

Social License and Environment Protection: Why Businesses Go Beyond Compliance.

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Traditionally, corporations which complied with the dictates of applicable legislation would have regarded not just their legal, but also their social obligations, as ending at that point. Sociolegal research suggested that corporations complied with law only for instrumental reasons (to avoid legal penalties) (Hawkins & Hutter, 1993) or because, “regulations are taken to be a measure of societal expectations, and thus interpreted as a guide to an organization’s moral and social duties (Wright, 1998). From this traditional point of view, corporations could be expected to take actions which went “beyond compliance” only where they saw some self-interest in doing so, such as increasing profit, usually over the short term (Porter & Vander Linde, ??).¹

Today, however, at least in economically advanced democracies, many corporations no longer perceive their social obligations as necessarily synonymous with their legal obligations. Two decades of tightening regulatory rules and legal threats have led many business people to assume that any hazards and harms that their enterprise engenders, even if not clearly illegal today, will sooner or later be subject to public censure,

¹ For example, in the case of environment protection, if a company saved more in reduced waste than the cost of installing pollution abatement equipment, it makes economic sense to make the investment. Yet until the last decade or so, politicians, environmentalists, and scholars, observing the ongoing degradation of the environment in industrial societies, understandably assumed that the opportunities for such “win-win” investments were few and far between, or at least not prevalent enough. Otherwise, there would have been little political demand for governmental regulation.

government action, and legal liability. Community groups and non-government organizations (NGOs) have also come to play important roles in pressuring corporations to curb their adverse social impacts. In consequence, corporation executives increasingly talk about the importance of operating in accordance with their “social license”, meaning that they are constrained to meet the expectations of society and to avoid activities that societies (or influential elements within them) deem unacceptable. And in some instances the conditions demanded by “social licensors” may be tougher than those imposed by regulation, resulting in “beyond compliance” corporate environmental measures even in circumstances where these are unlikely to be profitable. There are, however, limits to just how unprofitable environmental measures can be. Just as corporations must meet the requirements of social and legal actors, they must also meet the requirements of market actors—suppliers, customers, consumers, shareholders, institutional investors, etc. That is, corporations must meet the terms of three strands of their “license to operate”—legal, social and economic.²

The concept of social license is of recent origin and it is far from being fully accepted across the corporate spectrum. There is no consensus on what social license means, how it should be responded to, or for when it requires measures ‘beyond compliance’. Nevertheless, a series of damaging encounters between large corporations and institutions of civil society, caused by a corporate misreading of the terms of their social license, has caused a broader corporate rethink. Shell’s failure to appreciate public concerns regarding

And hence legal coercion, it has been assumed, is necessary to compel the vast majority of corporate environmental measures.

² Here we simply recast the familiar ideas of market demands in terms of economic license requirements so that the symmetries with social and legal demands may be easily apparent.

the sinking of the Brent Spar led to costly damage to both its international reputation and sales (Neale 1997). Monsanto's failure to respond to the concerns of European consumers about the introduction of genetically modified food led to a consumer backlash and breakdown of public trust sufficient to cause restructuring and re-branding of the corporation itself. (Moore, 2001) And Nike's perceived exploitation of labor in developing countries, widely publicized by a variety of NGOs operating internationally, also caused substantial damage to its brand image. (Connor, 1996 & Yoder, 2001)

As corporations learn from such reputational disasters and seek to develop more sophisticated risk management strategies, so has the concept of social license become increasingly important in understanding corporate behavior, and in explaining why, in what circumstances, and to what extent, corporations may choose to go beyond compliance with their existing legal obligations. It is also a concept of considerable significance to policy-makers, opening fruitful possibilities for influencing corporate behavior not just directly through regulation, but also indirectly (and perhaps more powerfully) by empowering various institutions of civil society.

Yet the social license and its policy implications have been the subject of very little empirical study by social scientists, students of regulation, or policymakers. Indeed, the economic, socio-legal and policy literature on regulatory administration traditionally has focused on explaining corporate compliance and non-compliance with existing legal requirements, tacitly assuming that regulated business corporations take costly measures to meet public policy aspirations only when specifically required to do so by law and

when they believe that legal non-compliance is likely to be detected and harshly penalized.³ Only recently, and to a limited extent, has a broader literature begun to evolve, particularly in the field of corporate environmental management.⁴

In this article, we examine empirically, the role of social license as it relates to one social problem – environmental protection – and as it relates to one particular industry – pulp and paper manufacturing. We show why the social license is important, the circumstances in which it may encourage companies to build a margin of safety or to go further “beyond compliance”, how its terms are monitored and enforced, and how it interacts with what we term the regulatory and economic licenses. Finally, we explore the social policy implications of our findings.

I. Research Methods

We opted for a sector-specific approach, in preference to examining a selection of firms in a variety of industries, because the environmental challenges confronting enterprises, the social forces which can be brought to bear upon them, and their actions, are likely to be highly dependent upon the characteristics of each particular industry sector.

In deciding *which* industrial sector to study, the pulp and paper industry was an attractive option for a number of reasons. Pulp and paper mills, which historically have been

³See for example, Becker (1968); Stigler (1970); Miller & Anderson (1986). There is empirical as well as theoretical support for this deterrence-based theory of compliance. According to Regens, *et al.*, YEAR?, "We also find that pollution control investment is positively related to the EPA enforcement budget, suggesting at the very least the industries believe that the EPA will increase its investigatory efforts as their budget increases."

⁴See for example, Ghobadian, *et al.* (1998); Reinhardt (2000); Yossie & Herbst (YEAR?); Nash (2000).

sources of extremely serious water pollution and offensive fumes, have been at or near the top of the environmental agenda in every nation in which they operate. Pulp mills' chemical-intensive processes generate visible and serious environmental risks, along with considerable concern from local communities, even in developing countries. (Sonnenfeld, year?) And particularly with respect to emission of dioxin from chlorine-based bleaching process, the industry has captured the attention of environmental activists enabling us to examine the influence of these bodies on corporate environmental performance. At the same time, the industry is intensely competitive, plagued by periodical overcapacity, and only intermittently profitable. Firms in the Northern Hemisphere are threatened by lower cost producers in southeast Asia, and investors do not see the industry as particularly attractive. Thus environmental managers in pulp millshave to fight particularly hard for funds for costly environmental measures, particularly of the 'beyond compliance' variety. Moreover, potential environmental innovations by one facility can be copied by others relatively easily, so that the gains from innovation may be short-lived. Finally, it has proved difficult for firms to capture additional market share by creating distinctive, "greener" products. Thus the industry poses a demanding test for the effectiveness of social license pressures.

