THE INTERSECTION OF REASON AND RISK: HOW ARTICLE I, SECTION 27 OF THE PENNSYLVANIA CONSTITUTION CAN PROTECT ENVIRONMENTAL JUSTICE COMMUNITIES FROM STATE-SANCTIONED POLLUTION AND CUMULATIVE IMPACTS

Kelly Hanna*

ABSTRACT

In 1970, the Commonwealth of Pennsylvania ratified an amendment in Article I, Section 27 of its state constitution. Coined the "Environmental Rights Amendment," Section 27 outlined two public rights for Pennsylvania citizens: the individual right to clean air, pure water, and the preservation of environmental values, and the right to ownership of public natural resources conserved and maintained by the Commonwealth for the benefit of the public and future. For decades, the state courts hindered Section 27's applicability by making it dependent on the state legislature. The tide changed in 2013, when the Supreme Court of Pennsylvania decided Robinson Township v. Commonwealth.

At the same time, society has begun to recognize that minority, low-income communities have historically and systematically endured a disproportionate amount of environmental harms, culminating in what the law calls "cumulative impacts." However, Section 27 and environmental justice have hardly interacted or worked in tandem. Based on the holdings from Robinson Township and subsequent cases, the first clause of Section 27 seems to prohibit Commonwealth

^{*} J.D. Candidate (2023), Drexel University Thomas R. Kline School of Law; B.S. Marine and Environmental Biology and Policy, minor in Public Policy, Monmouth University (2019). Thank you to *Drexel Law Review* for their support throughout this publishing process and to my family, peers, and colleagues that have assisted in the culmination of this Note by proofreading, making suggestions, or simply listening to me talk about it. Additionally, I'd like to give special thanks to my mentor and advisor, Professor Alex Geisinger, for his guidance and for sharing his vast and invaluable knowledge throughout this entire process.

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actions that unreasonably impair citizens' environmental rights. Whether an action does cause or will constitute "unreasonable" impairment, therefore, should be evaluated in light of tort law doctrines which require courts to evaluate reasonableness in consideration of risk.

Risk should be evaluated holistically—with an emphasis on whether a community deals with a disproportionate amount of environmental harms that exacerbates the risk and how the public perceives the risk. This stray from traditional, comparative risk evaluation may provide a more viable avenue for environmental justice communities to challenge the Commonwealth's actions that do or propose to add pollution to their already-overburdened communities. Ultimately, this reading of Section 27 may incentivize industry members to invest in sustainable methods of development that do not increase the pollution they add to a community.

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INTRODUCTION

When you hear the word "environment," what do you think of? Instinctually, I envision wilderness—rolling green hills, forests teeming with wildlife, and clear, blue, shining waters. My instincts, by systemic design, are consistent with the traditional focus of American environmentalism. John Muir, one of the original founders of the Sierra Club, suggested we "break clear away, once in a while" to "climb a mountain or spend a week in the woods" in order to "[w]ash [our] spirit[s] clean." However, as reporter Brentin Mock indicates, this

^{1.} See generally Brentin Mock, Are There Two Different Versions of Environmentalism, One "White," One "Black"?, GRIST (July 31, 2014), https://grist.org/climate-energy/are-there-two-different-versions-of-environmentalism-one-white-one-black/; DORCETA E. TAYLOR, THE STATE OF DIVERSITY IN ENVIRONMENTAL ORGANIZATIONS (2014), http://orgs.law.harvard.edu/els/files/2014/02/FullReport_Green2.0_FINALReducedSize.pdf. This mentality allowed environmental leaders to repeatedly cast aside the concerns and welfare of minority populations. For example, Native Americans disrupted the proceedings of the nation's first Earth Day in 1970 to point out that legislation to create national parks would infringe upon the Chippewa tribe's land. TAYLOR, supra, at 31. Similarly, a popular book amongst environmentalists in the 1960s and 70s was The Population Bomb, which warned against environmental detriment that would accompany population growth, at the same time minority populations began increasing more than the white population. Mock, supra.

^{2.} SAMUEL HALL YOUNG, ALASKA DAYS WITH JOHN MUIR 216–17 (1915); *The John Muir Exhibit*, SIERRA CLUB, http://vault.sierraclub.org/john_muir_exhibit/ (Feb. 2, 2023).

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traditional focus ignores the etymological root of the word environment, which is "environner." Environner translates roughly to be indicative of one's physical proximity.⁴ In this technical sense, the environment does not include the rolling green hills or areas teeming with wildlife for many Americans.⁵ Minority and low income communities, in particular, often exist in areas in which the air and water within their immediate physical proximity is more polluted than other communities.⁶ Thus, the traditional focus of American environmentalism embraces a mentality that readily ignores the fact that these Americans are saddled by "inescapable ecologies" that hinder their ability to "break clear away" into the wilderness as Muir suggests. 7 Some imperfect legislative and regulatory programs exist that attempt to shift this traditional focus in order to provide more protection for those in closer physical proximity to polluting facilities,8 but those programs do not explicitly

^{3.} Mock, supra note 1.

^{4.} *Id.*; see also Environner, COLLINS, https://www.collinsdictionary.com/us/dictionary/frenchenglish/environner (last visited Mar. 20, 2023).

^{5.} See generally KIM PARKER, JULIANA HOROWITZ, ANNA BROWN, RICHARD FRY, D'VERA COHN & RUTH IGIELNIK, WHAT UNITES AND DIVIDES URBAN, SUBURBAN AND RURAL COMMUNITIES (2018), https://www.pewresearch.org/social-trends/wp-content/uploads/sites/3/2018/05/Pew-Research-Center-Community-Type-Full-Report-FINAL.pdf (describing different population trends in urban, rural, and suburban areas and their respective political and social attributes).

^{6.} See Press Release, Harv. T.H. Chan Sch. Pub. Health, Racial, Ethnic Minorities and Low-Income Groups in U.S. Exposed to Higher Levels of Air Pollution (Jan. 12, 2022) (on file with author), https://www.hsph.harvard.edu/news/press-releases/racial-ethnic-minorities-low-income-groups-u-s-air-pollution/; KRISTI PULLEN FEDINICK, STEVE TAYLOR & MICHELE ROBERTS, WATERED DOWN JUSTICE 12, 18–19 (2019), https://www.nrdc.org/sites/default/files/watered-down-justice-report.pdf.

^{7.} See Brian Hamilton, Woke Environmentalism, EDGE EFFECTS, https://edgeeffects.net/woke-environmentalism/ (Oct. 12, 2019); HALL YOUNG, supra note 2, at 216.

^{8.} The federal Clean Air Act requires the U.S. Environmental Protection Agency ("EPA") to develop National Ambient Air Quality Standards ("NAAQS") for several criteria pollutants. See Clean Air Act, 42 U.S.C. §§ 7408–09. States whose air quality is in "nonattainment" with the NAAQS must submit and implement plans on how they will achieve attainment. See id. § 7410(a), (k). NAAQS are created by EPA to allow "an adequate margin of safety" as "requisite to protect public health." Id. § 7409(b)(1). While EPA has interpreted section 7409 to protect the public from "adverse health effects," what constitutes such is subject to ambiguity, including which populations to measure adverse health effects amongst. See generally ROBERT V. PERCIVAL, CHRISTOPHER H. SCHROEDER, ALAN S. MILLER & JAMES P. LEAPE, ENVIRONMENTAL REGULATION: LAW, SCIENCE, AND POLICY 481 (9th ed. 2021).

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recognize the data that shows that communities of color are disproportionately affected by pollution.⁹

Movements making such recognition emphasize prioritization of "environmental justice," which ultimately seeks to create a legal "paradigm that would emphasize preventing vulnerable populations from being exposed to environmental risks, rather than simply managing, regulating, and distributing such risks" without context. 10 In Pennsylvania, environmental justice is defined as "[t]he fair treatment and meaningful involvement of all people regardless of race, color, National origin or income, with respect to the Commonwealth's development, implementation and enforcement environmental laws, regulations and policies."11 Within the federal environmental justice framework, "overburdened" communities—typically comprised of minority, low-income populations-often deal with what the law refers to as

^{9.} In 1983, a federal report evidenced that Black communities in the South were disproportionately affected by a high percentage of waste sites. See U.S. GEN. ACCT. OFF., SITING OF HAZARDOUS WASTE LANDFILLS AND THEIR CORRELATION WITH RACIAL AND ECONOMIC STATUS OF SURROUNDING COMMUNITIES 3 (1983). A 1987 report found that the best predictor of whether someone would live near a toxic waste site was race. See Alejandra Borunda, The Origins of Environmental Justice-And Why It's Finally Getting the Attention It Deserves, NAT'L GEOGRAPHIC (Feb. 24, 2021), https://www.nationalgeographic.com/environment/article/ environmental-justice-origins-why-finally-getting-the-attention-it-deserves (citing UNITED CHURCH OF CHRIST COMMISSION FOR RACIAL JUSTICE, TOXIC WASTES AND RACE IN THE UNITED STATES 23 (1987)). More recently, a study found that seventy percent of our nation's most contaminated sites are located within one mile of federally-assisted housing. Michaelle Bond, Seventy Percent of Superfund Sites Are within One Mile of Public Housing, Report Finds, PHILA. INQUIRER (July 14, 2020), https://www.inquirer.com/news/environmental-justice-superfund-njshriver-center-20200714.html. The legal and political foundations that have perpetrated environmental injustice can be traced back to the earliest days of American colonialism, where settlors' ideas of freedom were focused on territorial expansion and the accompanying mission to "civilize the wilderness" and "turn it into a place reminiscent of the Garden of Eden." Jean-Daniel Collomb, The Transcendentalist Approach to Wilderness in US Culture, LA CLÉ DES LANGUES (Apr. 17, 2020), http://cle.ens-lyon.fr/anglais/civilisation/domaine-americain/the-transcendent alist-approach-to-wilderness-in-us-culture. To those settlors, that meant the domination of nature and the supremacy of white skin and Christianity. Darren Dobson, Manifest Destiny and the Environmental Impacts of Westward Expansion, 29 FLINDERS J. HIST. & POL. 41, 43 (2013).

^{10.} Percival et al., *supra* note 8, at 16–17.

^{11. 4} PA. CODE § 5.1031 (2022).

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"cumulative impacts." ¹² Cumulative impacts are, in essence, "[t]he combined, incremental effects of human activity" on the environment. ¹³ Often times, overburdened communities are disproportionately affected by cumulative impacts, compared to other communities. ¹⁴ While Pennsylvania has initiated some policy-making to address environmental justice, ¹⁵ it possesses a more formidable tool that the federal government and most other states lack: an environmental rights amendment codified in its constitutional Declaration of Rights. ¹⁶ Pennsylvania's environmental rights amendment, located in Article I, Section 27 of the state constitution, declares:

The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.¹⁷

^{12.} See 40 C.F.R. § 1508.7 (2005) (defining "cumulative impact"); EJ 2020 Glossary, U.S. ENV'T PROT. AGENCY, https://www.epa.gov/environmentaljustice/ej-2020-glossary (Aug. 18, 2022) ("Overburdened Communit[ies] [are] [m]inority, low-income, tribal or indigenous populations or geographic locations in the United States that potentially experience disproportionate environmental harms and risks The term describes situations where multiple factors, including both environmental and socio-economic stressors, may act cumulatively to affect health and the environment and contribute to persistent environmental health disparities.").

^{13.} EPA OFF. OF FED. ACTIVITIES, CONSIDERATION OF CUMULATIVE IMPACTS IN EPA REVIEW OF NEPA DOCUMENTS 1 (1999).

