

Information Disclosure Laws: The Irony of How Greater Procedural Justice Increases Environmental Injustice

I. Introduction

Much has been said about the success of information disclosure laws such as the Toxics Release Inventory program and Proposition 65 of California. These information disclosure laws compel companies to publish and to make available to the public information regarding toxic chemical release levels and whether certain premises or products contain chemicals that may cause cancer or birth defects.¹ The EPA and other government agencies, leaders in the mainstream environmental movement, and even leaders in the environmental justice movement have described these initiatives as major developments in environmental disclosure law.² Many have justifiably pointed to these laws as impetuses for dramatic drops in chemical releases and greater air and water quality and overall environmental protection.³ This praise is not completely unwarranted. However, while it is true that these laws have been successful in reducing toxic chemical releases, these laws are also deficient in a number of ways, namely in how information has failed to help low-income minority communities and how they have actually serve to increase environmental injustice.⁴

Many see information disclosure laws as a great equalizer, giving all communities valuable information on the industrial environmental risks in their neighborhoods.⁵ It is reasoned

¹ Emergency Planning and Community Right-To-Know Act of 1986 § 313(a), 42 U.S.C. § 11023(a) (1986). See also Cal. Health & Safety Code § 25249.5 (West Supp. 2004).

² Clifford Rehteschaffen & Eileen Gauna, *Environmental Justice: Law, Policy, and Regulation*, 322 (2002) (reviewing the relative success of information disclosure laws).

³ *Id.*

⁴ See Kathryn E. Durham-Hammer, *Left to Wonder: Reevaluating, Reforming, and Implementing the Emergency Planning and Community Right-To-Know Act of 1986*, 29 Colum. J. Env'tl. L. 323, 326 (2004).

⁵ See *id.*

that communities are empowered with the information provided to bring about change themselves rather than relying on bureaucratic governmental entities or regulatory enforcement. Such empowerment seems to increase procedural justice, which is founded on greater public participation and access to information, a major goal of the environmental justice movement.⁶ In theory, by giving communities access to information and allowing them to take part in the enforcement process of environmental regulations, these information disclosure laws should be implementing greater access to such procedural justice. Consequently, in theory that is, not only have these laws helped to bring about major advances in environmental protection, but they have also served to promote the goals of the environmental justice movement.⁷

However, despite widespread acclaim, ironically these information disclosure laws only give the impression of promoting the goals of the environmental justice movement, but in fact, actually serve to increase the unequal distribution of environmental harms to the detriment of environmental justice communities.⁸ These laws can be seen as a microcosm of the larger tension found between the environmental justice movement and the mainstream environmental movement.⁹ Information disclosure laws, as do almost all environmental laws in general, serve to promote the environmental goals of society at large, namely, safer and cleaner air and water, living and work spaces, and consumer products. However, these laws cause low-income, minority communities to bear a disproportionate exposure to toxic chemicals. This uneven

⁶ See generally, Robert R. Kuehn, A Taxonomy of Environmental Justice, 30 Environmental Law Reporter 10,681 (2000).

⁷ See Durham-Hammer, *supra* note 4, at 326.

⁸ *Id.*

⁹ See generally, Tseming Yang, Melding Civil Rights and Environmentalism: Finding Environmental Justice's Place in Environmental Regulation, 26 Harv. Envtl. L. Rev. 1 (2002) (discussing how the environmental protection movement is based on the framework laid out in Garret Hardin's *Tragedy of the Commons* and how the civil rights movement is based on the framework pioneered by *Brown v. Board of Education* and how these two different frameworks often lead to divergent goals).

distribution of environmental harms is due in large part to the inadequate and uneven distribution of access to the information provided by these laws and means in which to utilize this information to bring about actual change. The uneven effect that these information disclosure laws have had on different segments of society is a natural consequence of the underlying goals these laws were meant to accomplish.¹⁰ Ultimately, these laws operate in environmental protection paradigm and seek to accomplish the goals of that movement and fail to address the issues of discrimination that are central to the environmental justice movement.