Notwithstanding the economic challenges, in recent years, pulp mills have had a good record of legal compliance. ⁵For the most part, the facilities in our sample complied with

⁵The EPA's "Sector Facility Indexing Project," comparing "significant noncompliance" as detected by inspections and industry reports, found that in 1998 and 1999, American pulp mills (n=244) had lower levels of significant noncompliance -- 4.3 % for clean water regulations, 0% for RCRA (solid waste), and 21% for clean air requirements than most other "dirty" industrial sectors (petroleum and metals manufacturing and smelting). (Stanley, 1999) An EPA study of pulp mills in southern states in 1982-84 found 6% in "significant noncompliance" with permit levels, and that four of the 56 mills in the study created most of the instances of significant noncompliance. (Magat & Viscusi, 1990)

the law, as specified in their regulatory permits. Indeed they “over complied” in some respects, emitting an average of 37 percent of the water pollutants ⁶ allowed by their permits. Thus the industry provides fertile ground for examining whether and how far firms are willing to go *beyond* compliance, and for determining what factors explain difference among firms in that regard.

Most studies of corporate environmental policies and performance have relied either on (a) structured questionnaires mailed to a large number of companies in various lines of commerce, ⁷ or (b) in -depth case studies of one or two companies, often selected because of their reputation for innovative environmental management. ⁸ The survey methodology often suffers from low response rates (which make the data less representative), ⁹ from the researchers' inability to probe general responses for concrete details and reliability, and from variance in the industrial processes and environmental contexts of the respondents. The in -depth case studies rank higher in reliability but are weak in external validity (representativeness) and explanatory power.

In this study, we have charted a middle course, conducting interview -based studies of 14 firms (manufacturers of bleached paper pulp) that use a single production technology. Thus we have sought to hold constant (more or less) the nature of the environmental challenges and the economic and technical constraints our respondents face, while

⁶ Biological Oxygen Demand and Total Suspended Solids.

⁷ See for example, Baylis, *et al.* (1998) (postal questionnaire to 420 manufacturing and processing companies).

⁸ See for example, Hoffman (1997), Prakash (2000). See also Ghobadian, *et al.* (1998) (survey and analysis of four firms). A more sophisticated methodological approach is taken in R. Florida, M. Atlas and M. Cline. “What Makes Companies Green?” paper presented to 95th Annual Meeting of Association of American Geographers (Hawaii, March 1999). This involved a much larger number of firms and comparison of ‘matched’ enterprises. This study however, has a different focus from our own, being concerned with internal organizational factors.

varying the social contexts within which they operated. The sample is small enough that we were able to conduct lengthy interviews in person, followed in many cases by telephone conversations.

In determining the size of our sample (i.e., the number of firms selected for study) there were inevitably trade-offs to be made between breadth and depth. We were mindful that we wanted a sample size large enough to explore the main variables, but small enough that, given resource constraints, we could examine each of our selected firms in sufficient detail to explore adequately key research questions. We chose 15 firms in all: seven in the United States (4 in the state of Washington, 3 in Georgia), four in Canada (British Columbia), and four in Australia/New Zealand. One of the Australian/New Zealand mills subsequently closed before it was possible to obtain adequate data, leaving a total sample size of 14. All four countries have substantial timber, pulp and paper industries, and an overall level of economic development and political cultures sufficiently similar to provide useful lessons from the other's experience.

In selecting *which* mills in each jurisdiction to study, we chose not to select them at random, because we wanted to be sure to include some firms that had a reputation for outstanding environmental performance and some that did not. Through preliminary discussions with regulatory officials, industry association representatives, environmental NGOs and other informed sources, we identified facilities with a reputation for excellence. We chose 3 mills (1 in each of BC, WA, GA) for their good reputation. The total number of mills that met our study criteria (same technology) in each jurisdiction

⁹See for example, Greening & Gray (1994), (postal questionnaire to 451 companies) with 27% response rate.

were: BC=14, GA=5, WA=4, NZ=2 and AUS=1. We then chose all available mills in WA, NZ and AUS. In BC we deliberately chose a mill that was operated by the same parent corporation as two other mills already chosen, enabling us to compare the relative impact of corporate management and regulatory jurisdiction. We then chose two mills in BC that had a reputation for being average or below average.¹⁰ In GA, two mills were excluded for difficulty of access reasons. Thus, of the 14 facilities in our sample, 8 were chosen on the basis of their jurisdiction alone, 3 were chosen based on their reputation for excellence, 2 on the basis of their reputation for being average or below average, and 1 because it was owned by the same company as two other mills in the study. The sample also includes smaller independent operations as well as mills owned by large transnational corporations.

We conducted lengthy on-site, semi-structured interviews with environmental managers at each sampled facility and in most cases with mill managers as well. Our discussions were designed to elicit information about each facility's environmental management and pollution control history, control systems, general approach to environmental problems, and relations with regulators and environmental activists. We probed for specific examples, collecting detailed stories of particular environmental, regulatory, and economic problems, current or past, that illustrated the firm's characteristic responses to challenges¹¹.

¹⁰The sample is reasonably well representative of the range of Canadian performance. In 1991, the 14 mills in BC had a range of AOX performance from 0.6 to 6 kg/ton. The performance of facilities in our sample ranged from 3 to 0.6 kg/ton and ranked 1st, 6th, 9th, and 11th. In 1998, the performance of all 14 mills ranged from 0.2 to 0.7 kg/ton. Facilities in our sample ranged from 0.4 to 0.5, and ranked 3rd, 6th, 6th, and 12th.

¹¹More specifically, in our interviews with pulp mill personnel, we asked, inter alia: What environmental protection actions company personnel were proudest of and why they had taken them; What actions they believed still needed to be taken and why these actions had not yet been taken; The extent to which

In most cases, we also interviewed officials in corporate headquarters, regulators, and environmental activists familiar with the mills in question. We sought additional perspective on each facility through interviews with industry association officials, environmental consultants, financial analysts, corporate lawyers, other commercial third parties and, on occasion, mill employees.¹² We achieved a high response rate, partly (we assume) because we provided guarantees of confidentiality to our respondents and partly (we assume) because of the non-confidential nature of most of the information being sought. In total, we conducted approximately 70 interviews. In a small minority of cases, where direct contact was not practicable, we conducted telephone interviews.

Our research on social license formed part of a larger study in which interview-based research was complemented by hard data (primarily measures of water pollutants: total suspended solids (TSS), biological oxygen demand (BOD), and absorbable organic halides (AOX)) at most of the mills in our sample.¹³ However, because we could not meaningfully quantify the intensity of the social pressures each mill experienced,¹⁴ we can provide only qualitative evidence concerning the relative importance of firms' social licenses in explaining their environmental performance, and in this article, we refer only

production and environmental management decisions were integrated; How the company evaluated its environmental performance; What specific environmental technology was currently in use at the facility, and when and why it had been installed; What their experience had been with environmental regulators and inspectors; What their experience had been in relations with host communities and environmental activists concerning environmental issues.

¹²We interviewed HQ people at 11/14 facilities, regulators at 10/14 facilities, and activists at 6/14 facilities. In some cases, we have conducted follow-up telephone interviews with mill personnel and relevant regulatory officials.

¹³See Kagan, *etal.* (forthcoming *Law and Society Review*).

¹⁴Social license pressures are not merely difficult to measure, but inherently imprecise and malleable. For example, activists demand different things from different mills, and mills employed different ways of

tangentially to our hard data, which can be found in Kagan, Gunningham & Thornton (2002).

