

TOXIC CONFINEMENT: CAN THE EIGHTH AMENDMENT PROTECT PRISONERS FROM HUMAN-MADE ENVIRONMENTAL HEALTH HAZARDS?

Brenna Helppie-Schmieder

ABSTRACT—What would you do if you realized a nearby factory or energy operation was making everyone in your town sick? You might try to rally your neighbors in protest, take legal action, or cut your losses and move away. But what if your options were more limited? What if you were forced to stay? This is the situation for prisoners across the country who live in prisons located near dangerous energy industry operations.

The increased reliance on incarceration in recent times has resulted in prisons being built on undesirable land, often the same land occupied by the energy industry. This proximity presents serious health risks for prisoners who are exposed to harmful operations, yet are unable to move.

Eighth Amendment precedent already establishes that health risks can provide the basis for unconstitutional conditions claims, but it is not as clear whether human-made environmental health risks can provide a similar basis. Given the legal standard for Eighth Amendment claims, and precedent interpreting that standard, this Note argues that human-made environmental hazards near the physical location of a prison could form the basis for successful claims of unconstitutional conditions.

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INTRODUCTION

In his first year living at State Correctional Institution Fayette in LaBelle, Pennsylvania, Anthony Willingham developed shortness of breath, a violent cough, and a chronic hoarse throat.¹ It became so persistent that he required daily breathing treatments.² After one year, he discovered a growth under his tongue, which turned out to be cancerous.³ To this day, Willingham struggles to speak.⁴

In the summer of 2011, Michael Martone was imprisoned in the Texas Department of Criminal Justice Huntsville Unit.⁵ Martone took medications that react with heat.⁶ One day, when the temperature was over 100°F, Martone complained of sickness, breathing difficulty, and dizziness, and

¹ ABOLITIONIST LAW CTR. & HUMAN RIGHTS COAL., NO ESCAPE: EXPOSURE TO TOXIC COAL WASTE AT STATE CORRECTIONAL INSTITUTION FAYETTE 8 (2014), <http://abolitionistlawcenter.files.wordpress.com/2014/09/no-escape-3-3mb.pdf> [<http://perma.cc/F8HG-G2GV>].

² *Id.*

³ *Id.*

⁴ *Id.*

⁵ Martone v. Livingston, No. 4:13-CV-3369, 2014 WL 3534696, at *1–2 (S.D. Tex. July 16, 2014).

⁶ *Id.* at *1.

was taken to the infirmary.⁷ The nurse directed him to drink water and rest, and he was promptly turned back to his cell block.⁸ Soon after, Martone began convulsing in his cell and collapsed.⁹ He drifted in and out of consciousness, and as soon as he arrived at the emergency room via ambulance, he was pronounced dead.¹⁰ His body temperature was 108°F.¹¹

In Pennsylvania, prisoner¹² health problems at State Correctional Institution Fayette have recently been linked to a coal ash dumping site near the prison.¹³ In Texas, at least fourteen prisoners have died from excessive heat since 2007.¹⁴ In both cases, the physical location of a prison can present serious health risks for its prisoners. Although precedent already establishes that health risks can provide the basis for Eighth Amendment unconstitutional conditions claims,¹⁵ including health risks from some environmental factors like excessive heat,¹⁶ it is not as clear whether human-made environmental health risks¹⁷ can provide a similar basis. Given the legal standard for Eighth Amendment claims, and precedent interpreting that standard, this Note argues that human-made

⁷ *Id.* at *1–2.

⁸ *Id.* at *2.

⁹ *Id.*

¹⁰ *Id.*

¹¹ *Id.*

¹² This Note uses the words prisoners and prison, however the same arguments could apply to pretrial detainees and jails. See David C. Gorlin, Note, *Evaluating Punishment in Purgatory: The Need to Separate Pretrial Detainees' Conditions-of-Confinement Claims from Inadequate Eighth Amendment Analysis*, 108 MICH. L. REV. 417, 419–21 (2009) (“Pretrial detainees and convicted prisoners are both constitutionally protected from deplorable or dangerous conditions of confinement, but the protections for each group are found in distinct constitutional sources. . . . [M]ore than half of the federal circuits currently equate pretrial detainees’ and convicted prisoners’ rights to be free from deplorable conditions of confinement.” (footnotes omitted)). *But cf.* Kingsley v. Hendrickson, No. 14-6368, slip op. at 10–11 (U.S. June, 22, 2015) (discussing the distinct constitutional sources for excessive force claims brought by convicted prisoners versus pretrial detainees, and holding that pretrial detainees have a different standard to prove such claims).