^{14.} Mary B. Collins, *Risk-Based Targeting: Identifying Disproportionalities in the Sources and Effects of Industrial Pollution*, 101 Am. J. Pub. Health 231, 231 (2011) ("[R]acial and ethnic minorities and people of low socioeconomic status have higher morbidity and mortality from many chronic diseases [P]ublic health researchers have recently begun to explore environmental pollution as an important contributor to health disparities.").

^{15.} See, e.g., Environmental Stewardship and Watershed Protection Act, 27 Pa. Cons. Stat. §§ 6101–6102 (1999) (acknowledging the historical sources of pollution in "water-quality-impaired watersheds," and highlighting that "[t]he Commonwealth continues to have unmet needs in the area of water and sewer infrastructure").

^{16.} See PA. CONST. art. I, § 27.

^{17.} Id.

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A product of the environmental movement of the 1960s, Section 27 was championed by State Representative Franklin L. Kury as a tool to prevent environmental degradation throughout the Commonwealth of Pennsylvania.¹⁸ However, the Supreme Court of Pennsylvania's interpretation of Section 27 has fluctuated over time. In 2013, a plurality held that the amendment protects Pennsylvanians from state action which "unreasonabl[y] impair[s]" their right to "clean air and pure water, and to the preservation of natural, scenic, historic and esthetic values of the environment."19 This holding was made precedential in subsequent cases,²⁰ and while the courts have interpreted Section 27 to protect citizens from unreasonable environmental impairment, it has not been explicitly invoked as an environmental justice tool.²¹ Section 27 should be utilized to combat state actions which propose to contribute additional pollution in overburdened communities already dealing with cumulative impacts on the ground where such actions would unreasonably impair their environmental rights. In making such an argument, challengers may be able to utilize prevailing tort-law doctrines and scholarship to define reasonableness in light of the risk posed by additional pollution. Risk, then,

^{18.} See John C. Dernbach & Edmund J. Sonnenberg, A Legislative History of Article 1, Section 27 of the Constitution of the Commonwealth of Pennsylvania, Widener L. Sch. Legal Stud. Rsch. Paper Series no. 14-18, at 1, 6–7 (2014). While Representative Kury may not have envisioned that Section 27 would be utilized in the environmental justice realm, context implies that he certainly would be supportive of this usage—the amendment itself requires application "for the benefit of all the people" and Kury's colleague, Barry Hill, has articulated his belief "that the broad language of an ERA can be used to address environmental justice for all." See Pa. Const. art. I, § 27 (emphasis added); The Constitutional Right to Save the Environment, 52 Env't L. Rep. 10007, 10012 (2022).

^{19.} Robinson Twp. v. Commonwealth, 83 A.3d 901, 951 (Pa. 2013).

^{20.} See, e.g., Pa. Env't Def. Found. v. Commonwealth, 161 A.3d 911, 931 (Pa. 2017); Frederick v. Allegheny Twp. Zoning Hearing Bd., 196 A.3d 677, 694–95 (Pa. Commw. Ct. 2018); see also New Hanover Twp., EHB Docket No. 2018-072-L 66–67 (2020) (using similar language as the Robinson Township holding).

^{21.} Recently, Pennsylvania Governor Wolf implicitly recognized the intersection of Section 27 and environmental justice when he issued Executive Order No. 2021-07. He stated that Section 27 provides citizens with specific environmental rights that cannot be abridged on the basis "of race, ethnicity, color, natural origin, or income" and must be ensured for "generations yet to come." Pa. Exec. Order No. 2021-07 (Oct. 28, 2021).

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should be evaluated holistically, and the unequal distribution of risk and the affected community's "dread" of the risk should be considered.²² If successful, the cause of action could catalyze the use of Section 27 as an environmental justice tool and a

means to protect the *environners* of all citizens.

Part I of this Note will provide background information on the history of Section 27 in order to lay a foundation for Part II, which will discuss how the judicial interpretation of Section 27 has changed since ratification. Part II will focus specifically on (A) how the courts' "pre-Robinson Township" interpretation anesthetized Section 27's applicability; (B) the renewed hope that was and is *Robinson Township* in 2013; and (C) the caselaw thereafter. Part III will then discuss prevailing notions of reasonableness framed according to risk in tort law and scholarly assessment of risk. Part IV will discuss legal frameworks in place to address cumulative impacts. Part V will comment on how additional pollution which worsens cumulative impacts in communities may be considered to citizens' "unreasonably impair" environmental guaranteed under Section 27, and therefore may be particularly useful to minority communities seeking environmental justice. Part V will also speculate on how the Commonwealth may adjust in order to protect the environmental rights of its citizens and how, procedurally, community members may utilize a cause of action in order to prompt the Commonwealth's consistent consideration of fairness in all communities.

I. HOW AN ENVIRONMENTAL MOVEMENT LED TO ARTICLE I, SECTION 27 OF THE PENNSYLVANIA CONSTITUTION

Pennsylvania was no stranger to environmental woes in the mid 1900s. In fact, by "the late 1960s, there was a growing concern that Pennsylvania's environmental degradation would

^{22.} The concept of "dread" risk will be discussed more fully in later sections. *See* discussion *infra* Sections III.B., V.A.

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become irreversible."²³ These realizations prompted actionoriented approaches to environmental protection in the 1960s and 1970s.²⁴ Thus, the idea of Article I, Section 27 was born.²⁵

In the mind of State Representative Franklin L. Kury, the primary advocate and author of the amendment, Section 27 was necessary because the depletion and damage to the physical environment raised a "serious question as to how long mankind [could] exist on this planet." Therefore, he formulated the amendment to focus on four specific goals: (1) the establishment of the peoples' right to clean air, pure water, and natural, scenic, historic, and esthetic values of the environment; (2) the belonging of those values to the people and generations to come; (3) the establishment of the government's duty to serve as trustee for natural resources so that they would be passed on to future generations in a preserved state; and (4) the diligence

^{23.} PEC at 50: "We Had to Do Something", PA. ENV'T COUNCIL (Jan. 14, 2020), https://pecpa.org/pec-blog/pec-at-50-we-had-to-do-something/ (quoting "Eleanor Webster Winsor, one of the original founders of the Pennsylvania Environmental Council").

^{24.} See Donald Worster, Nature's Economy: The Roots of Ecology 346–51 (2d ed. 1977); Benjamin Kline, First Along the River: A Brief History of the U.S. Environmental Movement 86–92 (4th ed. 2011); Lorraine Boissoneault, The Deadly Donora Smog of 1948 Spurred Environmental Protection—But Have We Forgotten the Lesson?, Smithsonian Mag. (Oct. 26, 2018), https://www.smithsonianmag.com/history/deadly-donora-smog-1948-spurred-environmental-protection-have-we-forgotten-lesson-180970533/; Erin Blakemore, This Mine Fire Has Been Burning for Over 50 Years, History, https://www.history.com/news/mine-fire-burning-more-50-years-ghost-town (Apr. 26, 2019).

^{25.} While the environmental degradation in Donora and Centralia prompted actionoriented approaches like Section 27, those approaches were not geared towards environmental justice, which, as a movement, gained ground in the 1980s. See History of Environmental Justice Educations and Research at SEAS, UNIV. OF MICH.: SCH. FOR ENV'T & SUSTAINABILITY, https://seas.umich.edu/academics/master-science/environmental-justice/historyenvironmental-justice (last visited Mar. 20, 2023).

^{26.} See Dernbach & Sonnenberg, supra note 18, at 7 (displaying the Remarks of Rep. Kury from the House Legislative Journal, p. 485 published Jan. 6, 1971). When Franklin Kury drafted and advocated on behalf of Section 27, he was a member of the Pennsylvania House of Representatives. See Franklin L. Kury: Biography, ARCHIVES PA. HOUSE OF REPRESENTATIVES, https://www.legis.state.pa.us/cfdocs/legis/BiosHistory/MemBio.cfm?ID=547&body=H (last visited Mar. 20, 2023). The Amendment was passed in response to environmental degradation occurring throughout the state—for example, in 1948, smog in Donora killed twenty people and caused health complications in several others. Boissoneault, supra note 24. In 1962, an abandoned mine pit-turned-landfill was lit on fire in Centralia and spread to a nearby coal seam, causing residents to evacuate and permanently relocate. Blakemore, supra note 24.

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to maintain existing resources in order to guarantee their protection.²⁷

Representative Kury and the other supporting legislators sought to ratify the amendment to instill a sense of environmental stewardship in the government and provide each branch with "a sound, firm basis upon which [they] can act to make Pennsylvania's environment not only fit for human habitation biologically, but also a wholesome environment suited for the achievement of man's highest aspirations as a society."28 In essence, "Section 27 create[d] two public rights:" (1) the individual "right to clean air, pure water, and the preservation of . . . environmental values"; and (2) the right to ownership of "'public natural resources' . . . conserved and maintained [by the Commonwealth] for the benefit of [the public] and future."29

With the ratification of Section 27, hope for the improvement of environmental welfare was on the horizon for the people of the Commonwealth. However, in the decades that followed, the state judiciary interpreted Section 27 in a way that resulted in underutilization as a meaningful tool to environmental wellness.

II. THE PENNSYLVANIA JUDICIARY'S INTERPRETATION OF SECTION 27 PRE- AND POST-ROBINSON TOWNSHIP V. COMMONWEALTH

Pennsylvania's robust environmental awakening lost much of its enthusiasm in the years following the ratification of Section 27, thanks—in large part—to decisions by the Supreme Court of Pennsylvania. This Part will first discuss those decisions, and how they hindered initial application of Section 27. Then, this Part will distill the landmark case of Robinson

^{27.} Dernbach & Sonnenberg, supra note 18, at 7.

^{28.} See id. at 14 (displaying Rep. Kury's statements from a third consideration of the amendment, published on page 721 of the House Legislative Journal in 1969).

^{29.} John C. Dernbach, The Potential Meanings of a Constitutional Public Trust, 45 ENV'T L. 463, 464 (2015) [hereinafter Dernbach, The Potential Meanings of a Constitutional Public Trust].

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Township v. Commonwealth, which reinvigorated Section 27 by recognizing environmental detriment as a cognizable harm.³⁰ Lastly, this Part will discuss the judiciary's interpretation of Section 27 subsequent to *Robinson Township,* to set the stage for discussing how Section 27 can be utilized as a tool in environmental justice communities.

A. *Judicial Decisions Prior to* Robinson Township v. Commonwealth

Before the Supreme Court of Pennsylvania issued a final ruling in *Robinson Township* in 2013, Pennsylvania courts held that Section 27 was only applicable if certain conditions were met, in order to balance environmental, economic, and social concerns.³¹

In October of 1973, the Supreme Court of Pennsylvania held in *Commonwealth v. National Gettysburg Battlefield Tower* that Section 27 was not self-executing and was only applicable if the legislature promulgated "supplemental legislation . . . to define the values which the amendment seeks to protect and to establish procedures by which the use of private property can be fairly regulated to protect those values." Without supplemental legislation, the Court held that there would be serious problems of constitutionality under both the Equal Protection Clause and the Due Process Clause of the Fourteenth Amendment because "clean air," "pure water," and "the natural, scenic, historic and esthetic values of the environment" were not defined or previously considered as "concern[s] of [the] government."

In November 1973, the Court in *Payne v. Kassab* set the stage for claims brought under Section 27 for decades to come, by

^{30.} See Robinson Twp. v. Commonwealth, 83 A.3d 901, 957–58 (Pa. 2013).

^{31.} See, e.g., Payne v. Kassab, 312 A.2d 86, 94 (Pa. Commw. Ct. 1973). The court decided that the "realistic" evaluation of whether Section 27 had been violated involved a quasi-cost-benefits test, that would allegedly ensure judicial efficiency as the courts would need to review "endless decisions." See id.

^{32.} Commonwealth v. Nat'l Gettysburg Battlefield Tower, 311 A.2d 588, 591, 595 (Pa. 1973).