II. The Impact of Social License

The social license, then, is based not on compliance with legal requirements (although breach of these requirements may jeopardize the social license) but rather upon the degree to which a corporation and its activities are accepted by local communities, the wider society, and various constituent groups. Many pulp mill officials spoke quite explicitly about the importance of their "social license." A senior mill environmental manager put it: "It's very important how the community sees the plant - how they are thinking about our license to operate." A mill manager at another facility said, "We have to continuously convince the public we have a right to exist." In 1999, managers at yet another mill told us that the sanction they feared most for breaching regulations were not legal but informal sanctions imposed by the public and the media, and hence they were motivated less by avoiding regulatory violations per se than by avoiding "anything that could give you a bad name." In the words of one environmental manager: "If you are going to run the mill in the community you have to live with them".

How does social license, then, actually affect environmental performance? Attributing particular measures to social license pressures alone is often difficult. Yet references to

responding to, and hence, reshaping, those demands. And the intensity of social pressures depends on how they are interpreted and responded to and often reshaped by corporate managers.

the potency of social pressures permeated our interviews with pulp mill officials. An environmental manager at an American mill, for example, said:

“The EPA is such a monolith it can’t adapt. It takes a decade to get something to happen. The environmental community is really setting the tone. It’s done far more to make companies accountable for pollution. It does more to keep me on my toes, to give me an incentive to go to my management and say, we have got to do better because the community can sue us and also give us the biggest rewards.”

As this quotation suggests, the social license can make a difference in a number of significant ways. First, the social license, by punishing or rewarding firms in terms of reputation capital, can induce firms to take “beyond compliance” measures of the “good citizenship” variety, that is, they entail expenditures which are not justified in terms of traditional, quantitative analyses for assessing likely profitability; rather, they are justified on the grounds that enhancing the firm’s reputation for good environmental citizenship (and avoiding a reputation for bad environmental citizenship) will in the short or long run be “good business.” Second, it lends extra enforcement energy and weight to existing regulatory and legal license requirements, pushing regulated enterprises toward full legal compliance -- and even to investing in “beyond compliance” measures which provide a “margin of safety”¹⁵ against violations. Thus as noted earlier, the mills in our sample had

¹⁵“Margin of safety” measures are those which “overcomply” with current regulations, much as a motorist might drive 5 mph below the speed limit on a well-policed highway. Thus many firms construct effluent treatment systems that establish limits on pollutants that are more stringent than required by regulations or

reduced key pollutants in their effluent well beyond the limits specified in their regulatory permits.¹⁶ In addition, social license pressures can result in a tightening of the regulatory license.

Enhancing Reputation. The concept of social license is closely related to the notion of “reputation capital.” As Joyce and Thomson put it, “Reputation capital represents a communications bridge that predisposes NGOs, communities and other groups to enter into open discussion rather than hostile opposition. Reputation capital carries with it credibility, such that the up-front costs and risk associated with gaining social acceptability are reduced.” (Joyce & Thomson, 1992) Those with reputation capital, it is argued, will gain readiest access to the means by which to make future profit: development approvals; preferred access to prospective areas and products; the ear of government; the trust of regulators; the tolerance of local communities; and the least risk of being targeted by Environmental Non-Government Organizations (ENGOs).

One pulp mill environmental manager reflected the same idea — that building reputation capital is a good economic investment -- when he told us, in the context of a discussion of local community environmental activists, “You have to develop the relationship in times of peace... [because]... when there are spills, tank failure, dioxin issues, it gets tough.”

It was in these circumstances, he argued, that the trust and social capital that had been

their permits, or which have a larger -than-required capacity, in order to ensure that irregularities or breakdowns in the normal production and treatment operations do not result in a serious violation.

¹⁶ For mills in the United States and Canada, we were able to compare each mill’s BOD and TSS discharges with the legal limits prescribed in their regulatory permits. In 1998 -1999, these nine mills’ BOD emissions ranged from 18 to 85 percent of their permit limits, with a mean of 38 percent. For TSS, the range was 14 to 66 percent of permit limits and the mean was 36 percent. No figures for AOX is reported because US permits do not prescribe numeric limits for AOX.

built up earlier, became crucially important. Indeed, in one case, so great was the credibility that the company had established with the local community and with local environmental groups, that when Greenpeace contemplated a campaign against the company, it met with a very hostile local reaction and moved onto easier targets. A manager at another mill talked about the pitfalls of failing to build reputation capital: "It works against you when things are behind the community's back. If you have a good relationship with the public, then the goodwill will be there and when there is trouble you will get the benefit of the doubt -- you will have a positive bank account." Regretfully, he added, "We have a zero bank account or we're in deficit." (One consequence was strong local opposition to the mill's current plans for future disposal of solid waste, which meant the company faced the prospect of having to bury the waste, at much greater cost, to a distant disposal site).¹⁷

Building reputation capital also gave companies far greater control over their own destiny. For example, some, reflecting on past experience, believed they had been largely reacting to the agendas of other stakeholder groups, that they were unable to anticipate problems, and that the ad hoc solutions generated when they did react, often created as many problems as they solved. This led a number of companies to develop proactive strategies for dealing with communities and others. One senior corporate official described the situation very bluntly: "looked at from a business standpoint, it's risk management. We became responsible environmental stewards because it's not in our

¹⁷ In addition, mill officials were exploring the possibilities for treating the waste to make it a reusable commodity. "Things there might be opportunities," the firm's environmental manager said. Thus social license pressures can sometimes instigate a search for "win-win" alternatives.

financial interest or risk operations being closed down.” Or another put it: “anything that could give you a bad name is an unpredictable risk”.

Thus social license pressures acting alone and directly compelled mills to take “beyond compliance” odor control measures. A one mill manager put it: “We want people to know we are here, but not through their noses”. And so, for many mills, odor control became a major focus. When officials at AK asked, “What are you proudest of in your environmental program?”, the unequivocal response was odor reduction:

“We used to get 300 -350 odor complaints per year, but now it's down to about 50 this year so far. We spent a lot of money to achieve this... \$13M to put in an odor control system that is not required by law... But if there is sustained public pressure we are responsive... Our behavior is predicated by the feelings of the local community... We have dedicated scrubbers and an on -condensable gas incinerator system and we are running at a fraction of what our license permits. The driver is to pacify the community.”

We heard very similar stories at a number of other mills: “We didn’t have to put in the scrubber, but odor is the key to the community. We had a problem with a particular source, we couldn’t do it any other way. The only way was to remove it at source, but it wasn’t a consent [permit] requirement.

”Similarly, for some mills that were highly visible to broader urban as well as local communities (as when the mill could be seen by thousands of motorists

daily on a busy highway), such as PW, “The big issue isn’t the regulator, its appearance, it’s the steam coming off the stack. This is 99.5% water but its an aesthetic issue. We know that putting in condensers will cost and provide no economic benefits but it protects our business license.”