II. Background on TRI and Proposition 65

In 1986, Congress enacted the Emergency Planning and Community Right-To-Know Act (EPCRA), spurred in large part by a toxic release accident at a chemical plant in Bhopal, India that killed 3,000 people and the Union Carbide pesticide release in West Virginia that caused nearly 150 people to seek medical care.¹¹ The statute requires manufacturers and operators of industrial facilities to annually disclose their releases of specified toxic chemicals if those releases are above certain reporting thresholds.¹² The EPA maintains the list of qualifying toxic chemicals and minimum reporting thresholds.¹³ Finally, the statute also requires that the EPA “establish and maintain in a computer data base a national toxic chemical inventory” and to “make these data accessible by computer telecommunications and other means to any person . . .”¹⁴ This computer data base is known as the Toxic Releases Inventory (TRI). The legislative history and the title of the statute suggest two primary objectives: to aid effective emergency

¹⁰ See *id.*

¹¹ See Environmental Law Institute, *Community Right-to-Know Deskbook*, 103 (1988) (providing in full the Senate Debate Prior to Passage of EPCRA in which senators refer to the Bhopal disaster and the West Virginia incident as an impetus for EPCRA).

¹² *Id.* § 313(a), 42 U.S.C. § 11023(a) (1986).

¹³ *Id.* § 313(d), 42 U.S.C. § 11023(d).

¹⁴ *Id.* § 313(j), 42 U.S.C. § 11023(j).

planning at the state and local levels and to create a statutory right-to-know that affords community members an opportunity to make informed decisions about how to respond to environmental risks in their neighborhoods.¹⁵

According to a vast majority of environmental leaders, EPCRA has proven to be a major success.¹⁶ EPCRA has led to reduced levels of toxic chemical releases. For example, from 1988 to 1999, reported toxic releases, for chemicals that were reported in all years, dropped by 46 percent.¹⁷ More importantly, releases of some chemicals that pose particularly significant human threats, such as carcinogens, declined at an even faster rate than other releases.¹⁸ EPA officials, as well as environmentalists and regulated entities, regularly tout TRI as one of the nation's most effective environmental laws.¹⁹ EPCRA works by encouraging companies to self-monitor, which in some cases, has led to companies lowering emission levels on their own initiative.²⁰ In other cases, community and environmental leaders have been able to use TRI information to pressure companies to reduce emission levels.²¹

In 1986, California voters overwhelmingly passed Proposition 65, also known as the Safe Drinking Water and Toxic Enforcement Act of 1986.²² Proposition 65 requires that the Governor publish a list of chemicals known by the state to cause cancer or reproductive toxicity.²³ Over 800 carcinogenic and reproductive toxicants are currently on California's list of

¹⁵ Durham-Hammer, *supra* note 4, at 333.

¹⁶ Rechtschaffen & Gauna, *supra* note 2, at 322 (reviewing the relative success of information disclosure laws).

¹⁷ *Id.*

¹⁸ *Id.*

¹⁹ *Id.*

²⁰ *Id.*

²¹ *Id.* at 323

²² Judith A. DeFranco, California's Toxics Initiative: Making It Work, 39 *Hastings L.J.* 1195, 1195 (1988).

²³ *Id.*

chemicals known to cause cancer or birth defects.²⁴ Proposition 65 goes further than EPCRA in a number of ways. First, it prohibits businesses from knowingly discharging listed chemicals into water or onto or into land where such chemicals pass or will probably pass into any source of drinking water.²⁵ Secondly, Proposition 65 requires businesses subject to it to give a “clear and reasonable” warning to anyone whom they “knowingly and intentionally” expose to a listed chemical.²⁶ This required warning takes effect even without specific administrative standards that specify acceptable levels of exposure.²⁷ However, the warning requirement can be excused if the company can prove that the exposure to the chemicals did not cause a significant risk.²⁸ Finally, the Act allows anyone acting in the public interest to bring suit under it. No other state has taken on as ambitious of an information disclosure program as California.²⁹

Like EPCRA, Proposition 65 is also known as a significant success in its reduction of overall toxic air emissions.³⁰ David Roe, one of the co-authors of Proposition 65, has stated that Proposition 65 has been even more effective than EPCRA at reducing emission levels.³¹ From 1988 through 1997, air emissions of TRI chemicals that are also listed under Proposition 65 declined by approximately 85 percent in California, as compared to 50 percent in the rest of the country.³² At the same time, decreases in emissions in California of all other TRI-listed chemicals, that is the emissions in California of TRI-listed chemicals that are not covered by

²⁴ See current Proposition 65 listed chemicals, available at http://www.oehha.org/Prop65/prop65_list/files/032108list.pdf.

²⁵ Id. § 25249.5.

²⁶ Id. § 25249.6.