^{33.} Id. at 593.

essentially injecting a cost-benefit analysis requirement into Section 27.³⁴ In *Payne*, Wilkes-Barre citizens filed a complaint against the city to enjoin the widening of a portion of North and South River Streets.³⁵ The "River Street Project" was the product "of [an] extensive analysis by . . . state and local [officials]" that was considered necessary to meet projected traffic needs in the area.³⁶ After public hearings, the Secretary of the Pennsylvania Department of Transportation issued findings that no feasible construction alternatives existed and that the project, as proposed, implemented sufficient environmental safeguards to warrant moving forward.³⁷

Section 27 formed the basis of the plaintiffs' cause of action.³⁸ However, the Supreme Court of Pennsylvania reiterated its reasoning from *Gettysburg Battlefield Tower*, stating that "an absolute interpretation" of Section 27—to be self-executing—was at odds with the fact that all "human activity . . . in some degree impair[s] the natural, scenic, and esthetic values of any environment."³⁹ Thus, the court held that Section 27 "was intended to allow the normal development of property in the Commonwealth," which was understood to be equivalent to "controlled, rather than no development."⁴⁰ Accordingly, the court determined that judicial review of actions challenged under Section 27 required the court to apply the following balancing test:

^{34.} See Payne, 312 A.2d at 94–97. Scholars have criticized the Payne test as having "nothing to do with environmental protection in the way that the constitution envisioned it." Pennsylvania's Environmental Rights Amendment Is Back from the Dead, STATE IMPACT PA. (Oct. 27, 2017, 10:39 PM), https://stateimpact.npr.org/pennsylvania/2017/10/27/pennsylvanias-environmental-rights-amendment-is-back-from-the-dead/ (quoting John Dernbach, director of the Environmental Law and Sustainability Center at Widener University).

^{35.} Payne, 312 A.2d at 88.

^{36.} Id. at 92.

^{37.} *Id.* at 93; *see generally* Citizens to Pres. Overton Park v. Volpe, 401 U.S. 402, 404–09 (1971) (describing the process by which federal funds may be dispersed to highway projects that go through public parks).

^{38.} See Payne, 312 A.2d at 93.

^{39.} Id. at 94.

^{40.} Id.

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(1) Was there compliance with all applicable statutes and regulations relevant to the protection of the Commonwealth's public natural resources?

- (2) Does the record demonstrate a reasonable effort to reduce the environmental incursion to a minimum?
- (3) Does the environmental harm which will result from the challenged decision or action so clearly outweigh the benefits to be derived therefrom that to proceed further would be an abuse of discretion?⁴¹

In *Payne*, the court found that the River Street Project was not only compliant with all applicable laws and regulations but also demonstrated a "reasonable effort that will be expended to reduce the adverse environmental consequences of the project to a minimum" and that the benefits—reduced traffic congestion—greatly outweighed any costs of resulting environmental harm.⁴²

Critics have pointed out that the *Payne* test "bears virtually no relationship to the text of Section 27" and imposes a quasi-cost-benefit analysis unintended by the amendment's drafters and the citizens who ratified it.⁴³ The decisions from *Payne* and *Gettysburg Battlefield Tower*, both of which involved marginal environmental harms, illustrated the judiciary's prodevelopment mentality.⁴⁴

^{41.} Id.

^{42.} Id. at 94-96.

^{43.} See The Potential Meanings of a Constitutional Public Trust, supra note 29, at 477; discussion supra Part I (discussing the intent of State Representative Franklin Kury in drafting Section 27); see also The People's Right to a Clean Environment, PA. DEP'T OF CONSERVATION & NAT. RES. (May 12, 2021, 12:00 AM), https://www.dcnr.pa.gov/GoodNatured/pages/Article.aspx?Post=171.

^{44.} See Payne, 312 A.2d at 88 (involving a situation where the loss of the park in question amounted only to one half of an acre); Commonwealth v. Nat'l Gettysburg Battlefield Tower, 311 A.2d 588, 590 (Pa. 1973) (involving a challenge to construction of a tower that would allow park visitors to see the battlefield from a higher elevation to greater appreciate it). Beginning in the mid-1970s, courts throughout the nation began either exercising greater judicial restraint or

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B. *The Landmark Plurality:* Robinson Township v. Commonwealth

In 2013, the decision of *Robinson Township* ushered in a new era of interpretation for Section 27.⁴⁵ A group of Pennsylvania citizens (the "Citizens") challenged Act 13, a 2012 amendment to the Pennsylvania Oil and Gas Act, as repugnant to several provisions of the state constitution, including Section 27.⁴⁶ Act 13 was promulgated to create regulatory guidelines for unconventional gas extraction and deemed necessary due to growing extraction from Marcellus shale.⁴⁷ The Commonwealth

exercising judicial activism through a pro-development lens, especially when it came to the environment. A pro-industry mentality among courts throughout the country was common at that time. See Richard E. Levy & Robert L. Glicksman, Judicial Activism and Restraint in the Supreme Court's Environmental Law Decisions, 42 VAND. L. REV. 343, 363 (1989) (focusing primarily on the Supreme Court of the United States); Robert L. Glicksman, A Retreat from Judicial Activism: The Seventh Circuit and the Environment, 63 CHI. KENT L. REV. 209, 209 (1987) (focusing primarily on the Seventh Circuit). This Note will not attempt to state definitively what prompted the Pennsylvania judiciary's pro-industry mentality; however, anti-statism movements and resistance to the growing administrative state during the 1970s grew and continued throughout Ronald Reagan's presidency in the 1980s. See Christopher Sellers, How Republicans Came to Embrace Anti-Environmentalism, VOX, https://www.vox.com/2017/4/22/153 77964/republicans-environmentalism (June 7, 2017, 8:19 AM).

- 45. Robinson Twp. v. Commonwealth, 83 A.3d 901, 974–76 (Pa. 2013). The opinion was a plurality, authored by Chief Justice Ronald Castille, joined by Justices Debra McCloskey Todd and Seamus McCaffery, and joined in part by Justice Max Baer. *Id.* at 913. Justice Baer wrote a concurring opinion, which concluded that provisions of Act 13 were unconstitutional on different grounds. *Id.* at 1000–01 (Baer, J., concurring). In 2015, scholars recognized that "plurality opinions do not create binding precedent," but nonetheless predicted that the "plurality opinion is likely to have significant persuasive power" due to its "lengthy, detailed, and thoughtful exposition of the original meaning and understanding of article I, section 27." John C. Dernbach & Marc Prokopchak, *Recognition of Environmental Rights for Pennsylvania Citizens: A Tribute to Chief Justice Castille*, 53 DUQ. L. REV. 335, 359 (2015).
- 46. Robinson Twp., 83 A.3d at 915–16. Act 13 was signed into law on February 14, 2012, by then-Governor Corbett. See Act 13 Frequently Asked Questions, PA. DEP'T OF ENV'T PROT., https://www.dep.pa.gov/Business/Energy/OilandGasPrograms/Act13/Pages/Act-13-FAQ.aspx (last visited Mar. 21, 2023).
- 47. See Dernbach, The Potential Meanings of a Constitutional Public Trust, supra note 29, at 478. The Pennsylvania Department of Environmental Protection defines "[a]n unconventional gas well" as one "that is drilled into an unconventional formation, which is defined as a geologic shale formation below the base of the Elk Sandstone or its geologic equivalent where natural gas generally cannot be produced except by horizontal or vertical well bores stimulated by hydraulic fracturing." Act 13 Frequently Asked Questions, supra note 46. The unconventional extraction methods of hydraulic fracturing and horizontal drilling are two techniques known to "inevitably do violence to the landscape." Robinson Twp., 83 A.3d at 914.

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Court granted summary relief on four counts and enjoined the application of several provisions of the Act, including Section 3215(b)(4),⁴⁸ Section 3304,⁴⁹ and any remaining provisions of Chapter 33 that enforce Section 3304 of the Act.⁵⁰ In effect, the Commonwealth Court's injunction prohibited Pennsylvania Department of Environmental Protection ("PA DEP") from granting waivers of mandatory site setbacks from certain waters in the state and permitted local governments to enforce their existing zoning ordinances or adopt new ones that diverge from Act 13 without fear of legal or financial consequences.⁵¹ However, the Commonwealth Court rejected all of the citizens' other claims, including that Act 13 violated Section 27.52 On appeal, the Supreme Court of Pennsylvania found its "role of enforcing constitutional limitations" applicable given that the interest or entitlements of individual citizens were at stake.⁵³

^{48. &}quot;Section 3215(b)(4) creates a process by which the [DEP] grants waivers to oil or gas well permit applicants from statutory protections of certain types of waters of the Commonwealth." *Robinson Twp.*, 83 A.3d at 931.

^{49. &}quot;Section 3304... implements a uniform and statewide regulatory regime of the oil and gas industry by articulating narrow parameters within which local government may adopt ordinances that impinge upon the development of these resources." *Id.*

^{50.} Robinson Twp. v. Commonwealth, 52 A.3d 463, 494 (Pa. Commw. Ct. 2012). The Supreme Court of Pennsylvania, in its plurality decision, called for the invalidation of Section 3303 as well, which stated that "environmental acts are of Statewide concern and, to the extent that they regulate oil and gas operations, occupy the entire field of regulation, to the exclusion of local ordinances." *Robinson Twp.*, 83 A.3d at 978 (citing 58 PA. CONS. STAT. § 3303 (2012–2013)). The General Assembly's intent in enacting Act 13 was "to preempt and supersede 'local regulation of oil and gas operations regulated by the [statewide] environmental acts, as provided in [Chapter 33]." *Id.* at 970 (first alteration in original).

^{51.} Robinson Twp., 83 A.3d at 930.

^{52.} Id.

^{53.} The "political question doctrine," which usually restricts a court from resolving a dispute where the Constitution specifies self-governance, is not applicable here because of the interests involved. *Id.* at 928 (quoting Hosp. & Health Sys. Ass'n of Pa. v. Commonwealth, 77 A.3d 587, 597 (Pa. 2013)).

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1. The Commonwealth's arguments before the Supreme Court of Pennsylvania

The Commonwealth asserted that Act 13 was entirely constitutional as an exercise of the state's police powers aimed at reforming the oil and gas industry for the purposes of: (1) "promoting the development of ... vast natural gas reserves"; (2) "encouraging economic development, job creation and energy self-sufficiency;" (3) providing municipalities with impact fees; (4) "ensuring ... zoning ordinance[] [uniformity] throughout the Commonwealth"; and (5) maintaining up-todate environmental regulations pertinent to oil and gas.54 Further, the Commonwealth argued that the means of implementation were based on the legislature's "informed regarding the balancing of economic judgment" environmental values.⁵⁵ The Commonwealth contended that the Citizens could not "overcome the strong presumption of constitutionality of duly-enacted legislation," especially in consideration of the exercise of a state's police powers, which requires a showing that the statute "clearly, palpably, and plainly" violated the constitution.⁵⁶

2. The Citizens' arguments before the Supreme Court of Pennsylvania

To show a clear, palpable, and plain constitutional violation, the Citizens invoked Section 27 to support their argument that Sections 3215(b) and 3304 were repugnant to the Commonwealth's duty to preserve the public natural resources and the citizens' individual rights to the preservation of scenic,

^{54.} Id. at 933.

^{55.} *Id.* (quoting Brief for Appellants at 16).