¹³ See ABOLITIONIST LAW CTR. & HUMAN RIGHTS COAL., *supra* note 1; Eric Markowitz, *Poison Prison: Is Toxic Dust Sickening Inmates Locked Up in Coal Country?*, INT’L BUS. TIMES (May 12, 2015), <http://atavist.ibtimes.com/poison-prisonj653t> [<http://perma.cc/J4PE-33HF>]. Coal ash is waste left over from the combustion of coal. It contains toxic components and must be disposed of properly. David B. Wester & M.J. Trlica, *Mixtures of Bottom Ash and Soil as a Growth Medium for Three Range Species*, 30 J. RANGE MGMT. 391, 391 (1977); Markowitz, *supra*.

¹⁴ See HUMAN RIGHTS CLINIC, UNIV. OF TEX. SCH. OF LAW, DEADLY HEAT IN U.S. (TEXAS) PRISONS (2014), <https://law.utexas.edu/wp-content/uploads/sites/11/2015/04/2014-HRC-USA-DeadlyHeat-USShadowReport.pdf> [<http://perma.cc/6QU3-J7FN>].

¹⁵ See, e.g., *Helling v. McKinney*, 509 U.S. 25, 35 (1993) (holding that a prisoner’s health risks from involuntary exposure to tobacco smoke could form the basis of an Eighth Amendment claim).

¹⁶ See, e.g., *Graves v. Arpaio*, 623 F.3d 1043, 1045 (9th Cir. 2010) (per curiam).

¹⁷ “Human-made environmental health risks” and related terms refer to health risks that exist in the environment as a result of human activities, such as pollution caused by energy industry operations.

environmental hazards near the physical location of a prison could form the basis for successful claims of unconstitutional conditions.

While a substantial scholarship examines the workings of the Cruel and Unusual Punishment Clause in relation to prison conditions claims,¹⁸ possible claims related to the physical environment of a prison are relatively unexamined. Developing a theory for bringing environment-based conditions claims is important because the increased reliance on incarceration over the past several decades has resulted in prisons being built on undesirable land, often the same land occupied by the energy industry.¹⁹ These industry operations, and their associated disasters, can increase—or even create—health risks for people living in their vicinity.²⁰ Prisoners are therefore increasingly susceptible to human-made environmental health hazards.²¹

Part I of this Note frames the legal issue by discussing a brief history of the Eighth Amendment's Cruel and Unusual Punishment Clause, which provides the constitutional basis for many prison conditions claims. Next, Part I explains the current legal standard for a successful unconstitutional conditions claim,²² and describes its doctrinal evolution by highlighting landmark Supreme Court cases. Finally, Part I surveys cases in which the environmental hazard of unmitigated excessive heat has been deemed an unconstitutional prison condition. As will be argued, when the environmental hazards are human-made, the result should be no different.

Part II discusses environmental issues surrounding prisons. This Part first provides a brief background of prison sites and properties to demonstrate why human-made environmental hazards are a ripe area for Eighth Amendment conditions litigation. This Part then highlights specific

¹⁸ E.g., Brittany Glidden, *Necessary Suffering?: Weighing Government and Prisoner Interests in Determining What Is Cruel and Unusual*, 49 AM. CRIM. L. REV. 1815, 1816 (2012) (arguing “the Eight[h] Amendment conditions of confinement test is confusing, inconsistent, and ultimately lacks a sound theoretical basis, which prevents it from serving its intended purpose,” and proposing a modified test); Christopher E. Smith, *The Malleability of Constitutional Doctrine and Its Ironic Impact on Prisoners’ Rights*, 11 B.U. PUB. INT. L.J. 73, 81–87 (2001) (describing different Justices’ approaches to the Eighth Amendment conditions of confinement standard); Tom Stacy, *Cleaning Up the Eighth Amendment Mess*, 14 WM. & MARY BILL RTS. J. 475, 475 (2005) (“This article criticizes the Court’s interpretation of the Eighth Amendment’s Cruel and Unusual Punishment Clause and offers its own understanding.”).

¹⁹ See Markowitz, *supra* note 13 (“[T]here’s a reason former coal towns welcome prisons: money. The declining coal industry has left scores of rural, economically impoverished towns. That decline, coupled with the fact that the United States was opening a new prison every 15 days throughout the ‘90s, created a toxic mix.”). The relationship between energy sites and prisons is explored further in Part II.

²⁰ See *infra* Section II.B.

²¹ See *infra* Section II.B.

²² This standard will be discussed within the context of *Bivens* claims filed against federal defendants and 42 U.S.C. § 1983 claims filed against state defendants. See *infra* note 47.

examples in which conditions claims based on human-made environmental hazards could be raised.