And according to the manager of a pulp mill in a small town in Georgia: “A decision was made not to fight it as a battle but to understand what the community wanted and to spend money wisely to get the support of the community. For example, water color is not regulated and is not included in the permits so we could have fought about it, but we decided not to. We instilled in ourself the viewpoint that we wanted to be a good neighbor, it’s the local stakeholder that give us the right to operate.”

Whereas local communities often have made odor control and other aesthetic issues part of pulp mills’ social and regulatory licenses, activism by ENGOs has focused primarily on the use of chlorine as a bleaching agent, because it results in emissions of chlorinated organic compounds, particularly the extremely persistent and toxic dioxin. For example, in November, 1988, dioxins were discovered in shellfish near a mill in our sample. In highly dramatic public demonstrations, environmental activists targeted the mill’s parent company, a forestry company, and the mill itself. By 1989, the mill was spending \$1 billion on modernization and expansion, including improvements in dioxin emissions. In 1991, chlorinated organic emissions from this mill were the lowest for mills of its type in British Columbia.

At another company we talked to in 1999, head office personnel characterized the company as not having taken environmental issues seriously until a Greenpeace demonstration in which activists scaled the corporate office tower and draped a huge banner with slogans over the front of the building, putting the company and its environmental reputation into the front pages of the newspaper. The corporate officials believed this had been a pivotal event in getting the environment “in the face” of senior management, generating a commitment to improve environmental performance. As one of them put it: “It was the start of a wakeup. We have to do more than just crank the mills.”

In terms of the company's subsequent environmental performance, between November 1990 and January 1994, average biological oxygen demand (BOD) emissions at PG declined by a third, erratically but gradually, from about 15,000 lbs/day to about 10,000 lbs/day. In February, 1993 the company appointed a high profile ex-government regulatory official as senior vice-president for the environment. In July 1994, the company adopted an ambitious set of corporate “environmental principles,” including the establishment of company-wide environmental goals, strategies and time frames to achieve them, and the introduction of systemic environmental training and audit programs. In the two years beginning October, 1994, the company's average BOD discharges declined almost another 50 percent, to an average of about 5,000 lbs/day (except for an aberrant rise in early 1996). The mill's emissions of Total Suspended Solids (TSS) followed a similar course and timetable, dropping rapidly *before* a new regulatory permit was issued to the facility (in November, 1995). Thus in the company's

case as well, social license pressures appear to have been an important source of “beyond compliance” efforts, triggered in the early ‘90s by the shock of adverse environmental publicity alone and later, at least in part, by anticipated tightening of the regulatory license as well.

Augmenting Enforcement. Social license pressures from local communities, our interviews indicated, have been a primary source of pulp mill progress in reducing the impact of foul odors and other adverse aesthetic impacts, such as discoloration of receiving waters and emission of plumes of steam. Social pressures act both directly (as described above) and indirectly through augmenting the enforcement of existing legal pressures. Although regulations establish limits on ill -smelling sulfur emissions,¹⁸ odor control may not in itself be high on a regulator’s list since its environmental impacts are minimal (as defined by most regulatory regimes, which emphasized demonstrable adverse effects on human or ecosystem health). But in the case of pulp mills, odor is usually the community’s highest priority. In some cases, social pressures drove regulators to use the power of law to demand stronger odor controls. Thus in Australia, one environmental manager described his mill’s prosecution experience as follows:

“We have been to court three or four times, and pleaded guilty. We have only argued over the size of the fine. They were all odor -related issues. For example, we had a problem resulting in pulp going into the foul water accumulator and stuffing that up so it couldn’t be pumped into the stripping system so it was

discharged down the drain. The nearest private residence is 2 kilometers away. The towns are five or six kilometers away. It was one of those still, quiet nights, and it stank very badly. It was very apparent what it was. There were lots of complaints to EPA. There was a degree of negligence, but was a prosecution appropriate? We were in a no-win situation. *If you cause odor in a residential area you can't win.*" (emphasis added).

Tightening Regulatory License Requirements . In addition to direct effects leading to beyond compliance measures, the ENGO's campaign against dioxin in British Columbia also led to tightening of the regulatory license requirements for dioxin emissions. When dioxins were discovered in shellfish downstream from pulp mills in 1988 in British Columbia, a combination of environmental activism (especially by Greenpeace) and consumer concerns generated sufficient political pressure to result in regulation the following year that tightened conventional pollutant requirements and increased fines for violations. Two years later, political pressure had not dissipated, and a new rule requiring the complete elimination of chlorinated organics in pulp mill discharges by December 2002 was passed in 1991. Greenpeace kept up the pressure in the early 1990s; it organized a consumer boycott of chlorine-bleached paper in Germany, generating demands from some customers for chlorine-free pulp from Canadian producers. At a European port, Greenpeace members painted a 100-meter long slogan on the hull of a cargo ship carrying pulp and lumber from Canada. The net effect was that chlorinated organic discharges from pulp mills in British Columbia decreased in range from 0.6 to

¹⁸ For the U.S., 43 FR 7572, Feb. 23, 1978, as amended at 43 FR 34785, Aug. 7, 1978, established emissions limits for total reduced sulfur (TRS) from pulp mills. The EPA's Cluster Rule characterizes TRS

6.0kg/ton in 1991 to 0.2 to 0.72 in 1998, and almost tenfold decrease in the maximum level of discharge, far in excess of the decrease seen in the United States where no such rule was in place (and where far fewer companies exported to Europe).

Variation in Response to Social License Pressures. Different mills in our sample took very different approaches to the issue of meeting their social license and building reputation capital. One or two seemed oblivious to its existence. Some took a strategic approach, such as “buying off” the local community’s objection to particular emissions by offering to supply it with better quality drinking water, or trying to “win hearts and minds” through public relations campaigns in local schools and with local community organizations. Still others saw their social license and their reputation capital as central to their very existence, to work directly with stakeholders, to be transparent, and to respond substantially to their concerns. Some companies gradually shifted from defensiveness toward responsiveness to community and NGO concerns, as in the case of one company, whose environmental manager told us:

“Ten years ago we were reacting to threats from the public, from the regulator, and from the greens, and we didn’t control the process. We built a virtual wall around ourselves and no one on the outside was told anything. Now we are going through a process of turning that around, of opening the gates, of an attitudinal change from inside. We went through enormous changes over the years but we never told anyone, so the only story out there was the green one, that we were engaged in environmental rape and pillage, and it isn’t true. So

wetookstockofrealthreats,thentookthebravestepoftalkingaboutthem,of sayingtothepublic,thisiswhatwe'vedoneandthisiswhatweplanto do...onceyoustartthatprocess,peoplecomedownheavy onyou,butyou needthefortitudetokeepgoingandbetotallytransparent -we'llshowanyone anythingWhy?It'stherightwaytogo...Itcomesdowntoindividualsand overtime --trust,listenandrespond.”