^{56.} *Id.* (quoting Eagle Env't II, L.P. v. Commonwealth, 884 A.2d 867, 880 (Pa. 2005)). The Commonwealth and its *amici* emphasized the benefits that reformed oil and gas development incurred on the public, including the economic benefit of affordable energy, job creation, and stimulus of service industries across the state. *Id.* at 933 n.20. The Commonwealth also asserted "that the balkanization of land use regulation in the various [municipalities] hindered the development of ... Marcellus Shale" extraction. *Id.* Thus, the Commonwealth believed it presented strong arguments in favor of the state's police powers. *See id.*

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natural, historic, and esthetic values of the environment.⁵⁷ They alleged that, as extensions of the state, municipalities were also trustees of the public natural resources, and their authority and ability to act in such a capacity was limited by the Pennsylvania Department of Environmental Protection's "unbridled and unprecedented discretion" in issuing setback waivers and the legislature's mandate of uniform zoning ordinances.⁵⁸ Accordingly, the Citizens claimed that the Commonwealth Court erred in failing to recognize municipalities' fiduciary obligations under Section 27 to "evaluate short-term and longterm discrete and cumulative effects on public resources" and essentially allowed the General Assembly to "occupy the [entire] field" of oil and gas environmental regulation without regard for the "degradation and diminution" of the trust resources protected under the ERA.⁵⁹ The Citizens also asserted that the Commonwealth Court erred in concluding that the General Assembly alone has the authority to "determine[] what is best for public natural resources, and the environment generally, in Pennsylvania."60

3. The Plurality Opinion

The Supreme Court of Pennsylvania began its analysis by immediately recognizing the implication of Section 27 as a primary, dispositive argument in favor of the Citizens:

To describe this case simply as a zoning or agency discretion matter would not capture the essence of the parties' fundamental dispute regarding Act 13. Rather, at its core, this dispute centers upon an asserted vindication of citizens' rights to quality

^{57.} See id. at 939-42.

^{58.} See id.

^{59.} *Id.* at 941. The argument turned on the fact that Act 13 ultimately took power away from municipalities and hindered their ability to act as trustees. *See id.* According to the citizens, Act 13 rests on "the conclusion[s] that the Municipalities Planning Code [was] the source of the municipalities' obligations rather than the Constitution" and a statutory enactment could not "eliminate organic constitutional obligations." *Id.* (citing Brief of Cross-Appellants at 36–38).

^{60.} See id. at 941-42.

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of life on their properties and in their hometowns, insofar as Act 13 threatens degradation of air and water, and of natural, scenic, and esthetic values of the environment, with attendant effects on health, safety, and the owners' continued enjoyment of their private property.⁶¹

The court's analysis focused on the amendment's plain language, which is "control[ling] and must be interpreted in its popular sense, as understood by the people when they voted on its adoption." Given its inclusion in Article I—Pennsylvania's Declaration of Human Rights and "social contract between the government and the people"—the court found that Section 27 encompasses rights that must be explicated as part of the incremental development of decisional law. Although jurisprudential development did not effectuate Section 27's plain language, the court held that such "precedent[] do[es] not preclude recognition and enforcement of the plain and original understanding of" the amendment.

Based on these principles, the court held that claims under Section 27 can arise under the amendment's two distinct clauses: (1) the government infringed upon citizens' rights pursuant to the first "prohibitory" clause of Section 27;65 or (2) "the government . . . failed in its trustee obligations" pursuant to the second clause of Section 27.66 In its decision, the court first

^{61.} See id. at 942. The court chose to address the citizens' arguments under Section 27 in depth despite the fact that the Commonwealth Court's decision and the citizens' success therein rested on due process and separation of powers arguments. See id. The court therefore decided to "provide guidance upon [a] broader legal issue." See id. (quoting Scampone v. Highland Park Care Ctr., LLC, 57 A.3d 582, 604–05 (Pa. 2012)).

^{62.} Id. at 943 (quoting Ieropoli v. AC&S Corp., 842 A.2d 919, 925 (Pa. 2004)).

^{63.} See id. at 947, 950.

^{64.} See id. at 950.

^{65.} See id. The court refers to the first clause of the amendment as "prohibitory" because "the provision identifies protected rights, to prevent the state from acting in certain ways." *Id.* These protected rights include "clean air, pure water, and . . . the preservation of the natural, scenic, historic and esthetic values of the environment." *See* PA. CONST. art. I, § 27.

^{66.} Robinson Twp., 83 A.3d at 950. This tracks with the 1970 state legislature's belief that Section 27 "can be viewed ... as two separate bills." *Id.* at 950–51 (citing PA. H. JOURNAL, Reg. Sess. 2269–72 (1970)).

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examined "[t]he first . . . prohibitory clause of Section 27," which guarantees Pennsylvania citizens a right to clean air, pure water, and preservation of environmental values.⁶⁷ The court held that the clause "affirms a limitation on the state's power to act contrary to [the citizens'] right" and establishes that, while the state is able to regulate the right, any regulations are "subordinate to the enjoyment of the right" and cannot constitute an *unreasonable* impairment of the right.⁶⁸

Unlike the Supreme Court of Pennsylvania's decision in Gettysburg Battlefield Tower, the court in Robinson Township deemed the language "clean air" and "pure water" to be clear.⁶⁹ Although air and water generally "have relative rather than absolute attributes," and although state and federal laws govern air and water and delegate authority to agencies whose expertise courts typically defer to, the clarity of the language provides the courts with a role in enforcing the substantive amendment.⁷⁰ requirements of the Additionally, prohibitory clause includes a requirement for "the preservation of the natural, scenic, historic and esthetic values of the environment."71 Because these categories are broad, the court interpreted this part of the clause to mean that the government cannot perform any action that "unreasonably causes actual or likely deterioration of these features."72 Although the court held that the prohibitory clause did not call for a "stagnant

^{67.} Id. at 951; see also PA. CONST. art. I, § 27.

^{68.} Robinson Twp., 83 A.3d at 944 (quoting in part Page v. Allen, 58 Pa. 338, 347 (1868)).

^{69.} Compare Commonwealth v. Nat'l Gettysburg Battlefield Tower, 311 A.2d 588, 590 (1973) (holding that "clean air," "pure water" and "the natural, scenic, historic and esthetic values of the environment" had not been defined and had not otherwise been "concern[s] of [the] government"), with Robinson Twp., 83 A.3d at 951 ("The terms ... leave no doubt as to the importance of these specific qualities of the environment for the proponents of the constitutional amendment and for the ratifying voters.").

^{70.} See Robinson Twp., 83 A.3d at 953 (stating that courts are equipped to issue "reasoned decisions regarding constitutional compliance by the other branches of government"). In their reviews, the courts are "obliged to weigh parties' competing evidence and arguments" due to the "express purpose of the Environmental Rights Amendment to be a bulwark against actual or likely degradation of, inter alia, our air and water quality." Id.

^{71.} PA. CONST. art. I, § 27.

^{72.} Robinson Twp., 83 A.3d at 953 (emphasis added).

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landscape" or "for the derailment of economic or social development," the court concluded economic development "cannot take place at the expense of an *unreasonable* degradation of the environment."⁷³

Turning to the validity of Act 13, the court found, "[a]s a corollary, the Legislature may not abridge, add to, or alter the constitutional qualification of a right by statute."⁷⁴ Act 13's fundamental purpose was to "provide a maximally favorable environment for industry operators to exploit Pennsylvania's oil and natural gas resources."⁷⁵ Although the court acknowledged that Act 13 was constructed "to supply an energy source much in demand," the aspect of improving the public welfare from an economic standpoint was not dispositive—rather, the court focused on the "detrimental effect" Act 13's provisions would have "on the environment, on the people, their children, and future generations, and potentially on the public purse."⁷⁶

With these considerations in mind, the court concluded that Section 3303, Section 3304, and Section 3215(b) were unconstitutional as violations of the Commonwealth's trustee obligations pursuant to the second clause of Section 27.77 However, the court recognized three important things in light of Section 27's prohibitory clause and environmental justice. First, the court shed light on the prohibitory clause, by holding that it creates an *a priori* constitutional obligation for the Commonwealth "to consider in advance of proceeding the environmental effect of any proposed action on the constitutionally protected features." Second, the court implicitly recognized the disproportionate burdens that the Commonwealth's decisions might have on environmental justice communities when it stated that "[a] second difficulty

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^{73.} Id. at 953, 954 (emphasis added).

^{74.} Id. at 975.

^{75.} Id.

^{76.} Id. at 976-77.

^{77.} See id. at 978, 981-82, 984-85.

^{78.} *Id.* at 952.

arising from Section 3304's requirement that local government permit industrial uses in all zoning districts is that some properties and communities will carry much heavier environmental and habitability burdens than others."⁷⁹ Third, with respect to Section 3215(b), the legislature's imposition of a duty on the PA DEP to waive so-called "mandatory setbacks" so long as the applicant submits a plan marginalizes public participation, which will result in "disparate impact[s]" on certain members of the public, creating an outcome that is "irreconcilable" with Section 27.80

C. *Judicial Decisions Following* Robinson Township v. Commonwealth

Decisions following *Robinson Township* reinforced the core holdings from the plurality; namely that the Commonwealth must not condone actions which unreasonably impair citizens' right to "clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment."⁸¹

In 2017, the Pennsylvania Environmental Defense Foundation ("PEDF") challenged "the constitutionality of statutory enactments" that allowed the state to "leas[e] state forest and park lands for oil and gas exploration and extraction" for profit.⁸² The Supreme Court of Pennsylvania granted certiorari and formally rejected the three-pronged *Payne* test because it "is unrelated to the text of Section 27" and "strips the constitutional provision of its meaning."⁸³ The court adhered to its prior articulations in *Robinson Township*: Section 27 "places a limitation on the state's power to act contrary to this right, and

^{79.} Id. at 980.

^{80.} *Id.* at 982, 984. The court also points out that "[c]alling upon agency expertise" does not remedy a statute that does not promulgate the purpose of the trust. *Id.* at 984.

^{81.} See Pa. Env't. Def. Found. v. Commonwealth, 161 A.3d 911, 938–39 (Pa. 2017) (citing PA. CONST. art. I, § 27); Frederick v. Allegheny Twp. Zoning Hearing Bd., 196 A.3d 677, 691–98, 701 (Pa. Commw. Ct. 2018) (citing PA. CONST. art. I, § 27).

^{82.} Pa. Env't Def. Found., 161 A.3d at 916.

^{83.} Id. at 930.

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while the subject of this right may be amenable to regulation, any laws that *unreasonably* impair the right are unconstitutional."84

Another proceeding of importance is *Frederick v. Allegheny* Township Zoning Hearing Board, wherein the Commonwealth Court of Pennsylvania affirmed the Westmoreland County Court of Common Pleas denial of a land use appeal.⁸⁵ At the core of the issue was Zoning Ordinance 01-2010, a supplemental ordinance to Allegheny Township's Zoning Ordinance, which "allowed oil and gas well operations in all zoning districts so long as they satisfy enumerated standards designed to protect public health, safety and welfare."86 "Pursuant to [the ordinance], [Allegheny] Township issued a permit to CNX Gas Company to develop an unconventional gas well on property located in the Township's R-2 Agricultural/Residential Zoning District "87 Residents near the CNX well ("the Objectors") challenged (1) the substantive validity of Ordinance 01-2010 and (2) the issuance of the permit to CNX.88 The Zoning Board rejected the challenge and found that an argument relying on Robinson Township was "misplaced."89 The trial court affirmed the decision without receiving additional evidence.⁹⁰

On appeal to the Commonwealth Court, the Objectors raised the issue of whether CNX's permit violates Section 27.91 They

^{84.} *Id.* at 931 (emphasis added) (citing *Robinson Twp.*, 83 A.3d at 950). Ultimately, the court held that proceeds derived from utilization of the trust must be injected back into the trust. *Id.* at 933.

^{85.} Frederick, 196 A.3d at 679-80.

^{86.} *Id.* at 680; see also ALLEGHENY TOWNSHIP ZONING ORDINANCE §§ 250-109 to 250-149 (1997) (adopted June 16, 1997, by Ordinance No. 11-1997, as amended) (the underlying Township Zoning Ordinance whose modification is at issue in *Frederick*).