Finally, Part III argues that human-made environmental hazards unique to the physical location of a prison could provide the basis for successful Eighth Amendment conditions claims. It does so by presenting a litigation roadmap, which explores various kinds of evidentiary, doctrinal, and policy support for such claims. Ultimately, this Note aims to demonstrate why Eighth Amendment claims based on human-made environmental hazards are not only viable, but winnable.

I. FRAMING THE LAW

A. *Brief History of the Eighth Amendment's Cruel and Unusual Punishment Clause*

The Eighth Amendment states, “Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted.”²³ Along with the other nine amendments in the Bill of Rights, the Eighth Amendment was ratified on December 15, 1791.²⁴ Its origins, however, stretch back much further. Indeed, the specific language of the Amendment was taken almost verbatim from the English Bill of Rights of 1689.²⁵ The drafters of the English Bill of Rights included a cruel and unusual punishment clause in reaction to the Court of King’s Bench sentencing prisoners to disproportionately excessive punishments as compared to their crimes.²⁶ Like their English counterparts, the Framers of the Eighth Amendment mainly intended the Clause to “prohibit cruel and unusual post-conviction punishment.”²⁷

There was little debate about the Clause in the First Congress, except that its terms were questioned as vague and indefinite.²⁸ The ambiguity of

²³ U.S. CONST. amend. VIII.

²⁴ *Amendment VIII: Excessive Fines, Cruel and Unusual Punishment*, NAT’L CONST. CTR., <http://constitutioncenter.org/constitution/the-amendments/amendment-8-cruel-and-unusual-punishment> [<http://perma.cc/AN68-GRLT>].

²⁵ Celia Rumann, *Tortured History: Finding Our Way Back to the Lost Origins of the Eighth Amendment*, 31 PEPP. L. REV. 661, 666–67 (2004) (quoting the English Bill of Rights of 1689 as stating, “[E]xcessive bail ought not to be required, nor excessive fines imposed; nor cruel and unusual punishments inflicted.”).

²⁶ See NAWL Law Year Comm., *The Eighth Amendment*, 48 WOMEN LAW. J. 18, 18 (1962) (“The prohibition of cruel and unusual punishment was a well known principle in English law, popularized by Gilbert and Sullivan in the words, ‘the punishment should fit the crime.’ While this principle existed in theory, it seems some of the court of the king’s bench . . . assessed punishments involving torture and mutilation beyond reason.”).

²⁷ Rumann, *supra* note 25, at 665.

²⁸ See *Weems v. United States*, 217 U.S. 349, 368–69 (1910) (“The provision received very little debate in Congress. We find from the Congressional Register, p. 225, that Mr. Smith of South Carolina

“cruel” and “unusual” may have given some Framers pause, but it is precisely that ambiguity that has allowed the Clause to remain relevant over time. As Justice Brennan recognized in *Furman v. Georgia*,²⁹ “The Cruel and Unusual Punishments Clause, like the other great clauses of the Constitution, is not susceptible of precise definition. Yet we know that the values and ideals it embodies are basic to our scheme of government.”³⁰ One of the primary ideals of the Eighth Amendment, and thus the Cruel and Unusual Punishment Clause, is to preserve the “dignity of man.”³¹

The dignity of man ideal has formed the basis for evaluating whether a punishment is unconstitutionally cruel and unusual. The Court has recognized that such ideals cannot be defined by rigid boundaries, and therefore “[t]he Amendment must draw its meaning from the evolving standards of decency that mark the progress of a maturing society.”³² What constitutes cruel and unusual punishment, then, is very much informed by current societal values.³³ “To determine what constitutes ‘cruel and unusual’ punishment under that approach, the Court looks at objective indicia to determine the national consensus regarding the application of the punishment at issue.”³⁴

The Cruel and Unusual Punishment Clause was rarely relied upon in the first century of its existence.³⁵ It was not until the twentieth century that the Clause was given new life through litigation. In *Trop v. Dulles*, the

‘objected to the words “nor cruel and unusual punishment,” the import of them being too indefinite.’ Mr. Livermore opposed the adoption of the clause, saying: ‘The clause seems to express a great deal of humanity, on which account I have no objection to it; but as it seems to have no meaning in it, I do not think it necessary.’”

²⁹ 408 U.S. 238 (1972) (per curiam).

³⁰ *Id.* at 258 (Brennan, J., concurring).