²⁷ See Clifford Rechtschaffen, *The Warning Game: Evaluating Warnings Under California’s Proposition 65*, 23 *Ecology L. Q.* 303, 310 (1996)

²⁸ DeFranco, *supra* note 22, 1195

²⁹ Id.

³⁰ Rechtschaffen & Gauna, *supra* note 2, at 327 (discussing the relative success of Proposition 65).

³¹ Id.

³² Id.

Proposition 65, are almost identical to the rest of the U.S.³³ These results strongly suggest that the difference in results for TRI-listed and Proposition 65 listed chemicals in California and the rest of the U.S. are due to the higher requirements of California's law. It should also be noted that Proposition 65 works in some similar, but also slightly different ways, than EPCRA. For example, Proposition 65 has a warning requirement, which has stimulated significant consumer product reformation, due to a combination of industry concerns regarding liability and consumer reaction to warnings.³⁴

III. Tension Between Environmental Protection and Environmental Justice

It is important to examine the principles undergirding these information disclosure laws in order to determine how they actually affect different segments of society. There are two different movements that are central to thinking about environmental issues and distributional effects of health risks: the environmental protection movement and the environmental justice movement. There two are based on two very different paradigms.³⁵ The environmental protection movement operates in framework that seeks to maximize overall utility by preserving the environment as a shared resource belonging to each member of society.³⁶ This framework seeks to internalize the externalities that might not otherwise be properly accounted for by free markets, with the goal of increasing the overall utility of society.³⁷ On the other hand, the environmental justice movement operates in a framework that seeks to protect minorities from discrimination.³⁸ It is more focused on protecting minority communities specifically rather than

³³ *Id.*

³⁴ Rechtschaffen, *supra* note 27, at 341.

³⁵ Yang, *supra* note 9.

³⁶ *Id.* at 8-11.

³⁷ *Id.*

³⁸ *Id.* at 11-13.

increasing societal utility in general.³⁹ One key strategy for protecting the rights of minority communities that environmental justice advocates have pursued has been increased procedural justices for these communities, that is, increased access to decision-making processes.

Information disclosure laws appear to operate in the environmental justice paradigm because they empower communities, including minority communities, with more information so that these communities have greater ability to bring about change. Such empowerment looks like the greater procedural justice that environmental justice advocates are looking for. However, despite seeming to operate in the environmental justice paradigm, information disclosure laws actually operate in the environmental protection paradigm.

A. Information Disclosure Laws Work Within a Market-based Model

The environmental protection paradigm is based on a market-based conception of the world.⁴⁰ As pointed out in the famous The Tragedy of the Commons, environmental harms are externalities that are not properly accounted for in a free market.⁴¹ These environmental harms are costs that each member of society must bear even though companies are the ones benefiting. In order to correct this error and to make up for this market deficiency, these costs must be properly allocated. However, the solution of shifting costs to polluting companies still works within the market-based paradigm. Another foundational attribute of a properly functioning free market is perfect information being available to market participants.⁴² Consumers must be aware

³⁹ Id.

⁴⁰ Id. at 3. See also Garret Hardin, The Tragedy of the Commons, 162 *Science* 1243-1248 (1968).

⁴¹ Id.

⁴² William S. Pease, Chemical Hazards and the Public's Right to Know: How Effective is California's Proposition 65?, *Environment*, Dec. 1991, at 12, 14 (citing Leslie Roberts, A Corrosive Fight Over California's Toxics Law, 243 *Science* 306, 309 (1989) (quoting Tom McGarity)).

of the full costs of their decisions if they are to make completely rational decisions.⁴³

Information disclosure laws seek to make more information available to more people because they seek to further the market-based approach to the issue of toxic releases and environmental harms.

Information disclosure laws, including EPCRA and Proposition 65, are based on a market-based model that seeks to shift the cost of chemical releases from the public to industry by increasing access to information.⁴⁴ This is accomplished in a number of ways. First, TRI information encourages companies to self-monitor.⁴⁵ TRI information is used by businesses to evaluate their own performances and adjust their emission levels accordingly to meet guidelines.⁴⁶ For example, managers, who were previously unaware of the volumes of toxic pollutants their firms were generating, are informed of their company's toxic chemical emissions and may adjust their operations to reduce such emissions.⁴⁷ In such cases companies have been unaware of the costs that they were imposing on the rest of the society, and once made aware, companies will adjust their conduct so that society does not bear an unfair amount of the costs that these companies should bear.