^{87.} Frederick, 196 A.3d at 679; ALLEGHENY TOWNSHIP ZONING ORDINANCE §§ 250-22 to 250-29.

^{88.} Frederick, 196 A.3d at 679.

^{89.} *Id.* at 685–86 (citing *Robinson Twp.*, 83 A.3d at 901). Specifically, the Zoning Board found that the situation at hand—"where the municipality has exercised its power to decide where oil and gas extraction can take place"—was substantively different than the holding of *Robinson Township*, which held that Act 13 "unconstitutionally deprived municipalities of the ability to make zoning decisions about oil and gas extraction." *Id.* (citing *Robinson Twp.*, 83 A.3d at 901).

^{90.} Id. at 686.

^{91.} Id.

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contended that placement of a gas well in an area zoned for agricultural and residential use "degrades the local environment in which people live, work, and recreate, including the public natural resources on which people rely."⁹² The Objectors relied on *Robinson Township* and *PEDF* to advance their argument;⁹³ however, CNX contended, the zoning ordinance concerns the right of landowners to lease their *private* land for *private* activity, making the circumstances distinct from both *Robinson Township* and *PEDF*.⁹⁴

In addressing the applicability of the prohibitory clause of Section 27, the Commonwealth Court found that "[t]he precise duties imposed upon local governments . . . are by no means clear."95 However, in accordance with Robinson Township, 96 the Commonwealth Court held that government action "must reasonably account for the environmental features of the affected locale" and judicial review requires an evidentiary hearing to determine (1) whether the values of the first clause (clean air, pure water, and preservation of the natural, scenic, historic, and esthetic values of the environment)⁹⁷ are implicated by the action, and (2) whether the action "unreasonably impairs" those values.98 The Commonwealth Court ultimately held that the Objectors did not prove that Zoning Ordinance 01-2010 "unreasonably impairs" their rights under Section 27 because zoning, in and of itself, "accounts for the 'natural, scenic, historic and esthetic values of the environment' by placing compatible uses in the same ... establishing ... lot sizes and district[s] dimensional requirements providing parking and signage controls and

^{92.} Id. at 691 (quoting Objectors' Brief at 49).

^{93.} Id. at 691–93.

^{94.} Id. at 693–94.

^{95.} Id.at 694.

^{96.} Id. at 694–95.

^{97.} PA. CONST. art. I, § 27.

^{98.} Frederick, 196 A.3d at 695 (emphasis added) (quoting Robinson Twp. v. Commonwealth, 83 A.3d 901, 951 (Pa. 2013)). The Commonwealth Court states definitively that when a municipality enacts a zoning ordinance, "it is bound by the Environmental Rights Amendment and by all the rights protected in Article I of the Pennsylvania Constitution." *Id.*

requiring landscape and screening controls." ⁹⁹ *Robinson Township*, therefore, did not change the notion that "[m]unicipalities lack the power to replicate the environmental oversight that the General Assembly has conferred upon [PA] DEP and other state agencies." ¹⁰⁰

More recently, the Environmental Hearing Board ("EHB") which hears appeals of PA DEP actions—found that the PA DEP acted contrary to Section 27 when it issued a noncoal mining permit renewal, a National Pollutant Discharge Elimination ("NPDES") permit, and an authorization to mine to Gibraltar Rock, Inc. to operate a quarry located adjacent to a Hazardous Sites Cleanup Act ("HSCA") site. 101 Challengers of the permits contended that the PA DEP, in granting the permits, "incorrectly concluded that the additional environmental impact caused by the quarry would not result in unreasonable degradation of the environment," to which EHB agreed but did not address in depth.¹⁰² Ultimately, EHB found that in light of the risk posed by the groundwater contamination, the quarry permits needed to be rescinded. 103 Subsequently, the Commonwealth Court held that EHB

^{99.} *Id.* at 695 (quoting PA. CONST. art. I, § 27). Moreover, the Commonwealth Court found that CNX's expert witness—who testified that "there is a long history of oil and gas development safely coexisting with agricultural uses in the rural areas of the Township and that unconventional gas development will actually help preserve farming in the R-2 District"—adequately proved that Ordinance 01-2010 would not unreasonably impair citizens' rights under Section 27. *See id.* at 698.

^{100.} See id. at 697. Scholars have criticized this holding on the grounds that "the Commonwealth should not be able to successfully argue, in response to a claim that the Commonwealth violated Section 27, that *no* Commonwealth entity is specifically responsible for the violation, and therefore that no remedy is available." John C. Dernbach, *Natural Resources and the Public Estate: Article 1, Section 27, in* THE PENNSYLVANIA CONSTITUTION—A TREATISE ON RIGHTS AND LIBERTIES 35 n.171 (2d ed., forthcoming 2020).

^{101.} See New Hanover Twp. v. Pa. Dep't of Env't Prot., EHB Docket No. 2018-072-L, at 1–2 (Pa. Env't Hearing Bd. Apr. 24, 2020); see also NPDES Permit Basics, U.S. Env't Prot. AGENCY, https://www.epa.gov/npdes/npdes-permit-basics (Dec. 23, 2022) (defining National Pollutant Discharge System Permits). The Township was concerned permit approval ignored the hydraulic connection between the polluted groundwater and the quarry, and the inevitable spread of hazardous contaminant would result from quarrying activities, in violation of Section 27. New Hanover Twp., EHB Docket No. 2018-072-L, at 66–72.

^{102.} Id. at 67-68.

^{103.} See id. at 2, 60.

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exceeded its authority in rescinding the permits on the grounds that there were no deficiencies in the quarry operation plans. 104 More specifically, the Commonwealth Court held that rescission of Gibraltar's permits may itself equate to a violation of Section 27 by eliminating Gibraltar's ability to participate in any groundwater cleanup. 105 After granting certiorari, the Supreme Court of Pennsylvania did not substantively address the applicability of Section 27; rather, it held that the Commonwealth Court, by considering Section 27 *sua sponte*, exceeded its authority. 106

Despite unpredictable outcomes, a recurring theme throughout each proceeding regarding Section 27 is that, pursuant to the first prohibitory clause of Section 27, government actions or government-endorsed actions—such as permitting decisions to allow development—cannot unreasonably impair the peoples' right to "clean air and pure water and the preservation of the natural, scenic, historic, and esthetic values of the environment." Accordingly, Section 27 may proceed as a tool for environmental justice communities to ensure those rights.

III. SECTION 27'S INTERSECTION WITH ENVIRONMENTAL JUSTICE: A CAUSE OF ACTION FOR COMMUNITIES TO AVOID UNREASONABLE POLLUTION

While the Commonwealth's environmental justice initiatives and Section 27 have not yet worked in tandem, the two have potential to unite and achieve a common goal: the prevention

^{104.} See Gibraltar Rock, Inc. v. Pa. Dep't of Env't Prot., 258 A.3d 572, 581–82, 584 (Pa. Commw. Ct. 2021), vacated and remanded, 286 A.3d 713 (Pa. 2022).

¹⁰⁵. *Id.* at 583–84. The Commonwealth Court did not expand on its reasoning regarding this point.

^{106.} Gibraltar Rock, Inc. v. Dep't of Env't Prot., 286 A.3d 713, 725 (Pa. 2022). The court vacated the Commonwealth Court's decision and remanded it back to the Commonwealth Court. *Id.*

^{107.} See, e.g., Robinson Twp. v. Commonwealth, 83 A.3d 901, 951 (Pa. 2013); Pa. Env't. Def. Found. v. Commonwealth, 161 A.3d 911, 931 (Pa. 2017); Frederick v. Allegheny Twp. Zoning Hearing Bd., 196 A.3d 677, 694–95 (Pa. Commw. Ct. 2018).

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of unreasonable additional pollution in environmental justice communities. The prohibitory clause of Section 27 is read to instill a duty in the Commonwealth to avoid or reconsider actions which "unreasonably impair" the citizens' right to clean air, pure water, and to the preservation of natural, scenic, historic, and esthetic values of the environment. The question of what exactly constitutes *unreasonable* impairment is without answer, but the standard of care should be evaluated according to existing tort law doctrines, wherein reasonableness is the ultimate touchstone in any inquiry and is determined in conjunction with risk. Ultimately, members of environmental justice communities may be able to assert that any additional pollution is unreasonable on the basis of the risk that it imposes when the community is already dealing with the impacts of compounding adverse environmental stressors. In the community is already dealing with the impacts of compounding adverse environmental stressors.

To be more specific, when the Commonwealth and its entities—such as the PA DEP—initiate or finalize a state action—such as the renewal or grant of a permit for a polluting facility—in an overburdened community already suffering from cumulative impacts,¹¹¹ Section 27 may provide a means for community members to challenge the renewal or granting of the permit as unreasonable.

This Section will first discuss the prevailing doctrines of reasonableness as bolstered by scholarship to establish that, ultimately, reasonableness should be based on risk analysis that assigns great weight to both equitable distribution of risk and the affected public's perception of the risk—if the circumstances create too great of a risk, the Commonwealth may be obligated

^{108.} See cases cited supra note 81; see also PA. CONST. art. I, § 27.

^{109.} See discussion infra Section III.A.

^{110.} See discussion infra Part IV.

^{111.} The Supreme Court of Pennsylvania has deemed municipalities to be arms of the Commonwealth and, therefore, subject to the same obligations under Section 27. See Robinson Twp., 83 A.3d at 977 ("[T]he General Assembly can neither offer political subdivisions purported relief from obligations under the Environmental Rights Amendment, nor can it remove necessary and reasonable authority from local governments to carry out these constitutional duties.").

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to make changes to the conditions of permits or deny them.¹¹² This constitutional duty may serve to motivate polluters to implement more stringent control technology or rethink their operations entirely.

A. How Tort Law Defines the Reasonable Standard of Care

The fundamental principle of the law of negligence can be found in the famous judgment of Lord Atkin in *Donoghue v. Stevenson*:

You must take *reasonable* care to avoid acts or omissions which you can reasonably foresee would be likely to injure your neighbour. Who, then, in law is my neighbour? The answer seems to be—persons who are so closely and directly affected by my act that I ought reasonably to have them in contemplation as being so affected when I am directing my mind to the acts or omissions which are called in question.¹¹³

In a more modern context, the Restatement (Third) of Torts distills common themes surrounding the judiciary's evaluation of negligence, and defines it as follows:

A person acts negligently if the person does not exercise reasonable care under all the circumstances. Primary factors to consider in ascertaining whether the person's conduct lacks reasonable care are the foreseeable likelihood that the person's conduct will result in harm, the foreseeable severity of any harm that may ensue,

^{112.} See discussion of New Jersey's environmental justice law infra Part IV.

^{113.} Donoghue v. Stevenson, [1932] A.C. 562, [1932] UKHL 100, 1932 S.C. (H.L.) 31, 1932 S.L.T. 317, [26 May 1932] (emphasis added), http://www.bailii.org/uk/cases/UKHL/1932/100.pdf.