Similarly,anothermillmanagernoted:

“Inthe oldtimes,wescopedtheproject,putittogether,gotBoardapproval, didthecostings,broughtitbacktotheBoardforfinalcostings – then announcedwhatweweregoingtodo.Andthenmaybetheregulatorshadan inkling,certainlythecommunitydidn't.Now,oncewehavedonethe preliminaryscopingandgotthepreliminaryOK,webriefthecommunity committee,andasktheirissuesandconcerns,thentaketheseonboard.They wantednomoreeffluentsothechallengewas,canwedothistillbuildthe new[installation],andbecauseweknewthisearly,wecouldgotothe designersandaskwaystoachievementminimumwaterusageandhowtooff -set thiselsewhereinthepant.Weachievedthis,gotenvironmentalapprovals fromtheregulatorsandhadnoobj ectionsfromthecommunity.”

Management at a few mills in our sample, or at their corporate headquarters, were less responsive to social license pressures. ¹⁹ Thus, while most companies responded to perceived social license pressures by improving their environmental performance, this was not invariably the case, and some reacted to community or NGO demands with resistance rather than responsiveness. For example, one company in our sample had considerable reason to pay attention to its local community, because although the company was the major rate payer in the area, it was not the major employer and was not well regarded. There was a history of environmental damage to the estuary adjacent to the mill (which was alleged to be “knee deep in dead material in which nothing will grow”) and of poor labor relations. Local environmental and community groups were very active in challenging the mill’s activities, and were contemplating legal action on a number of fronts. Community opposition to the proposed opening of a new dump site seemed likely to derail the project, causing the company to have to face spending considerable amounts in shipping its wastes substantial distances to the next jurisdiction. Despite all of this community pressure, the mill had a very poor record of community relations. Apart from a fleeting period of dialogue (terminated by the mill management apparently on the instructions of head office) the general approach had been one of stonewalling, and at the time of our fieldwork, community groups were not welcome at the mill. According to the environmental manager;

¹⁹ There was risk in this strategy, for a mill could not be sure that environmental activists would not be able to prod regulatory license enforcers into action. In the case of Louisiana Pacific’s Samoa, California mill (not in our sample), unresolved complaints by the Surfrider Foundation about the mill’s chronic violations of permissible pollution discharges into the ocean resulted in a 1989 lawsuit by that ENGO. The U.S. EPA joined the suit, which resulted in a 1991 consent decree. Louisiana Pacific agreed to install and operate a totally chlorine free, peroxide-based bleaching system, the first in the United States -- thereby going substantially “beyond compliance” with current U.S. law (but positioning itself for compliance with regulations that were likely to be promulgated later in the 1990s) N-B & R (Young, 1993). See also (Knickerbocker, 1994).

“this mill has done a horrible job of PR in the last decade. There is a huge trust chasm with the local community.... odor, particulates, the visual impact, these are legitimate beefs... The track record isn't there. It works against you when things go on behind the community's back.”

Yet, for most mills in our sample, social license pressures appear to have mattered significantly. They gave corporate officials an additional incentive to comply or even “over-comply” with the terms of their regulatory license, for legal compliance often served as an important benchmark of company cooperativeness or commitment, in the minds of social license enforcers. And social license pressures were responsible in many cases for a measure of “beyond compliance” company activity, both reducing odors and visual impacts and in accelerating the reduction of emissions of chlorinated organics.

III. Interaction between social license and economic and regulatory “licenses”.

The social license of course, is not the only influence on corporate behavior. Indeed, the scholarly literature on corporate environmental performance has revolved around the effort to specify various external “drivers” of corporate behavior, not least, regulation and economic forces. However, in the course of four field research we came to regard the concept of ‘drivers’ as somewhat impoverished. It implies the existence of independent, unidirectional and unambiguous pressures, whether from regulation, communities or markets, which impact upon corporations with sufficient force that they react to them.

Yet we found that these external factors, rather than being independent, often gain their force through mutual interaction. Indeed, we found it more useful to think not only of social pressures, but also of regulatory and economic pressures, as terms or conditions of a multi-faceted “license to operate”. In contrast with the concept of unidirectional drivers, this concept captures the complexity of the relationship between the regulated enterprise and key stakeholders, and it accords with an important reality we observed: the relationship between the licensors and licensees is interactive, not unidirectional, and many of the terms of the license are open to interpretation, negotiation, and company-initiated amendment.

As we will see, the interactions among the regulatory, economic, and social strands of the license to operate often result in an intensification in the overall constraints under which companies operate. In other cases, however, there are tensions between the different economic, social and regulatory forces which may pull firms in different directions. The economic license, for example, often calls for limits on or even reductions in environmental expenditure, while the terms of the social license push for an increase. We explore the implications of these interactions for the social license, below, distinguishing for heuristic purposes, between legal and social interactions, and economic and social interactions, while recognizing that in the real world all three may interact.

Legal Expansion of the Social License. In terms of legal and social interactions, the regulatory license often extends the reach and impact of the social license, either by directly empowering social licensors, or by giving them access to information, which

they can then use to pressure target enterprises. Conversely, the scope of the legal license can also be expanded as a result of its interaction with the social license, for example as social pressures on legislators and regulators feed through in terms of enactment, monitoring and enforcement of regulation.

The most common influence of the legal on the social license is that of empowerment. For example, the relative power and influence of the local community may be connected directly to the extent to which it is enabled by legislation to participate in decision making about the mill's future. In New Zealand, almost all our respondents emphasized the enormous impact of the *Resource Management Act*, which gave individualsthe right to make submissions and challenge any variation of the consent (the basic permit or license to operate) and whose interventions might hold up a new project for a considerable period. A senior mill manager described it: "It became a very public process. In 1994 -95 there were 169 submissions regarding the mill." We had very strong protests. People were finally able to have their say. We had 32 people speaking at the public hearings". This created an environment in which there was a strong incentive for mills to listen and respond to community concerns because if they failed to do so, they risked delays, possibly for years, in obtaining the consents they needed in order to introduce technological and other changes.

Laws requiring disclosure of environmental information at firm level, can also act to empower local communities, albeit indirectly. The literature on community right to know in general and on the U.S. Toxic Release Inventory in particular, demonstrates the

potential power of informational regulation in this context. (Fung, 1998) For example, the power of publicity was seen as particularly potent by most pulp mill management and in Canada the “environmental scorecard” published by the Province (outlining environmental performance indicators and major infringements of regulations) was seen as “a pretty effective tool – if you have recurring environmental problems you come upon the list – it keeps you in compliance because public pressure is more demanding than the regulatory agencies... agencies are more forgiving”.

These examples do not exhaust the list of ways in which the terms of the legal license expand the social license. Rights of standing to sue either a company or a regulatory agency, broader issues of access to information, legal duties of companies to consult with local communities, and penetration of the legal decision-making process can all serve to expand the scope of the social license. In addition to criminal sanctions and administrative notices (and in the USA, civil penalties) companies that breach their legal obligations are also vulnerable to either individual or class actions from citizens injured as a result of the facility's illegal activities. In the case of local residents, they can oppose, by both legal and political means, any expansion of the facility, thereby slowing or halting its economic growth. For example, they may challenge or oppose variation in the permit requirements or in local ordinances, or they may lobby local and state governments to limit any expansion of the mill under planning and land use laws.