Furthermore, TRI information is available to regulators who would be able to adjust regulations based on the information they get.⁴⁸ Regulators will then step in as external market correctors that will force companies to internalize pollution costs that they could otherwise have

⁴³ Michael Barsa, Note, California's Proposition 65 and the Limits of Information Economics, 49 *Stan. L. Rev.* 1223, 1227 (1997).

⁴⁴ See Cass R. Sunstein, *Informing America: Risk, Disclosure, and the First Amendment*, 20 *Fla. St. U. L. Rev.* 653, 655-658 (1993).

⁴⁵ See Bradley C. Karkkainen, *Information as Environmental Regulation: TRI and Performance Benchmarking, Precursor to a New Paradigm?*, 89 *Geo. L. J.* 257, 295-309 (2001).

⁴⁶ *Id.* at 297.

⁴⁷ *Id.*

⁴⁸ *Id.* at 309-316.

avoided. TRI information is also available to environmental and community groups to pressure firms to reduce emission levels.⁴⁹ Moreover, community groups use this information to educate and recruit community residents into local anti-pollution efforts, and to organize local campaigns seeking ‘good neighbor agreements’ and similar commitments from polluting firms to reduce releases.⁵⁰ These community groups will act in a similar capacity as regulators, but as private actors rather than public entities. They will force companies to internalize externalities by increasing the costs to these companies to operate until these companies lower the costs that they pass on their neighbors or customers.

Finally, investors use TRI data in determining where to invest their money.⁵¹ Investors may interpret adverse TRI data as an indicator of a greater risk of future liability, regulatory fines, potential loss of consumer market share, or even potentially costly and disruptive “informal regulation” by citizens.⁵² Thus, being forced to produce TRI information induces companies to reduce or eliminate their emissions in order protect their own balance sheets.⁵³ Additionally, consumers will choose not to purchase certain products or to live in certain areas because they have more complete information about the total costs of a product or a particular living space. The full costs will be factored in, and based on a rational decision-making process, consumers will decide that the total costs are not worth the purchase.

Proposition 65 works in much the same way that EPCRA does. It does not operate in the environmental justice framework and was never meant to. California’s Proposition 65 was authored by David Roe of the Environmental Defense Fund, Carl Pope of the Sierra Club, and

⁴⁹ Id. at 316-323.

⁵⁰ Id.

⁵¹ Id at. 323-325.

⁵² Id.

⁵³ Id.

Barry Groveman, an environmental crimes prosecutor who worked at the Los Angeles District Attorney's office.⁵⁴ Each of these drafters was a leader in the environmental movement and had the goals of that movement at the forefront of their minds when formulating the initiative. Proposition 65 works by imposing the costs of environmental harms on industry.⁵⁵ Individuals are given greater information, and with more information these individuals can make more informed decisions.⁵⁶ Individuals are able to make more informed choices regarding what products to purchase, where to live, and where to work.⁵⁷ Also, with the threat of liability for toxic chemical releases or toxic chemicals found in consumer products, companies have sought to be diligent in providing warnings to the public in order to avoid liability.⁵⁸ Furthermore, rather than facing statutory fines that can be enormous, many companies have reformulated their products in order to reduce their potential liability, which leads to far more products being free of toxic chemicals.⁵⁹ The most significant effect of Proposition 65 has been the way businesses have altered their products and business practices to account for consumer reaction to product warnings.⁶⁰ Rather than face the threat of decreases in business because of consumer aversion to warnings of toxic chemicals, companies have reformulated their products and renovated their buildings to make them free of toxic chemicals.⁶¹

⁵⁴ See Paul Jacobs, Political Ploys Seen in Debate on Toxics Law, L.A. Times, Aug. 18, 1986, § 1, at 3.

⁵⁵ Sunstein, *supra* note 44.

⁵⁶ See *id.* Professor Sunstein describes three major benefits of information disclosure laws: 1) increase in personal liberty by helping individuals make free choices, 2) increase in economic efficiency by providing information consumers want but that market forces might not provide for them, and 3) increase in individuals' role in environmental risk management.

⁵⁷ *Id.*

⁵⁸ See Rechtschaffen, *supra* note 27, at 341-343.

⁵⁹ *Id.*

⁶⁰ *Id.* at 344-345.