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and the burden of precautions to eliminate or reduce the risk of harm.¹¹⁴

In essence, to avoid liability for negligence, actors must exercise "reasonable care." To evaluate what constitutes reasonable or unreasonable behavior, courts will almost always consider foreseeable harms and the severity of the foreseeable harms.¹¹⁶ The Restatement (Third) of Torts echoes the analysis of Judge Learned Hand, who, writing for the Second Circuit in United States v. Carroll Towing Co., explained that one acts negligently if the burden of adequate precautions to prevent harm is less than the probability of the harm's occurrence multiplied by the gravity of that potential harm. 117 This formula "is [now] enshrined in the law-and-economics literature as the centerpiece of the courts' way of determining negligence."118 Some scholars interpret the "Learned Hand Formula" to be a consecration of cost-benefit analyses into negligence determinations.¹¹⁹

While the Learned Hand Formula, as conceptualized by law and economics, suggests a need to quantify costs of protection and severity of harm to determine if the cost of avoidance outweighs the harm, neither of these is truly determinative of reasonableness. Consider the Seventh Circuit's decision in *McCarty v. Pheasant Run.*¹²⁰ Writing for the Seventh Circuit, Judge Richard Posner noted that it is not necessary to determine costs and benefits with numeric precision because "[c]onceptual as well as practical difficulties in monetizing . . . injuries may continue to frustrate efforts to measure expected accident costs with the precision that is possible . . . in

^{114.} Restatement (Third) of Torts: Liab. For Physical & Emotional Harm \S 3 (Am. L. Inst. 2010).

^{115.} Id.

^{116.} See, e.g., id. (emphasizing the importance of foreseeability and severity in the current standard of negligence based on the Restatement (Third) of Torts).

^{117.} See United States v. Carroll Towing Co., 159 F.2d 169, 173 (2d Cir. 1947).

^{118.} Jeonghyun Kim, Revisiting the Learned Hand Formula and Economic Analysis of Negligence, 169 J. INST'L & THEORETICAL ECON. 407, 407 (2013).

^{119.} See, e.g., id. at 408.

^{120.} McCarty v. Pheasant Run, Inc., 826 F.2d 1554 (7th Cir. 1987).

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measuring the other side of the equation—the cost or burden of precaution."¹²¹ Fact-finders, therefore, "may be forced to make rough judgments of reasonableness, intuiting rather than measuring the factors in the [Learned] Hand Formula."¹²²

In addition, there are clearly other factors that impact one's sense of reasonableness beyond simple concepts of risk and avoidance costs. Consider the Ford Pinto case. 123 Ford created a subcompact car and discovered during testing that the gas tank was misplaced and would explode if the car was rear-ended.¹²⁴ Instead of fixing the issue, which would have approximately \$11 per car (totaling \$137.5 million), Ford opted to handle the anticipated lawsuits, which they estimated would cost around \$49 million.125 Although Ford's decision is not considered unreasonable under the parsimonious reading of the Learned Hand formula, arguably choosing to accept guaranteed severe injury or loss of life in order to save money is, at its core, unreasonable, and is a prime example of why quantification of dollar amounts or predicted fatalities across the aggregate population alone are not sound bases for determining reasonableness.¹²⁶

Context is significant to every "reasonableness" determination throughout the law. Consider two situations. In the first, a man fires a shotgun in the wilderness, knowing that no one is around. In the second, the same man fires a shotgun,

^{121.} Id. at 1555, 1557.

^{122.} Id. at 1557.

^{123.} Grimshaw v. Ford Motor Co., 174 Cal. Rptr. 348 (Ct. App. 1981).

^{124.} See id. at 359-61.

^{125.} WILLIAM H. SHAW & VINCENT BARRY, MORAL ISSUES IN BUSINESS 84 (8th ed. 2001). Ford estimated that \$49.5 million would be necessary to cover costs of 180 burn deaths, 180 serious burn injuries, and 2,100 burned vehicles. *Id*.

^{126.} See Donald T. Hornstein, Reclaiming Environmental Law: A Normative Critique of Comparative Risk Analysis, 92 COLUM. L. REV. 562, 595 (1992) (demonstrating that the pure application of a cost-benefit comparative risk analysis ignores important concerns such as equity). This method of quantifying risk is used in environmental law, but scholars have criticized comparative risk analysis, particularly within the U.S. Environmental Protection Agency: "[n]ot only is it possible that environmental risk assessments will fail to focus on all relevant categories of losses, but estimating the probabilities and magnitudes of losses can be idiosyncratic." Id. at 572.

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but this time, he is outside of City Hall in Philadelphia, where other people are similarly firing off shotguns. In the first instance, the risk—that is, the foreseeability and severity of harm—of someone getting injured is incredibly low, and therefore the man's actions can generally be considered reasonable. In the second instance, the risk of someone getting injured is incredibly high, compounded by the fact that there are other men firing shotguns. In that situation, therefore, the man's actions are intuitively unreasonable. The critical component differentiating the risk-analyses in each instance is context. Normative views of the Learned Hand Formula encompass this general principle.¹²⁷ In fact, in the context of "decisionmaking about the accident risks to others associated with one's conduct," persons should generally "compare the expected consequences if they take greater care with the expected consequences if they do not."128

Thus, cost considerations are not dispositive in reasonableness analysis throughout tort law. What is dispositive, then, is the duty of care required to avoid foreseeable consequences. Consideration of context is therefore a critical component throughout such reasonableness evaluations.

B. The Expansion of Reasonableness and Risk in the Realm of Scholarship

The notion of reasonableness in tort law generally considers the actions one can take to decrease any particular risk that may ensue from the actions or behavior.¹²⁹ The concept should not be purely quantitative, as many other factors can influence one's perception of risk, such as whether the risk is fairly and

^{127.} Stephen G. Gilles, On Determining Negligence: Hand Formula Balancing, the Reasonable Person Standard, and the Jury, 54 VAND. L. REV. 813, 820 (2001).

^{128.} *Id.* Moreover, the author asserts that "the Hand Norm—in its most general, inclusive form—stands for the pragmatic proposition that persons should choose to take greater care when the expected good consequences outweigh or overbalance the expected bad consequences." *Id.*

^{129.} See, e.g., id.

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equitably distributed, voluntarily assumed, or controllable.¹³⁰ Each of these factors can be gleaned from public perception of risk and are particularly relevant in environmental justice communities.¹³¹ Legal scholars investigating risk analyses suggest that courts evaluate risk holistically using the aforementioned factors, in order to more accurately capture the true essence of reasonableness, compared to comparative, economic models of risk.¹³²

Traditionally, government agency risk analysis is focused on comparative models, which concern aggregate risk and frame harm according to chance of fatalities over the population. 133 In this respect, scholars have criticized this method of risk analysis for not being inclusive of the holistic factors mentioned above, and in particular, equity—a concept that is evidently important to laypeople. 134 Similarly, comparative risk analysis tends to "compare environmental risks with each other" thus neglecting any moral direction in which the law could move. 135 Generally, equity endeavors seek to distribute risk equally among individuals—"it assumes that equal distributions are preferable to unequal distributions."136 While equity considerations have not become a prevalent part of government agency decisionmaking, scholars suggest that they require "real public participation" rather than mere "lip service" to the public's expected perception.¹³⁷ This hurdle is hard to clear, given that staunch advocates of comparative risk analysis tend to "scoff"

^{130.} See Hornstein, supra note 126, at 629–33.

^{131.} See discussion infra Parts IV, V.

^{132.} See, e.g., Hornstein, supra note 126, at 629–33.

^{133.} See Hornstein, supra note 126, at 591–92 ("[C]omparative risk analysis tends to emphasize aggregate numbers of mortality and morbidity as the principal (or only) factors across which environmental risks should be compared and judged."); see also id. at 595 n.150.

^{134.} See id. at 595.

^{135.} Id. at 617.

^{136.} Id. at 595.

^{137.} See, e.g., id. at 604. This suggestion is in accordance with the "expected utility theory," which theorizes that people make choices based on expected outcomes and will "choose the alternative with maximal expected utility." *Id.* at 577 (quoting Peter Gardenfors & Nils-Eric Sahlin, *Introduction: Bayesian Decision Theory—Foundations and Problems, in* DECISION, PROBABILITY AND UTILITY 5 (Peter Gardenfors & Nils-Eric Sahlin eds. 1988)).

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at the public's purported "irrationality toward[] risk"; accordingly, experts tend to presume that public perception of risk is inherently at odds with the actual probability and magnitude of risk.¹³⁸

However, scholar and Professor Donald Hornstein opines that public perception of risk should play more of a role in decision-making due to comparative risk analysis' inability to consider risk equity, voluntariness, and controllability. 139 This is especially important and relevant in environmental decisions that affect overburdened communities dealing with cumulative impacts. Although it is true that several cognitive heuristics may distort laypersons' perception of risk, scholars believe that "there are ... reasons why they do not compel the need for comparative risk analysis to displace the vicissitudes of public choices about environmental risk."140 First, evidence suggests that comparative risk analysis naturally results in data gaps, and experts will deal with such uncertainties by employing their own heuristics to calculate probabilities of harm.¹⁴¹ In other instances, such as agency capture, it is often evident that "powerful set[s] of influences ... will prevent some (perhaps many) decisions from reflecting a fully unbiased, scientific assessment of probabilities."142 Moreover, even comparative risk analyses are riddled by uncertainties, a concession admitted by the U.S. EPA on occasion. 143 Accordingly, Professor Hornstein argues that the public's ability to make intuitive conclusions regarding risk illustrates heuristics as "useful, time-saving devices" despite the fact that they "sometimes or

^{138.} See, e.g., id. at 604-05.

^{139.} See id. at 605-10.

^{140.} Id. at 610.

^{141.} See Clayton P. Gillette & James E. Krier, Risk, Courts, and Agencies, 138 U. PA. L. REV. 1027, 1093 n.210 (1990) ("Available studies suggest that when experts rely on judgment, their thought processes resemble those of laypeople.") (citing Fischhoff, Managing Risk Perceptions, ISSUES IN SCI & TECH., Fall 1985, at 91).

^{142.} Hornstein, supra note 126, at 611.

^{143.} See id. at 563 n.2, 610 n.227, 614 n.241.

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even often get us into trouble."¹⁴⁴ Public perception, therefore, may play a more vital role in risk analysis, as Professor Hornstein believes such perception "can . . . be unpacked to reveal concern about a whole set of values that rational people may legitimately consider, values which are captured only dimly . . . by comparative risk analysis."¹⁴⁵ "Dread risk" encompasses several of these values—it "is associated with the public's . . . lack of control over an activity, high catastrophic potential for fatalities, *inequitable distribution of risks and benefits* . . . and the way in which fatalities may occur."¹⁴⁶

Reasonableness considerations, in accordance with tort law's tendency to value context via a layperson's objective perspective, should value context such as that derivable from a community's dread risk. Scholar and Professor Paul Slovic suggests that public participation in government decision-making needs to be prioritized and restructured, considering the fact that "public debates and communications from experts [regarding risk] do little to allay fears and, indeed, may exacerbate them." Other scholars outright criticize the comparative expert approach on the basis that "it cuts off rather than allows social discourse on relevant and important values." In the same realm, these scholars contend that societal "baselines" will shape public perception of risk more so

^{144.} *Id.* (quoting Charles Perrow, Normal Accidents: Living with High-Risk Technologies 317 (1984)); *see also* Perrow, *supra*, at 316–17 (discussing availability heuristics wherein people weigh the probability of an event by the ease with which some relevant information comes to mind).

^{145.} Hornstein, *supra* note 126, at 614–15. This is not to say that permits should be instantly denied—in New Jersey, the Department of Environmental Protection must "apply conditions to ... existing facilit[ies]" permits or "may grant [new] permit[s]" for facilities whose industrial processes will add pollution to the community if the "facilit[ies] ... serve a compelling public interest." *See* N.J. STAT. ANN. §§ 13:1D-160(c)—(d). Consideration of community risk, therefore, does not need to be and should not be the death knell for industry in Pennsylvania.

^{146.} See, e.g., Hornstein, supra note 126, at 615 (emphasis added) (citing Paul Slovic, Perception of Risk, 236 SCIENCE 280, 283 (1987)). According to Slovic, dread risk can serve as a holistic explanation as to why expert and layperson perception of risk often differ. *Id.*

^{147.} See Paul Slovic, Baruch Fischhoff & Sarah Lichtenstein, Psychological Factors and Social Implications 21 (1981).