The extent to which a company complies with regulation is also used by community and environment groups as a performance indicator by which the community judges

compliance with the broader social license. For this reason, some companies fear enforcement not so much because of any penalty likely to be inflicted by the regulator but rather because of the resulting publicity, and as a consequence, the informal sanctions imposed by the public, the media, and perhaps also by European markets. For example, in the early 1990s, Greenpeace was highly successful in targeting individual mills in our sample, on the basis of their environmental record and marshalling consumer and customer pressure against them. Certainly compliance with regulation often will not in itself be sufficient to satisfy broader community concerns, which often extend well beyond the standard embodied in regulation and commonly include issues such as water color or odor, which may not even be directly addressed in the permit itself. However, at the very least, substantive non-compliance with the permit and regulation will send broader signals to the community concerning the company's failure to discharge its broader social and environmental obligations.

Social Expansion of the Legal License. While the terms of the legal license commonly serve to expand the scope of the social, the converse is also true. For example, a failure to respond appropriately to the social license, involves the risk of expanding the regulatory license, as politicians and ultimately regulators, respond to community demands. As one senior corporate official pointed out; “local communities have the ability through the political process to create the regulations that allow you to do business . . . we operate under a license from the public in every place we do business so we have to be sensitive to public concerns”. Again, so sensitive are some companies to the messages they send to

local communities, that they are willing to compromise substantially on the terms of their legal license and permit conditions. Thus as one company recounted:

“when dioxin first showed up in 1991 when we renewed our wastewater permit there were concerns from the community that a deal was done between the company and the government behind closed doors. We didn’t like the permit limit but we didn’t want to appeal it because that would send wrong message to the community. We had some trust to build up, we didn’t want to appeal the permit for that reason - we asked, what do you want in the permit - and so sent a message out and saved our reputation [with the community]. The public has ability to appeal the permit - nobody appealed it but was very controversial - even other pulp company in the state appealed their permit.”

However, we also found that mills sometimes use compliance with the social license to gain some respite from some of the terms of the regulatory license. For example, good community relations can sometimes be used to gain additional regulatory leverage. As one environmental manager argued (TS) “If you can sell something to the local community they will stand in front of the regulator on your side”. This manager gave the example of a dispute between the regulator and the mill concerning a Superfund site. Although the company wanted to proceed with a cleanup plan, the government was reluctant to sign off on anything. “[B]ut the environmental groups mobilized behind us

and that got EPA and [the State regulator] in the room and to achieve the first settlement of Superfund site in the country without litigation... it saved us millions of dollars.”

More broadly, the way enforcement agencies exercise their discretion *maybe* influenced substantially by community mores and expectations. On occasion, regulatory action could even be viewed almost as a surrogate for community action, with the company regarding their main license as being social rather than regulatory. For example, in the Australian case cited earlier, the regulator’s policy appeared to be not to prosecute simply because there had been a breach of environmental standards, but rather to do so only when the level of community complaints about a particular incident was adjudged to be sufficiently high.

Social and Economic License Interactions. The main interactions between the *economic and social licenses* are at the level of enforcement. Because there are no formal means by which to enforce the social license, social licensees seek to do so indirectly by bringing pressure to bear. For example, national and international environmental groups exert pressure largely through the attempt to impose informal economic sanctions. Bad publicity generated by carefully staged media events, such as protestors chaining themselves to pulp barges, or staging public protests in head office, can impact directly on corporate image and sales and indirectly on share prices and access to investment capital. Thus when members of one environment group at a European port painted a derogatory 100 -metre-long slogan on the hull of a Canadian cargo ship carrying pulp and

lumber, naming the companies involved, this caused not only a major embarrassment to one of the companies in our sample but also a threat of consumer and customer boycotts.

Sometimes the pressure on the economic license is more direct, as when local community pressure threatens a company's access to essential resources. ²⁰For example, one of our sample firms was acutely aware that it was involved in increasingly tough competition for water, that it was perceived as a profligate user of that resource, and that a failure to justify its water use and broader economic contribution to the community could result in a substantial curtailment of its operations.

Environmental groups also seek to influence *customer* preferences, sensitizing them to the environmental consequences of the products they buy and urging and orchestrating consumer boycotts. This in turn may affect the purchasing decisions of buyers of pulp products and directly threaten market access. Thus RF, which far exceeded the performance of the other American mills in our sample, in reducing chlorinated organic emissions, did so in response to European customer concerns regarding dioxin in the diapers it produced. The company "Felt it's not good business to be in the middle of the [dioxin] controversy."

Similarly, consumer demand in Europe for chlorine-free paper played a significant role in inducing SH – an exporter of market pulp – to make sharp reductions in its AOX emissions during the 1990s, achieving lower levels in 1998 – 99 than other mills in British

²⁰Such resources include legal resources such as permits to build, permits to operate, zoning restrictions, as well as physical resources such as energy, water, lumber, etc.

Columbia (and indeed, lower than all mills in our sample save RF). American pulp mills, on the other hand, generally are not export oriented and hence are more insulated from European demands for ECF and effluent-free paper (Norbert -Bohm & Rossi, 1998:230). With the exception of RF, with its special customer concerns, the American mills in our sample had below-average records in AOX reduction in 1998-99 (as compared to our sample of mills as a whole).²¹

IV. Variation in the Terms of the Social License

Since each community is unique, since each mill's geographical location in relation to its local community will differ, and since the degree to which a local community is economically dependent upon a mill, will also differ, so too will the strength and terms of the social license. In practice, we found that all the mills in our sample experienced some community pressure, and in many cases that this was substantial. Nevertheless, almost all our correspondents acknowledged that "location and geography has a lot to do with it" and that a "mill in the boon docks" with an economically dependent local community could be anticipated to have a more relaxed social license.

In fact, variation between the terms of the social license of different mills in our sample often appeared to influence differences in environmental outcomes.²² For example, one

²¹ At the same time it is also clear, as noted earlier, that European demand for ECF paper, at least in the late 1990s, was not so strong as to enable producers to charge a premium for ECF paper. Hence even mills like SH, with the ability to operate ECF, felt economic pressure to back off from eliminating all AOX, as long as regulators are still allowing them to do so.

²² We have described elsewhere (Kagan, Gunningham and Thornton op cit) our attempt to match pairs of companies operating in broadly similar circumstances but with different social license terms.

mill with exemplary environmental performance had a far more demand in social license than another with relatively lax environmental performance.²³ The exemplary mill was located on the waterfront of a fairly large city, once heavily dependent on trade in forest products, but now with a much more diversified economic base. The mill was visible to the white collar workforce in nearby downtown office buildings. The city was also home to several environmental groups that paid close attention to the quality of the mill's receiving water. The laggard mill, in contrast, was the primary employer in a small company town, miles from the nearest large city. While it experienced some local complaints (from owners of high-priced vacation homes), for the most part it is more isolated location buffered it from community or environmental group pressure. The managers at this mill did not perceive themselves to be vulnerable to local pressure to anything like the extent as those at the leading mill, nor had they come close to establishing the same level of communication or dialogue with environmental groups or regulators. Thus each mill's social license appear to have been a very important reason for their disparate environmental performance.