⁶¹ *Id.*

The market-based model has been very effective at promoting environmental protection, but in the past environmental justice communities have been the very communities that get left behind as a result of market deficiencies.⁶² Thus, market-based approaches only serve to increase the disparity between affluent communities and poor, minority communities. Companies are encouraged to shift polluting facilities and products to low-income minority communities because of the informal regulation that more affluent communities are more apt to take part in.⁶³ As long as there are inequalities between communities at the onset, market-based initiatives only serve to widen the disparity between rich and poor.⁶⁴ In the case of information disclosure laws, as long as there are inequalities between communities to begin with, information disclosure laws, which are framed in the environmental protection paradigm and operate in a market-based model, only increase the unequal distribution of environmental harms. The great irony is that information disclosure laws seem to offer greater procedural justice to low-income, minority communities and thus, the appearance of seeking to solve environmental justice issues, but they actually serve to worsen distributional justice, exasperating environmental injustice.

IV. The Disproportionate Effect of Information Disclosure Laws on Different Communities

There is little doubt that both EPCRA and Proposition 65 have been successful in reducing overall toxic air emissions at a national and state level.⁶⁵ However, despite this success, for a number of reasons these programs have had a disproportionate effect on environmental justice communities. First, TRI data only provide narrow, incomplete, oversimplified, and

⁶² Durham-Hammer, *supra* note 4.

⁶³ Stephen M. Johnson, *Economics v. Equality: Do Market-Based Environmental Reforms Exacerbate Environmental Injustice*, 56 Wash & Lee L. Rev. 111, at 188 (1999).

⁶⁴ James Boyd White, *Economics and Law: Two Cultures in Tension*, 54 Tenn. L. Rev. 161, 178 (1987).

⁶⁵ See Rechtschaffen & Gauna, *supra* note 2, at 322, 327.

outdated information that may never reach the communities that most need information—those exposed to the most industrial risk.⁶⁶ Second, even if communities are able to locate the information, communities often have a very difficult time harnessing the information to actually effect change.⁶⁷ Thus, in practice, the right to know under EPCRA and Proposition 65 has failed to actually inform or empower low-income, minority communities about local environmental risks.⁶⁸ As a result, EPCRA and Proposition 65 have widened the information gap between communities, giving affluent communities greater leverage in environmental decision-making at the expense of environmental justice communities. In other words, the effects of NIMBYism (Not In My Back Yard) actually causes an even more unequal apportionment of toxic pollution exposure because well-educated, affluent communities are able to reduce or move toxic-emitting facilities to new locations or move to new locations themselves, whereas low-income, minority communities are the recipients of these facilities and lack the mobility to get away from them.⁶⁹

A. How Inadequate Information is Often Provided

Information provided by EPCRA is incomplete because not all data regarding all hazardous chemicals that pose health risks is provided.⁷⁰ Many environmentally significant chemicals are not listed and many sources of toxic releases are not required to report their chemical releases.⁷¹ The list only includes one percent of the 80,000 toxic chemicals that are currently used in industry.⁷² Information is presented in such a way so as to advertise the need for emission reductions more than to objectively communicate health or environmental

⁶⁶ Durham-Hammer, *supra* note 4, at 326.

⁶⁷ *Id.*

⁶⁸ *Id.*

⁶⁹ See Karkkainen, *supra* note 45, at 339-340.

⁷⁰ William F. Pedersen, *Regulation and Information Disclosure: Parallel Universe and Beyond*, 25 *Harv. Envtl. L. Rev.* 151, 152 (2001).

⁷¹ *Id.*

⁷² Durham-Hammer, *supra* note 4, at 334.

concerns.⁷³ This makes sense since the primary goal of this legislation is to lower overall emission levels rather than to actually empower specific communities to prevent companies from polluting in their particular neighborhoods. Also, since EPCRA does not apply to the transportation of toxic chemicals or the storage of toxic chemicals prior to transportation, facilities can avoid reporting large quantities of chemicals stored on their premises if those chemicals are only on their premises before being transported.⁷⁴ In addition, information about toxic chemicals that has to do with trade secrets does not need to be reported on.⁷⁵ Finally, the information provided through TRI is often outdated with the usual lag time for reporting being about two years.⁷⁶

Information provided by EPCRA can also be inaccurate. First, EPCRA allows facilities to report mere estimates of release levels if more accurate measurements are not available.⁷⁷ Secondly, neither the EPA or state environmental agencies have a structure in place to confirm that the information that companies provide is actually accurate.⁷⁸ Companies have no incentive to report the full extent of all their chemical releases.⁷⁹ Even if it is assumed that companies have a desire to comply with the statute, companies may not have the resources to accurately and exhaustively measure all their toxic chemical releases. These companies have no incentive to invest in such technology, especially with the provision that allows them to report estimates when more accurate information is not available.⁸⁰

⁷³ Pedersen, *supra* note 70.