^{148.} See Hornstein, supra note 126, at 615–16.

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than expert opinion.¹⁴⁹ For example, "if the baseline is the right to an environment as free as feasible from harmful substances," the public will assess risks accordingly.¹⁵⁰ In such an instance, the public might accept a "state-of-the-art-scrubber" on a coalfired electricity generator rather than demand no generator at all.¹⁵¹ This is consistent with the general public's expectation that they "are entitled to an environment that does not appreciably harm their well-being"¹⁵² and Pennsylvania citizens' expectations in light of Section 27. Consideration of public perception of risk, therefore, may provide more of a means to consider context and fairness, in a way that traditional approaches cannot.¹⁵³

This approach ensures a capacious enough distribution of risk to encompass cumulative impacts, especially if society's baseline of perception is an environment free of "unreasonable impairment" pursuant to Section 27.¹⁵⁴ It also comports with tort law's tendency to approach reasonableness from an intuitive standpoint, given that assigning dollar amounts to notions of morality and fairness tend not to capture a complete picture of most situations.

IV. LEGAL FRAMEWORK THAT ADDRESSES ENVIRONMENTAL JUSTICE AND CUMULATIVE IMPACTS

The most straightforward definition for "cumulative impacts" can be found within the framework of the National

^{149.} Id. at 615-18.

^{150.} Id. at 617.

^{151.} See id.

^{152.} See id. at 616.

^{153.} Professor Hornstein argues that "even improved comparative models of risk assessment cannot account for the different mixes of values and contexts that influence the way individuals and communities measure the utilities of public risks." *Id.* at 603.

^{154.} The Supreme Court of Pennsylvania addressed the citizens' baseline expectations regarding their immediate environment in *Robinson Township. See* Robinson Twp. v. Commonwealth, 83 A.3d 901, 977 (Pa. 2013) ("To put it succinctly, our citizens buying homes and raising families in areas zoned residential had a reasonable expectation concerning the environment in which they were living, often for years or even decades. Act 13 fundamentally disrupted those expectations, and ordered local government to take measures to effect the new uses, irrespective of local concerns.").

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Environment Protection Act ("NEPA"), which was passed by Congress during Richard Nixon's presidency and at the height of the national environmental movement of the 1960s and 1970s. ¹⁵⁵ It delegated regulatory authority to the Council on Environmental Quality, which promulgated a substantive definition of cumulative impacts:

[T]he impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.¹⁵⁶

Under NEPA, cumulative impact consideration used to be part of the procedure of Section 102(c), which mandates the consideration of unavoidable "adverse environmental effects" as part of the planning procedure for major government actions that "significantly affect[] the quality of the human environment." The Supreme Court evaluated the meaning of "significantly" given the absence of both a Congressional and agency definition, and determined that two factors must be considered:

^{155.} See 42 U.S.C. §§ 4321–70; Richard Nixon, Statement About the National Environmental Policy Act of 1969, THE AM. PRESIDENCY PROJECT, https://www.presidency.ucsb.edu/documents/statement-about-the-national-environmental-policy-act-1969 (last visited Mar. 21, 2023).

^{156.} See 42 U.S.C. § 4344; 40 C.F.R. § 1508.7 (2005). Pursuant to the Clean Water Act, the EPA also defines "cumulative impacts" in a more specific sense: "changes in an aquatic ecosystem that are attributable to the collective effect of a number of individual discharges of dredged or fill material." 40 C.F.R. § 230.11(g)(1); see also 33 U.S.C. § 1251. Notably, no mention is made of past activities. Permitting authorities must only evaluate cumulative impacts "to the extent reasonable and practical" and consider them in their decision-making processes. § 230.11(g)(2). Thus, courts generally will not attribute the failure to consider past activities as a violation of the Clean Water Act. See Ky. Riverkeeper, Inc. v. Midkiff, 800 F. Supp. 2d 846, 875 (E.D. Ky. 2011).

^{157. 42} U.S.C. § 4332(c)(ii).

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(1) the extent to which the action will cause adverse environmental effects in excess of those created by existing uses in the area affected by it, and

(2) the absolute quantitative adverse environmental effects of the action itself, including the *cumulative* harm that results from its contribution to existing adverse conditions or uses in the affected area.¹⁵⁸

Accordingly, CEQ defined "effects" to include indirect, direct, and cumulative effects. 159

Perhaps the more relevant definitions of cumulative impacts come from recent state laws that have been enacted to remedy environmental injustices. New Jersey passed a comprehensive environmental justice law on September 18, 2020. The law states that

the [NJ] department [of environmental protection] shall, after review of the environmental justice impact statement . . . deny a permit for a new facility upon a finding that approval of the permit, as proposed, would, together with other environmental or public health stressors affecting the overburdened

^{158.} Hanly v. Kleindienst, 471 F.2d 823, 830-31 (2d Cir. 1972) (emphasis added).

^{159.} See Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act, 40 C.F.R. §§ 1508.7–8.8. During the administration of President Donald Trump, CEQ repealed 40 C.F.R. §§ 1508.2–1508.28, which includes the sections pertaining to cumulative impacts. See Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act, 85 Fed. Reg. 43,304, 43,342–44 (July 16, 2020). More recently, the Biden Administration issued a notice of proposed rulemaking, wherein the CEQ stated its intent to revert its NEPA regulations to their pre-Trump versions. See National Environmental Policy Act Implementing Regulations Revisions, 86 Fed. Reg. 55,757, 55,763–65 (Oct. 7, 2021). The consideration of cumulative impacts in federal government decision making is, at best, in flux which prompts environmental justice advocates to worry that "the concerns of poor and minority communities impacted by [government] projects" were being sidelined. See Jeff Brady, Trump Overhauls Key Environmental Law to Speed Up Pipelines and Other Projects, NPR (July 15, 2020, 5:00 AM), https://www.npr.org/2020/07/15/891190100/trumpoverhauls-key-environmental-law-to-speed-up-pipelines-and-other-projects.

 $^{160.\ \ \,} N.J.\,Stat.\,Ann.\,\S\S\,\,13:1D\text{-}157\text{-}16.$

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community, cause or contribute to adverse cumulative environmental or public health stressors in the overburdened community that are higher than those borne by other communities within the State, county, or other geographic unit of analysis ¹⁶¹

Similarly, when the department reviews "a permit for the expansion of an existing facility, or the renewal of an existing facility's major source permit," it is required to "apply conditions" upon a finding that the application "would, together with other environmental or public health stressors affecting the overburdened community, cause or contribute to adverse cumulative environmental or public health stressors in the overburdened community that are higher than those borne by other communities"162 Just the existence of laws that prohibit actions that "cause or contribute to adverse cumulative environmental or public health stressors in ... overburdened communit[ies]" suggests that the addition of pollution is unreasonable.¹⁶³ To the extent these laws prohibit additional pollution to overburdened communities, they recognize that even a small addition of pollution to an environmental justice community may be too significant given the background levels of pollution and factors like context, equality, fairness, control, and voluntariness. 164

^{161.} Id. § 13:1D-160(c) (emphasis added).

^{162.} Id. § 13:1D-160(d).

^{163.} See id.

^{164.} See Hornstein, supra note 126, at 608–10.

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V. SECTION 27'S INTERSECTION WITH ENVIRONMENTAL JUSTICE: A CAUSE OF ACTION FOR COMMUNITIES TO AVOID UNREASONABLE POLLUTION

A. Section 27 Supports the Understanding that Worsening of Cumulative Impacts is Unreasonable

Despite Section 27's precarious beginnings, it has potential to protect environmental justice communities from Commonwealth actions that condone or contribute to the worsening of cumulative impacts.

The judiciary's reading of Section 27 forbids Commonwealth from acting in ways that "unreasonably impair" the citizens' environmental rights, implying that impairment be assessed on the basis of reasonableness. "Reasonableness" necessitates a consideration of risksometimes referred to as the probability multiplied by the magnitude of a potential harm that would occur as the result of an action.¹⁶⁵ In practice, reasonableness is not so formulaic rather, it requires an intuitive evaluation in light of context and fairness. 166 Recall Section III.A, wherein this Note discussed the Ford Pinto case. 167 Even where Ford's decision to deal with the wrongful death lawsuits was "sensible" economically, one's intuition easily reveals that the equitable and fair course of action would have been to spend the extra money to prevent injury and death. A purely economic approach to reasonableness has been criticized as perhaps rational, but largely amoral. 168 Even more relevant in relation to Section 27—

^{165.} See RESTATEMENT (THIRD) OF TORTS: PHYS. & EMOT. HARM § 3(d)–(e) (2010); United States v. Carroll Towing Co., 159 F.2d 169, 173 (2d. Cir. 1947).

^{166.} See McCarty v. Pheasant Run, Inc., 826 F.2d 1554, 1557 (7th Cir. 1987).

^{167.} See supra Section III.A; seegenerally Grimshaw v. Ford Motor Co., 174 Cal. Rptr. 348 (Ct. App. 4th 1981).

^{168.} See Frédéric G. Sourgens, Reasons and Reasonableness: The Necessary Diversity of the Common Law, 67 ME. L. REV. 73, 74, 81 n.53 (2014) (quoting Robin Paul Malloy, The Political Economy of Co-Financing America's Urban Renaissance, 40 VAND. L. REV. 67, 120 n.199 (1987)) (arguing that a purely qualitative approach to reasonableness "has become too confined by amoral principles of wealth maximization and utilitarian cost-benefit analysis"). Others have

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the judiciary has explicitly stated that the amendment is *not* supposed to be read as a consecration of any cost-benefit analysis.¹⁶⁹

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Measures of costs and benefits tend to also ignore context, something that is highly valued in a true determination of reasonableness.¹⁷⁰ By ignoring context, experts tangentially ignore equity and fairness, which are highly valued by society and the law, generally.¹⁷¹ In environmental justice specifically, minority, low-income communities deal with context in the form of cumulative impacts that other communities do not, subjecting them to inequitably distributed environmental risks.¹⁷² A more holistic analysis that considers how fairness impacts perception of risk may comport more with the judiciary's prohibition on *unreasonable* impairment of environmental rights under Section 27, because such analysis encompasses context, and therefore equity.

The holistic approach should also consider other factors that impact the community's perception of the risk—such as whether the community has been subject to significant amounts of pollution involuntarily or without their control—in order to fully capture the values of the afflicted community and focus on equity. However, it is the unequal distribution of risk that most significantly impacts society's intuitions in a way that

opined that the market does not belong in every facet of our lives, especially when it comes to health, family, nature, art, and civic duties. See Michael J. Sandel, What Isn't for Sale?, THE ATLANTIC (Apr. 2012), https://www.theatlantic.com/magazine/archive/2012/04/what-isnt-for-sale/308902/. Even the strongest proponents of assigning economic values in risk analysis concede that doing so is "a difficult and contentious process." See RICHARD L. REVESZ & MICHAEL A. LIVERMORE, RETAKING RATIONALITY: HOW COST-BENEFIT ANALYSIS CAN BETTER PROTECT THE ENVIRONMENT AND OUR HEALTH 47 (2008).

^{169.} See Pa. Env't Def. Found. v. Commonwealth, 161 A.3d 911, 926–27, 930 (Pa. 2017).

^{170.} See, e.g., discussion supra Section III.A.

^{171.} In common law nuisance claims, liability is imposed only where "the harm or risk to one is greater than he ought to be required to bear under the circumstances, at least without compensation." RESTATEMENT (SECOND) OF TORTS § 822 cmt. g (1979).

^{172.} To reference the shotgun hypothetical mentioned in *supra* Section III.A, low-income, minority communities are more often analogous to the scenario where someone is firing a shotgun outside of City Hall as others are doing the same.

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makes pollution in an already highly-polluted community unreasonable.