However, corporate response to the terms of the social license is not entirely predictable because the terms of the license may themselves be ambiguous or uncertain, giving rise to the possibility of variable interpretation and action on the part of mill and corporate management. For example, health effects may be unknown or unpredictable, giving rise

²³ The legal license pressures were presumably the same, both mills being located in the same US state, subject to the same laws and regulations which were administered by the same agencies. In addition, the more laggardly environmental performer appears to have had more economic resources at its disposal than the leading mill. The laggard mill was part of a larger corporation with more economic depth than the leading mill, and the laggard mill corporate profitability in the late 1990s higher than average for our sample. We have no specific economic data for the leading mill which was a privately held company.

toun certain *public* expectations. Obnoxious odors may be anathema to affluent and middle class communities but may be regarded as “the smell of money” in communities with little industry and employment. The issues that will concern nearby residents, the special interest groups that will form in a particular location, the strength of those groups and the alliances they may make, are all unpredictable. Consequently, the requirements of the social license are interpreted and responded to differently (and often reshaped) by different corporate managers.

Elsewhere, we have argued that the perceptions and attitudes of mill and corporate management, and their interpretation of their license terms, acts as an important filter through which information about the external licenses is sifted and guided their responsiveness to conflicting external pressures²⁴. And this suggests that environmental management style – the attitudes and modes of thought that guided corporate and mill level policy, not social pressure alone, is a key variable in determining the capacity of social pressure to shape corporate environmental performance, although quite how they do so, is a complex issue requiring further research.

IV. The Limits of the Social License

We have argued that today, at least in economically advantaged democracies, many corporations no longer perceive their social obligations as necessarily synonymous with their legal obligations, and that the conditions demanded by social actors may be tougher than those required by law, resulting in ‘beyond compliance’ corporate behavior. But

clearly there are limits to how far beyond compliance companies are able and willing to go, and the degree to which social actors can effectively impose their demands on companies reluctant to meet them. The limitations of the social license arise from each of the three sectors already discussed: social, legal, and economic. First, in order to articulate social demands, social actors must be able to determine that a harm has or might well occur and must also have the organizational competence to develop and effectively articulated demands to address the harm. Second, legal and political actors must be reasonably responsive to social actors' demands; that is, they must see the demands of social actors as both important and legitimate. Finally, economic concerns often constrain the *degree* of beyond compliance behavior firms are willing or able to undertake.

Social Actors. While obnoxious odors or visible dumps or emissions to the air or water are easily detected and can form the basis for rallying and organizing social actors, other kinds of environmental harms are less detectable or hard to trace to particular businesses. In such cases, the terms of the social license may be much less stringent. Of course, even when discharges are not detectable by human sensors, they may be made detectable by scientists or technicians. But even if that data is available, much depends on the social interpretation of its meaning. For example, advances in analytical chemistry that allowed the detection of even low levels of dioxin in pulp mills' water effluents was a trigger for social activism only because of the pre-existing publicity concerning dioxin's toxic effects. Had this general awareness been absent, finding dioxin in pulp mill discharges would have resulted in a small footnote in an obscure scientific journal, rather than a

²⁴Kagan, Gunningham and Thornton op cit.

rallying cry for an effective Greenpeace campaign. Where the general knowledge and public concern about particular adverse environment alterations is at lower levels, firms' social license pressures may lie dormant. Once aware of a harm, communities must be able to develop and articulate a set of demands designed to mitigate or redress it. The development of demands seldom requires a high degree of competence; most often it simply insists that the firm "cease and desist" demands, or "do something about it". However, the ability to come to an agreement as to what the harm is and what the appropriated demands in response to it should be requires a degree of organizational competence which may be absent in more marginal, disorganized communities or in less developed countries.²⁵

Similarly, once developed, demands must be articulated in a manner that encourages others social, legal, and economic actors to understand and respond to them. Incompetent articulation of demands can also result in delegitimation of social demands as extremist or irrational, and poor communities can be disadvantaged in this regard too.

Political/Legal Actors As already discussed, the terms of the social license often are enforced indirectly through economic or legal mechanisms. In undemocratic regimes, officials and politicians may feel no pressure from failing to respond to public concerns. Thus the type of political regime in a jurisdiction may affect the strength of social license pressures. Similarly, where agencies have been 'captured' by industry, to the demands of social actors may go unheeded. For example, in a previous study, (Gunningham, 1987)

²⁵ See further Davy (1997).

one of us found that a very close relationship between an asbestos mine and local regulators, enabled both sets of officials to ignore workers and community complaints (notwithstanding levels of asbestos dust that grossly exceeded the prescribed limits), while regulators gave the company prior warning of inspections. (Gunningham, 1987)

The importance of the harm, or indeed its very existence, may also be contested. For example, some regulatory officials might regard 'smelly' odor emanating from pulp mill as simply a nuisance and not an urgent object of government action, whereas others may fear that such odor may itself be an indicator of some more serious health hazard.

In other cases, government or corporate decision-makers may be more concerned about the economic consequences of a social demand than its health or environmental benefits, especially where such benefits are contested. Thus where the economic consequences of social demands are high, and the health and environmental benefits are small, uncertain, or contested, legal and political actors are likely to be less responsive to social pressures. For example, one of the Canadian mills in our sample chose to ignore community concerns relating to unsightly effluent left drying on the banks of the river downstream. The company asserted that the environmental impact was minimal (a view shared by the local regulators) and were prepared to ignore strong criticism from a local community group, confident that neither the group, nor the community more generally, had sufficient political or legal leverage (or independent scientific evidence) to inflict significant economic or reputational damage.

Economic Actors. As already noted, the terms of the social license can only be enforced indirectly through economic or legal mechanisms. The principal economic enforcement mechanism is the boycott, which may be carried out by any number of economic actors - customers, clients, consumers, investors, or shareholders. Boycotts, however, may be impossible to organize or less effective against companies that are less concerned about their reputation, either because they do not have a consumer market or a branded identity to protect, or where the harm is not associated with a product directly, but rather with a by-product of the production process. For example, part of the explanation for the ability of environmental activists to generate concern regarding pulp mills' use of chlorine, is that dioxin was present in the products consumers bought - in the diapers, coffee filters, and tampons they used. Dioxin was not simply a byproduct of diaper production, discharged in a remote place to affect a distant ecosystem. But more typically, where the harm is associated with the production process alone, rather than the product produced, social license pressures are likely to be less effectively enforced through economic mechanisms.