⁷⁴ Durham-Hammer, *supra* note 4, at 335.

⁷⁵ *Id.*

⁷⁶ *Id.* at 341.

⁷⁷ See Environmental Law Institute, *supra* note 11, at 13.

⁷⁸ Karkkainen, see *supra* note 45, at 335.

⁷⁹ Durham-Hammer, *supra* note 4, at 337-338.

⁸⁰ *Id.*

TRI data can also be misleading. Chemical release data only provide information regarding the total mass of chemicals released with no mention of the level of toxicity of each chemical.⁸¹ Thus, a company can cut its reported emissions without actually reducing the level of pollutants it is emitting. For example, if a company released two toxic chemicals in one year and the following year the company substantially decreased the release level of one chemical and only slightly increased the level of release of the other. This would give the impression that this company had dramatically improved its emission releases, even if the second chemical is far more toxic than the first chemical. Consequently, TRI information may actually cause harmful effects because decreased total volume levels of chemical releases might give communities a false sense of security when it might not necessarily be warranted.⁸²

Moreover, information regarding the toxicity levels and associated health risks of each chemical is not provided.⁸³ As a result of the lack of information regarding the relative health risks each chemical can pose at any particular level of exposure, communities have little guidance as to what the information found in TRI actually means. Consequently, these communities do not know whether the release levels found in TRI are actually favorable or harmful. Communities do not know how physical proximity to a toxic chemical releasing source affects the level of health risk to their community.⁸⁴ Communities are not given information about what sort of health risks chemical releases pose to them based on their proximity to a facility.⁸⁵ While these deficiencies in the information would affect not just environmental justice communities, but all communities, environmental justice communities are the communities most

⁸¹ Karkkainen, *supra* note 45, at 332

⁸² Durham-Hammer, *see supra* note 4, at 336.

⁸³ *Id.* at 340-341.

⁸⁴ *Id.*

⁸⁵ *Id.*

affected by such gaps in the information. This is primarily because more affluent communities have more of an ability to investigate further to get more information or have access to resources that allow them to understand the data that are provided.

B. The Inability of Communities to Harness the Information Provided

While the information provided by EPCRA is inadequate in many ways, perhaps more importantly, the information provided, even if accurate, does not actually inform communities about environmental risks. First, low-income, minority communities are less likely to even be aware of the existence of public access to TRI information. Despite efforts by community environmental groups to inform community members of the information provided by EPCRA, many citizens may still be unaware of their right to know about environmental hazards in their neighborhood.⁸⁶ Furthermore, low-income, minority communities are also less likely to own computers, have access to computers, or sufficient computer expertise to be able to access TRI information.⁸⁷ Additionally, these communities are unable to evaluate the data without consulting scientists and expert risk analysts, something that few communities have the resources or foresight to do.⁸⁸ Also, communities made up of individuals with less education and limited English-speaking ability have a much more difficult time harnessing this information.⁸⁹

Finally, even if individuals are given information regarding health risks that they may be exposed to, they may not have the ability to alter their behavior to avoid the health risks.⁹⁰ For example, workers may not be able to leave their jobs despite potentially being able to access

⁸⁶ Gary Rischitelli, *Developing A Global Right To Know*, 2 *ILSA J. Int'l & Comp L* 99, 110 (1995).

⁸⁷ Karkkainen, *supra* note 45, at 338-339.