Accordingly, reasonableness should not be evaluated with a method that is purely quantitative. It should focus on laypersons' intuition of risk, as well. The factors that make pollution unreasonable in already-polluted communities may lead to a determination that additions of pollution to that community are unreasonable. This is not the case where communities do not suffer from unfair amounts of pollution that have been involuntarily foisted upon them. If a waste incineration company seeks to build a facility in a suburban area with almost or no adverse environmental stressors, the community may indeed "dread" the facility's construction; however, dread alone does not make the risk of pollution unreasonable. Hypothetically, this would be like firing a shotgun in the lonely forest, as described supra in Part III.A. In essence, the facility would not, in conjunction with other adverse stressors, create an environment burdened by unreasonable pollution. The same cannot be said for a community containing a significant number of alreadyestablished adverse stressors. In that situation, the community's perception of risk can more readily be viewed as rational and additional pollution as unreasonable, because subjecting an overburdened community to more pollution would be inequitable and intuitively unfair.

Recently, the New Jersey Department of Environmental Protection (NJ DEP) published a notice of proposed regulations that outlines the agency's duties in carrying out the environmental justice law.¹⁷³ The proposed regulations are indicative of New Jersey's desire to implement a holistic approach to environmental justice, consistent with the argument that risk should be based on, among other things,

^{173.} The notice of proposed regulations can be found at 54 N.J. Reg. 971(a) (June 6, 2022). New Jersey's environmental justice law, N.J. STAT. ANN. §§ 13:1D-157-61, is described in *supra* Part IV.

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inequitable distribution and fairness.¹⁷⁴ Under the proposed regulatory scheme, the NJ DEP must issue initial screening information on an overburdened community's stressors environmental, public health, and cumulative adverse stressors compared to other New Jersey communities—to prospective applicants whose projects will be located in that particular overburdened community. 175 New Jersey proposes to quantify and assign a stressor value to overburdened census blocks, and then compare such values to "the [fiftieth] percentile of combined stressor totals for block groups that are not identified as overburdened communities in the geographic point of comparison."176 If the overburdened community's combined stressor total is higher than the fiftieth percentile of the geographic point of comparison, and applicants cannot demonstrate that a disproportionate impact would be avoided,177 the NJ DEP must apply conditions to, or deny, a permit for a facility.¹⁷⁸ This approach to cumulative impacts encompasses risk evaluation on the basis of unequal distribution. Accordingly, it may influence any approach implemented by the Commonwealth as environmental justice continues to be on the forefront of important issues.

^{174.} See 54 N.J. Reg. at 971(a); see also Hornstein, supra note 126, at 615.

^{175.} See 54 N.J. Reg. at 971(a).

^{176. &}quot;[T]he geographic point of comparison . . . is the lower of the values for the State and the county in which the facility is located." Id.

^{177.} Id. ("In assessing a facility's ability to avoid a disproportionate impact in an overburdened community, an applicant would conduct modeling of the facility's operations to determine how those operations would impact levels of stressors identified as affected, utilizing the data and metrics set forth in the chapter Appendix.").

^{178.} N.J. STAT. ANN. § 13:1D-160(c). Other states have noted that this approach strays from traditional, comparative risk assessment. See MASS. DEP'T ENV'T PROT., CUMULATIVE IMPACT ANALYSIS (CIA) FRAMEWORK FOR AIR PERMITS 2 (Apr. 25, 2022). Whether New Jersey has the constitutional or statutory means to take this approach is outside the scope of this Note.

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B. A Prologue: How Environmental Justice Communities Might Procedurally Allege the State Action Constitutes "Unreasonable" Impairment Under Section 27

To enforce citizens' rights outlined under Section 27, the PA DEP may, as an agent of the Commonwealth, incorporate cumulative impact analyses and holistic risk evaluations on its own accord. ¹⁷⁹ On the federal level, the EPA, despite not having a statutory or regulatory basis regarding environmental justice, is putting pressure on state entities to do just that. 180 More specifically, in 2021, the EPA submitted comments to the Michigan Department of Environment, Great Lakes, and Energy ("EGLE"), urging it to conduct a cumulative impact analysis before it grants a permit for a hot-mix asphalt plant near the city of Flint. 181 Ultimately, the EGLE granted the permit and included specific conditions to reduce air pollution. 182 Legal counsel to regulated entities, on both the state and federal level, are on alert and working in tandem with local regulators to "help them think about [environmental justice] issues in ways they might not have thought about it previously."183

In accordance with Section 27 and the Commonwealth's evolving understanding of its implications, as well as anticipated pressure from the EPA, the PA DEP may recognize

^{179.} See Pa. Envt'l Def. Found. v. Commonwealth, 161 A.3d 911, 930-33 (Pa. 2017).

^{180.} Juan Carlos Rodriguez, Biden's Enviro Justice Push Dips into Uncharted Waters, LAW360 (Aug. 29, 2022, 4:10 PM), https://www.law360.com/environmental/articles/1520414/biden-senviro-justice-push-dips-into-uncharted-waters. Fifty-four percent of the population of Flint, Michigan—the location of one of the most "egregious" examples of environmental injustice in the United States—is Black or African American. See, e.g., Katherine Gallagher, Environmental Injustice: The Flint Water Crisis, TREEHUGGER (May 14, 2021), https://www.treehugger.com/ environmental-injustice-flint-water-crisis-5181655.

^{181.} Letter from Cheryl L. Newton, Acting Reg'l Adm'r, U.S. Env't Prot. Agency, to Mary Ann Dolehanty, Air Quality Div., Mich. Dep't of Env't, Great Lakes and Energy, https://www.epa.gov/system/files/documents/2022-03/ajax-egle-permit-comment-letter-9-16-2021.pdf.

^{182.} EGLE Approves Asphalt Plant Air Permit; Seeks Federal Guidance, Support to Address EJ Concerns, DEP'T OF ENV'T, GREAT LAKES, & ENERGY (Nov. 15, 2021), https://www.michigan. gov/egle/newsroom/press-releases/2021/11/15/egle-approves-asphalt-plant-air-permit. This is comparable to New Jersey's legislation. See discussion supra Part IV.

^{183.} See Rodriguez, supra note 180.

its obligations to modify or deny permits after determining that the risk imposed by the proposed or existing facility would be unequitable and is highly resisted by the community.¹⁸⁴ If the PA DEP chooses not to act proactively, based on the longstanding trend of judicial interpretation and determination of reasonableness, it is logical to conclude that citizens may be successful in filing complaints directly with the judiciary to challenge any Commonwealth action that they believe unreasonably impairs their environmental rights.¹⁸⁵

To do so, interested parties must have standing, which is the "legal concept assuring that the interest of a party who is suing is really and concretely at stake to a degree where he or she can properly bring an action before the court." ¹⁸⁶ To obtain standing in Pennsylvania state court, parties must simply have a "substantial, direct, and immediate interest" in the subject matter of the litigation. ¹⁸⁷ This Note only speculates on the viability of environmental justice claims in satisfying standing requirements by noting that the plurality in *Robinson Township*

^{184.} See Permit Reform Initiative, DEP'T OF ENV'T PROT., https://www.dep.pa.gov/Business/OtherPrograms/Permits/pages/default.aspx (last visited Mar. 21, 2023); see also Environmental Justice Public Participation Policy, DEP'T OF ENV'T PROT., https://www.dep.pa.gov/Public Participation/OfficeofEnvironmentalJustice/Pages/Summaries-and-Documents.aspx (last visited Mar. 21, 2023).

^{185.} This type of litigation is happening in other states that actually lack environmental rights amendments. *See* Friends of Buckingham v. State Air Pollution Control Bd., 947 F.3d 68, 71, 87 (4th Cir. 2020) (quoting Respondent's Brief at 53) (holding that the Virginia Air Pollution Control Board acted arbitrarily in granting a permit for a natural gas compressor by failing to perform its statutory requirement "to consider the potential for disproportionate impacts to minority and low income communities").

^{186.} Robinson Twp. v. Commonwealth, 52 A.3d 463, 471 (Pa. Commw. Ct. 2012) (citing Baker v. Carr, 369 U.S. 186 (1962)).

^{187.} Robinson Twp., 52 A.3d at 472 (quoting William Penn Parking Garage, Inc. v. City of Pittsburgh, 346 A.2d 269, 281 (Pa. 1975)). These elements have been described more thoroughly in South Whitehall Township Police Service v. South Whitehall Township:

A "substantial" interest is an interest in the outcome of the litigation which surpasses the common interest of all citizens in procuring obedience to the law. A "direct" interest requires a showing that the matter complained of caused harm to the party's interest. An "immediate" interest involves the nature of the causal connection between the action complained of and the injury to the party challenging it, and is shown where the interest the party seeks to protect is within the zone of interests sought to be protected by the statute or constitutional guarantee in question.

⁵⁵⁵ A.2d 793, 795 (Pa. 1989) (internal citations omitted).

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interpreted the prohibitory clause of Section 27 to impose a constitutional duty on the Commonwealth to consider environmental effects *a priori*.¹⁸⁸ Therefore, the doctrine of standing should not hinder the claims of concerned community members.¹⁸⁹

The Commonwealth, on its own accord and in an effort to avoid post hoc litigation, might implement procedures to comprehensively consider environmental effects *a priori* by implementing a regulatory approach that considers risk holistically,¹⁹⁰ or by passing legislation to specifically outline the PA DEP's duties under Section 27.¹⁹¹ This outcome would rectify the difficulties that the PA DEP has in enforcing Section 27, because although the amendment is "self-executing," the PA DEP is a creature of statute. Regardless, if the courts are partial to the framework of the argument posed by this Note, industry members (and their counsel) who want to avoid involvement in and delays due to litigation, might opt to propose projects in communities that are not overburdened or, in the alternative, begin utilizing more sustainable industrial methods that would not add pollution to the community at all.

CONCLUSION

For most of its existence, Section 27 has not been used to catalyze or support environmental justice. ¹⁹² Despite that fact, it may nonetheless be capable of gaining momentum to protect not only Pennsylvania's rolling hills, snowy mountains, and cherished water bodies, but the physical proximity or "environner" of all Commonwealth citizens. The state judiciary has interpreted Section 27 to prohibit state action which

^{188.} See Robinson Twp. v. Commonwealth, 83 A.3d 901, 952 (Pa. 2013). Accordingly, the Commonwealth's failure to make such a consideration will likely automatically constitute a challengeable violation that citizens living in the affected area can utilize in their complaints.

^{189.} See id. at 951-52.

^{190.} See supra Section V.A.

^{191.} See Robinson Twp., 83 A.3d at 951-53.

^{192.} See supra Section II.A.

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unreasonably impairs any citizen's environmental rights. 193 Reasonableness, if assessed according to tort law, requires the exercise of care in consideration of the foreseeability and severity of harm—that is, the risk—in an intuitive way. 194 Risk evaluation should place great value on citizens' "dread" of environmental risks, including, and most importantly, whether the risk is distributed unequally or unfairly. 195 This evaluation would stray from a traditional, comparative risk approach by encompassing more holistic considerations that comport with tort law's intuition regarding reasonableness determinations.¹⁹⁶ Under such a framework, Section 27 may be used as a tool to protect minority, low-income communities that are already burdened by cumulative impacts from additional pollution because such pollution would be unreasonable. 197 Accordingly, Section 27 seems to plainly endorse the view that no one should have to "break away" from their surroundings in order to access a clean and healthy environment. 198

^{193.} See supra Section II.C.

^{194.} See supra Section III.A.

^{195.} See supra Section III.B.

^{196.} See supra Section III.B.

^{197.} See supra Section V.A.

^{198.} See HALL YOUNG, supra note 2; see also Hamilton, supra note 7 (conceptualizing that no one should have to break away).