Although, as described above, the economic license can be used to enforce the demands of social actors, our pulp industry research suggests that the economic license more often served as a brake on highly significant and costly "beyond compliance" environmental initiatives beyond those which can be justified in "margin of error" or "win-win" terms. The lesson is hammered home by the experience of firms that suffered economically from overestimating the stringency of anticipated regulations or the eagerness of customers to buy "greener" products. Reinhardt (2000: 152-54) relates the experience of

Champion, a paper products company that in the high -pulp-price era beginning in the late 1980s adopted an “aggressive strategy [including the expenditure of \$1 billion on environmental technologies and systems] for managing both regulatory risk and the business risk inherent in antagonistic relations with downstream neighbors.” This included the expenditure of \$330 million in its Canton, North Carolina mill. The mill’s chlorinated organic emissions went down to 0.1 kg per ton, far lower than EPA’s rule eventually required. But by then pulp prices had declined, and the mill had very large capital cost burdens compared to its competitors. In 1999, Champion sold the mill to its employees and managers, plus a New York investment fund.

Consider, too, the experience of a Canadian firm which made an earlier and larger investment in totally chlorine-free (TCF) technology than most of its industry peers. The anticipated demand and price premium for TCF pulp did not materialize. The mill ended up losing money, and the company came to be perceived by other pulp mill managers as an example of how not to proceed. The corporate managing director was replaced and his successor reintroduced the conventional emphasis on short -term economic targets (although the mill did continue to be a leader in most measures of effluent control).

Understandably, few firms were eager to follow the environmental technology path blazed by such facilities. As long as customers continued to care more about cost, brightness and strength of their paper than about the pulp mills’ chlorinated organic numbers, most mills used regulatory requirements as their chief guide to environmental performance. Moreover, they treated these economic license constraints as fairly fixed.

They did not strive to generate more customer demand for unbleached or less bright paper, in order to reduce the environmental impact of unrecycled bleaching chemicals in their effluent.

As interpreted by the enforcers of the economic license – investors, lenders, and financial analysts – the economic license does not encourage a firm to invest in very costly environmental measures or technologies that do not improve productivity and profits, unless government regulations provide assurance that the firm's competitors will be compelled to make similar expenditures. As Forest Reinhardt (2000, pp. 25, 28) has pointed out, customers in markets for “commodity products” (such as pulp) usually will pay premiums for environmentally differentiated products only if the products lower their own overall costs. And even then a marketer of “greener” products will not benefit if its competitors can easily replicate the same innovation. Thus early movers to ECF pulp derived little benefits since most of their competitors, anticipating regulatory tightening, quickly did the same. Thus social license pressures are likely to be more limited in industries and companies that produce commodity products.

Conclusion: Social License and Environmental Policy

To explain corporate environmental performance, we have argued, it is useful for analysts (and corporate managers themselves) to view business enterprises as simultaneously motivated and constrained by a multi-sided “license to operate.” We found that corporate managers, at least in closely watched industries like pulp and paper manufacturing,

viewed each facility's license to operate as including an often -demanding "social license" along with the traditional economic and regulatory license terms.

In all the governmental jurisdictions we studied, we found that social license pressures affected pulp mills' environmental performance in three major ways. First, they acted as auxiliary and sometimes potent enforcers of the mill's regulatory licenses, pushing managers to comply fully with permits and sometimes to invest in beyond compliance measures of the "margin of safety" variety. Second, on occasion, environmental activists helped bring about a "tightening" of regulatory licenses, either by generating political pressure for more stringent laws and regulations or by pushing for more stringent conditions in individual mill permits. Third, the social license was the primary source of "beyond compliance" measures of the "good citizenship" variety, that is, investments that could not be justified in traditional "return on investment" financial criteria or in terms of regulatory requirements (current or pending). These measures were instead justified in terms of their reputational consequences.

The social license is monitored and enforced by a variety of stakeholders, who commonly seek leverage by exploiting a variety of license terms. Environmental groups not only enforce the terms of the social license directly (e.g., through shaming and adverse publicity) but also seek to influence the terms of the economic license (e.g., generating consumer boycotts of environmentally damaging products) and of the regulatory license (e.g., through citizen suits or political pressure for regulatory initiatives). Thus the *interaction* of the different types of license often exceeds the effect of each acting alone.

The terms of some legal license provisions extend the reach and impact of the social license by directly empowering social activists or by giving them access to information which they can use to pressure target enterprises. Conversely, a company which fails to respond appropriately to social license obligations risks a tightening of its regulatory license, as frustrated community activists turn for help to politicians and regulators. At the same time, the interaction between a firm's economic license and the demands of social stakeholders help determine how far a firm will go beyond legal compliance.

These findings have important policy implications, for they suggest that business firms' social licenses provide a particularly powerful point of leverage. Community and environmental advocacy groups in particular tend to act as effective watchdogs and defacto regulators, shaming and otherwise pressurizing companies into beyond compliance environmental performance²⁶. While they can sometimes play this role in the absence of any former state intervention, their effectiveness, we have observed, is enhanced by various forms of facilitative government regulation. For example, regulatory information-gathering and self-monitoring requirements can empower social actors if environmental information about facilities is easily accessible and sufficient to allow for meaningful interpretation of the data. Rules that require facilities to inform the public of environmentally significant actions and monitoring redress some of the inherent

²⁶For example, in Indonesia, under the PROPER PROKASIH program, regulators rank the performance of individual facilities using surveys, a pollution database of team reports, and independent audits. A enterprise's pollution ranking is readily understood by the public, being based on a color coding (gold and green for the best performers, black blue and red for those not in compliance). The program has reportedly been very successful in improving the environmental performance of participating firms. See Afsah et al. In our study, we found that in British Columbia, mills were particularly mindful of avoiding breaches which might result in poor standing in a periodic government-published report that functioned much as a mill-by-mill environmental scorecard. In the United States, the Toxic Release Inventory, which simply

information asymmetries that occur between regulators, regulatees and the public, and allows social actors to most appropriately target their actions²⁷.

Our research indicates that government actions that *procedurally* empower local communities can also have significant effects. In New Zealand, mills reported having become much more responsive to community environmental concerns after communities were given the legal right to challenge the terms of each facility's "consent" (permit), and thereby gained the power to delay the introduction of new processes or technology. In an Australian jurisdiction, similar effects flowed from a new law that obligated firms to prepare and comply with an environmental improvement plan, including a commitment to consultation with local communities²⁸. In Canada and the US, the permitting process has long been open to the public and allowed for public comment on permitting decisions. Such public access has been extended in the US through programs such as Project XL and the Environmental Leadership Program, which make it a condition for providing greater regulatory flexibility, that participating companies provide information to, and consult with, local communities.

Beyond all else, our research demonstrates that corporate environmental behavior cannot be explained purely in terms of instrumental and moral obligations to comply with the law. On the contrary, in an increasing range of circumstances, at least in reputation-sensitive industries, corporations contemplate going beyond compliance for reasons more

obligates firms to publish their total estimated emissions of potentially hazardous chemicals, has created strong incentives to reduce the use of such chemicals.

²⁷ See for example, National Academy of Public Administration (2001) which calls for an information-rich, flexible, and performance-driven strategy. See also Clarke (2001).

closely connected with the perceived terms of their social license, albeit that the extent to which they do so may be constrained by economic considerations.

²⁸See further Gunningham & Sinclair (2002).

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