⁸⁸ *Id.*

⁸⁹ *Id.*

⁹⁰ *Id.*

information of chemical releases or even direct warnings of health risks.⁹¹ This is especially true of low-wage workers and particularly true of immigrant workers.⁹² Individuals living in poor neighborhoods also have less of an ability to move to another neighborhood even if they were given knowledge of the health risks of the neighborhood.⁹³ Also, it is likely that property surrounding facilities that release toxic chemicals is cheaper, thus making it much more likely for poor, minority communities to be situated near such facilities.⁹⁴

Proposition 65 addresses some of the problems that lessen the effectiveness of EPCRA by requiring companies to provide warning labels on products or premises if they contain or release toxic chemicals.⁹⁵ This makes the information more accessible than if the information was only made available on a website. However, these warnings are inadequate in a number of ways. First, the statute does not define warning and gives little clear guidance as to what the warning should communicate.⁹⁶ Companies often do not have a clear idea who is in need of a warning while the statute only demands “reasonable” warnings.⁹⁷ Thus, not all communities or individuals may be warned when they should be. Companies also often produce overly broad warnings that do not effectively communicate the level of risk to one’s health or even what health risk is posed.⁹⁸ Environmental exposure warnings are typically found in newspaper advertisements, mass mailings to affected communities, or signs posted at the fence line of a

⁹¹ Rechtshaffen, *supra* note 27

⁹² *Id.*

⁹³ Durham-Hammer, *supra* note 4

⁹⁴ *Id.* See also generally Vicki Been, *Locally Undesirable Land Uses in Minority Neighborhoods: Disproportionate Siting or Market Dynamics*, 103 *Yale L.J.* 1383 (1994) (describing lower property values as a pull force for siting facilities that pose environmental risks within low-income, minority communities).

⁹⁵ See *supra* note 14.

⁹⁶ Rechtshaffen, *supra* note 27, at 311.

⁹⁷ Bradley C. Karkkainen, *Information-Forcing Environmental Regulation*, 33 *Fla. St. U. L. Rev.* 861, 873 (2006).

⁹⁸ *Id.*

polluting facility, with the effectiveness of these warnings being questionable at best.⁹⁹ Such ineffective warnings, meant to “reach the masses,” only give the impression of adequately informing individuals, but in reality do little to effectively communicate potential health risks to people. It will only be individuals that are self-motivated and that are apt to discover and decipher health risks that will benefit from such warnings.

Moreover, warnings provided to the public do not clearly communicate the level of health risk associated with the chemicals released. In some cases consumers may react with an “alarmist” attitude when one should not be due, and in other cases consumers may completely ignore warning labels that should be heeded.¹⁰⁰ Alarmist reactions eventually lead to warnings losing effectiveness because citizens do not know how serious each warning is.¹⁰¹ The ubiquity of warning labels has caused individuals to ignore them. In a telling example, one study found that consumers identified the risk of a product with a Proposition 65 warning to be equivalent to the cancer risk of smoking .58 packs of cigarettes.¹⁰² These “alarmist” reactions and indifferent reactions are more common in environmental justice communities because they tend to have less education and be more prone to misunderstand warnings. As a result, these warnings will actually be disproportionately more ineffective in low-income, minority communities than more affluent communities.

C. How Information Disclosure Laws Work in Conjunction with NIMBYism

Despite the shortcomings of the information that is provided through information disclosure laws, even if the information provided was complete and accurate, these laws would

⁹⁹ Rechtshaffen, *supra* note 27, at 323.

¹⁰⁰ Katherine Renshaw, Student Article, *Sounding Alarms: Does Informational Regulation Help Or Hinder Environmentalism?*, 14 N.Y.U. *Envtl. L.J.* 654, 672 (2006).

¹⁰¹ *Id.*

¹⁰² Wesley A. Magat & W. Kip Viscusi, *Informational Approaches to Regulation* 4, 173 (1992).

still serve to disadvantage low-income, minority communities. Information disclosure laws rely on community activism to reduce environmental harms.¹⁰³ So while it is true that information disclosure laws empower communities with information in order to pressure companies to reduce or stop their emissions, more affluent, better-educated communities have better access to this information, more of an ability to understand the information, and more political power to pressure companies than low-income, minority communities. This is a natural consequence of how information disclosure laws work and how affluent communities and low-income, minority communities are each situated prior to the distribution of information.

First, more affluent communities are less likely to be willing to subject themselves to environmental harms.¹⁰⁴ So if it were the case that there was a potential environmental harm in a neighborhood, more affluent individuals are less likely to take the chance of continuing to expose themselves to that potential threat. Secondly, more affluent communities are more likely to have greater political power because of greater access to political processes and confidence that their actions can actually bring about substantial change.¹⁰⁵ Thus, a more affluent, better-educated community would be more able to pressure a company to reduce or even cease chemical releases in their community. This in turn would cause the company to have to increase or move these operations to another location. In all likelihood, this new location will be within a low-income, minority neighborhood that offers either cheaper land or less resistance to such a facility.¹⁰⁶

¹⁰³ Rischitelli, *supra* note 86, at 113. (describing “informal regulation” as the foundational rationale behind information disclosure laws).

