and expert witnesses. Prior to that time, environmental cases were investigated by officers and prosecuted by lawyers who had no background or training in pollution law; most government experts had never set foot in a court of law.¹³ Much of the training focused on the significant cultural change required for staff who were accustomed to the persuasive approach and extremely uncomfortable prosecuting their industrial "clients".

In 1990, 308 charges were laid under British Columbia's environmental legislation and over \$1 million in fines was collected. This trend continued until the mid 1990's, with individual fines against pulp mills reaching \$200,000 and higher. The Ministry published media releases listing the names of companies significantly out of compliance with

environmental legislation and permits. It also released the names of companies charged and convicted of environmental offenses, including major penalties. Release of this information continues to this day.

Environmental law conferences sponsored by the Environmental Prosecution Group were well attended by legal counsel for industry who advised their clients that practices and procedures must now be implemented to protect the environment and also to protect industry against prosecution. Prior to that time, environmental defense work was rare and normally done off the corner of industry counsels' desks, but now, the large British Columbia law firms began to employ lawyers specializing in environmental law.¹⁴

The pulp and paper industry responded by employing environmental specialists to liaise with government regulatory staff and to develop environmentally sound operating standards for the mills. During the period 1989 to 1993, the British Columbia pulp industry reportedly spent roughly \$1 billion to meet the new standards.¹⁵ Finfish and subsequently shellfish closures and consumption advisories began to be lifted in 1993.¹⁶ This trend continues.

6 PHASE 4

Now, the public is informed and exercises its vigilance through mature ENGOs, effective lobby mechanisms and the media. Domestic and global markets apply economic pressure on industry to make and keep their products "green". Government regulation continues to evolve with technological advances. In 1995 a regulation was passed that would lead to complete elimination of AOX discharge from the bleaching process by December 31, 2002. The decision to require zero AOX discharges from pulp mills set an international precedent. The government of Canada introduced regulations that require the virtual elimination of dioxins and furans. Monitoring, inspection and enforcement regimes are well established. Industry knows that protecting the environment is good for business and uses environmental endorsements and certification to sell their products. Compliance is high; the number of prosecutions and the amounts collected in fines has decreased substantially. Water and air quality continue to improve.

With these elements in place, British Columbia's government has decided to move its efforts farther "up the pipe" to increase the efficiency and effectiveness of environmental management in the province. A new initiative called "Pollution Prevention Planning" challenges industry to identify ways to avoid, reduce and eliminate pollution at source rather than treating or containing it after it has been created. Through Pollution Prevention Plans, companies incorporate pollution prevention in the context of their strategic business plans and also develop stronger ties to the communities in which they operate. This initiative compliments the International Standards Organization's environmental management certification process (ISO 14000) and facilitates the development and implementation of comprehensive environmental management systems on an industrial site basis. Over time, these plans can replace the multiple "end of pipe" permits for direct discharges to water, air and land. Industries efforts will involve measures such as elimination of hazardous material inputs, improvements to in-production processes and "closed-looping" of residual streams. These innovations will focus also on increasing efficiency, reducing costs, improving flexibility and gaining a competitive advantage through secure markets.

7 CONCLUSION

United States President Theodore Roosevelt, speaking at the Minnesota State Fair in 1901, advised to “Speak softly and carry a big stick”. The British Columbia government spoke softly to the pulp and paper industry during its first 60 years of operation in the province, but government carried no stick to speak of. Later, government finally had a stick but didn’t use it. Speaking loudly and using its big stick during the third phase, government finally got industry’s attention. Now, we seem to have Roosevelt’s formula about right. We are back to speaking softly to industry but we carry our big stick in plain view.

ENDNOTES

- 1 Ministry of Environment, Lands and Parks, January 1995. B.C.’s Pulp Mills: Effluent Status Report, Highlights.
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- 3 Ministry of Environment, Lands and Parks, January 1994. B.C.’s Pulp Mills: Effluent Status Report, p.2
- 4 Khare, Prad, Ministry of Environment, Lands and Parks, personal communication
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- 7 Ministry of the Environment, 1977. Pollution Control Objectives for the Forest Products Industry of British Columbia
- 8 Ministry of Environment,, 1987/88 Annual Report
- 9 Brown, R.M. and Rankin, T.M., September 1988. Persuasion, Penalties and Prosecution: The Treatment of Repeat Offenders Under British Columbia’s Occupational Health and Safety and Pollution Control Legislation.
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