¹⁰⁴ Karkkainen, *supra* note 45, at 339.

¹⁰⁵ *Id.*

¹⁰⁶ *Id.*

Even if there was equal access to and ability to understand chemical release data, upon learning of a facility's level of toxic chemical releases, more affluent, better-educated individuals have more of an ability to move to a new neighborhood than low-income, minority individuals. Thus, even though both more affluent, better-educated communities and low-income, minority communities are more empowered by information disclosure laws, the much greater empowerment of affluent, better-educated communities relative to the slight empowerment of low-income, minority communities actually leads to greater inequality and more uneven distribution of environmental harms.¹⁰⁷ There is emerging empirical data to show both patterns of NIMBYism—affluent communities forcing polluting facilities to low-income, minority communities and affluent individuals moving away from polluting facilities.¹⁰⁸ These patterns suggest that information disclosure laws actually encourage NIMBY-like efforts and serve to reinforce and even widen existing inequalities in the distribution of environmental harms. Thus, under the guise of greater procedural justice information disclosure laws lead to greater distributional injustice. This is an unsurprising consequence when it is considered that information disclosure laws operate in the environmental protection paradigm and not the environmental justice paradigm. Initiatives operating in the environmental protection paradigm, based on a market-based model, will only serve to heighten inequalities caused by a market-based system.

V. Recommendations

There are no clear or obvious changes that can be made to these information disclosure laws that would address the issues of distributional justice raised by them. Since the

¹⁰⁷ Luke Cole, Empowerment as the Key to Environmental Protection: The Need for Environmental Poverty Law, 19 Ecology Law Quarterly 619, 646-647 (1992).

¹⁰⁸ Karkkainen, *supra* note 45, at 339.

environmental protection movement and the environmental justice movement seek to pursue fundamentally different values it is nearly impossible to salvage information disclosure laws, which operate so solidly in the environmental protection paradigm. However, one key step would be to understand that because environmental laws, including information disclosure laws, operate in a market-based model they must have alongside them government programs that serve to protect against market deficiencies. Even though such programs would not change how NIMBYism coupled with information disclosure laws serve to increase distributional injustice, they would help give poorer communities more power in the market system.

Potential measures would include having the government ensure that all consumers in the market system have more perfect information, not just the more affluent ones. The government should take more proactive steps to ensure that information provided by these laws is actually effectively communicated to poor and minority communities. This would include making the information more accessible than only having the information available in an online database. As it is, more widespread distribution of the information would be required. There should also be clearer guidelines as to what information should be provided in a warning under Proposition 65. Additionally, the laws should be tightened to ensure more accurate information is produced and loopholes to avoid reporting are stopped up. Information provided should also include elaboration on specific health risks and the level of risk involved. In the end, it will difficult to address the issues presented by information disclosure laws and other market-based environmental laws because the unequal distributional effect that they lead to is so tied to the unequal distribution of resources at the societal level. Unequal distributional justice at the societal level will be almost impossible to abate as long as poor, minority communities are underrepresented in the political process and have unequal power in the market. However,

measures taken to allow for environmental justice communities to participate on a more equal level will help stem some of the effects on the unequal distribution of health risks that information disclosure laws cause.

VI. Conclusion

Information disclosure laws are a clear example of how the goals and principles underlying an initiative serve to frame the paradigm in which these laws operate. EPCRA and Proposition 65 operate in the environmental protection framework and are most effective at serving the goals of that movement. These laws illustrate how the goals of the environmental protection movement often cut against the goals of the environmental justice movement. Information disclosure laws have been tremendously successful in lowering overall pollution and health risks in society, but have failed to address issues of distributional justice in society. In fact, these laws serve to further increase the inequities caused by market systems. The irony is that information disclosure laws appear to offer greater procedural justice to environmental justice communities because, in theory, these laws should put communities on a more equal footing with polluting companies by giving them access to the same information. In reality, the information provided to communities is often inadequate and difficult to access and low-income, minority communities are often unable to use the information in a meaningful way. In the end, these laws operate in a market-based model and work in conjunction with NIMBYism to further exasperate the uneven distribution of environmental harms between more affluent communities and environmental justice communities.