³¹ See *Brown v. Plata*, 131 S. Ct. 1910, 1928 (2011) (“Prisoners retain the essence of human dignity inherent in all persons. Respect for that dignity animates the Eighth Amendment prohibition against cruel and unusual punishment.”); *Trop v. Dulles*, 356 U.S. 86, 100 (1958) (plurality opinion) (“The basic concept underlying the Eighth Amendment is nothing less than the dignity of man. While the State has the power to punish, the Amendment stands to assure that this power be exercised within the limits of civilized standards.”).

³² *Trop*, 356 U.S. at 100–01 (plurality opinion).

³³ See Corey Rayburn Yung, *Is Military Law Relevant to the “Evolving Standards of Decency” Embodied in the Eighth Amendment?*, 103 NW. U. L. REV. COLLOQUY 140, 142 (2008) (“For better or worse, the examination of the evolving standards of decency continues to be the Court’s methodology for evaluating statutes challenged under the Cruel and Unusual Punishment Clause.”).

³⁴ *Id.*

³⁵ Rumann, *supra* note 25, at 666; see also Note, *The Cruel and Unusual Punishment Clause and the Substantive Criminal Law*, 79 HARV. L. REV. 635, 637 (1966) (“Comment at [the time of the Bill of Rights’ ratification] indicates that the practices intended to be forbidden were punishments such as pillorying, disemboweling, decapitation, and drawing and quartering; it was unusual cruelty in the *method* of punishment that was condemned. In the nineteenth century the provision was considered by some to be obsolete, aimed only at primitive practices that had long since passed away.” (footnotes omitted)).

Supreme Court held that denationalization—that is, stripping a citizen of his or her status as an American—was a violation of the Eighth Amendment’s Cruel and Unusual Punishment Clause.³⁶ This holding was transformative because it recognized the flexible nature of what constituted cruel and unusual punishment.³⁷ By Supreme Court decree, the Cruel and Unusual Punishment Clause was alive, and the punishment it prohibited could change over time.

The Cruel and Unusual Punishment Clause has primarily been used to police the bounds of state-sanctioned criminal punishment in three ways: “First, it limits the kinds of punishment that can be imposed on those convicted of crimes; second, it proscribes punishment grossly disproportionate to the severity of the crime; and third, it imposes substantive limits on what can be made criminal and punished as such.”³⁸ The second mode of safeguarding—prohibiting punishment that is disproportionate to the crime—is at issue in unconstitutional prison conditions cases.³⁹ These cases are governed by a two-pronged legal standard.

B. Legal Standard for Unconstitutional Prison Conditions Claim

A successful prison conditions claim requires proving that: (1) the plaintiff faced substantial risk of serious harm, and (2) the defendant was “deliberately indifferent” to that risk.⁴⁰ The underlying reasons for allowing these claims are essential for contextualizing the two prongs. In *DeShaney*

³⁶ See 356 U.S. at 101 (plurality opinion).

³⁷ See Note, *supra* note 35, at 637.

³⁸ *Ingraham v. Wright*, 430 U.S. 651, 667 (1977) (citations omitted).

³⁹ See *Helling v. McKinney*, 509 U.S. 25, 31–32 (1993) (“[T]he conditions under which [a prisoner] is confined are subject to scrutiny under the Eighth Amendment.”). It should be noted that the Cruel and Unusual Punishment Clause also applies to the states. In 1962, the Supreme Court incorporated the prohibition against the states via the Due Process Clause of the Fourteenth Amendment. See *Robinson v. California*, 370 U.S. 660, 666–67 (1962).

⁴⁰ *Farmer v. Brennan*, 511 U.S. 825, 828 (1994) (“A prison official’s ‘deliberate indifference’ to a substantial risk of serious harm to an inmate violates the Eighth Amendment.”). The standard is the same in the context of a § 1983 suit, with the addition of having to prove state action. See *West v. Atkins*, 487 U.S. 42, 48 (1988) (“[A] plaintiff must allege the violation of a right secured by the Constitution and laws of the United States, and must show that the alleged deprivation was committed by a person acting under color of state law.”). In *West v. Atkins*, a detainee filed a § 1983 action alleging the medical services at the prison where he was housed amounted to cruel and unusual punishment. *Id.* at 45. The prison physician against whom the detainee was filing suit, however, was not employed by the prison itself. *Id.* at 44. Still, the Court held that the “physician employed by North Carolina to provide medical services to state prison inmates[] acted under color of state law for purposes of § 1983 when undertaking his duties in treating petitioner’s injury,” and that “[s]uch conduct is fairly attributable to the State.” *Id.* at 54.

v. Winnebago County Department of Social Services,⁴¹ the Supreme Court explained:

[W]hen the State takes a person into its custody and holds him there against his will, the Constitution imposes upon it a corresponding duty to assume some responsibility for his safety and general well-being. . . . [W]hen the State by the affirmative exercise of its power so restrains an individual's liberty that it renders him unable to care for himself, and at the same time fails to provide for his basic human needs . . . it transgresses the substantive limits on state action set by the Eighth Amendment and the Due Process Clause.⁴²

Importantly, unconstitutional conditions claims are agnostic as to what the conditions are. Claims can range from improper medical care to lack of safety.⁴³ Although common categories of claims have developed,⁴⁴ prisoners have also alleged their prison conditions amount to unconstitutional cruel and unusual punishment for less common reasons, like absence of sexual relations⁴⁵ or being served an exclusive diet of poor-tasting food.⁴⁶ Available remedies for successful claims depend on who is being sued and in what capacity.⁴⁷

⁴¹ 489 U.S. 189 (1989).

⁴² *Id.* at 199–200 (citations omitted).

⁴³ *Farmer*, 511 U.S. at 832 (“[The Eighth Amendment’s Cruel and Unusual Punishment Clause] imposes duties on [prison] officials, who must provide humane conditions of confinement; prison officials must ensure that inmates receive adequate food, clothing, shelter, and medical care, and must ‘take reasonable measures to guarantee the safety of the inmates.’” (quoting *Hudson v. Palmer*, 468 U.S. 517, 526–27 (1984))).

⁴⁴ For example, common categories include use of force cases, e.g., *Avratin v. Bermudez*, 420 F. Supp. 2d 1121, 1124–25 (S.D. Cal. 2006), and medical care cases, e.g., *Dellairo v. Garland*, 222 F. Supp. 2d 86, 90–92 (D. Me. 2002), among others.

⁴⁵ E.g., *Tarlton v. Clark*, 441 F.2d 384, 385 (5th Cir. 1971) (per curiam).

⁴⁶ E.g., *Prude v. Clarke*, 675 F.3d 732, 733 (7th Cir. 2012); see also Eliza Barclay, *Food as Punishment: Giving U.S. Inmates ‘The Loaf’ Persists*, NPR (Jan. 2, 2014, 3:53 AM), <http://www.npr.org/sections/thesalt/2014/01/02/256605441/punishing-inmates-with-the-loaf-persists-in-the-u-s> [<http://perma.cc/DR2L-TT67>].

⁴⁷ For example, if a prisoner alleges unconstitutional conditions against a federal defendant, she or he will likely file a *Bivens* action. See *Carlson v. Green*, 446 U.S. 14, 18–20 (1980) (finding a constitutional implied right of action under the Eighth Amendment’s Cruel and Unusual Punishment Clause). *Bivens* actions are so-called implied rights of action that stem directly from the Constitution and allow for damages remedies. See *Bivens v. Six Unknown Named Agents of Fed. Bureau of Narcotics*, 403 U.S. 388, 397 (1971) (“[W]e hold that petitioner is entitled to recover money damages for any injuries he has suffered as a result of the agents’ violation of the Amendment.”). If a prisoner alleges unconstitutional conditions against a state defendant, she or he will file suit under 42 U.S.C. § 1983 (2012), which states in relevant part: “Every person who, under color of any statute . . . of any State or Territory or the District of Columbia, subjects, or causes to be subjected, any citizen of the United States . . . to the deprivation of any rights, privileges, or immunities secured by the Constitution and laws, shall be liable to the party injured” Section 1983 claims are also viable against city and county defendants. See *Monell v. Dep’t of Soc. Servs.*, 436 U.S. 658, 669 (1978). Section 1983 suits allow for damages against state officials sued in their personal capacity, subject to immunity limitations, in addition to injunctive relief against state officials sued in their official capacity. See *Ex parte Young*, 209 U.S. 123, 159–60 (1908) (spawning the doctrine that Eleventh Amendment sovereign

Regardless of the factual allegations, the objective first element of unconstitutional conditions claims requires the plaintiff to prove that the risk of serious harm is sufficiently substantial. If there is not yet an injury, the plaintiff must demonstrate three aspects of the risk for it to be deemed sufficiently substantial: the injury's seriousness, the likelihood of the injury occurring, and that the risk "violates contemporary standards of decency to expose *anyone* unwillingly to such a risk."⁴⁸ For example, the Court noted that a prisoner could likely "successfully complain about demonstrably unsafe drinking water without waiting for an attack of dysentery" to satisfy the first prong.⁴⁹

The subjective second element, that the defendant was deliberately indifferent to the risk, is often the more difficult element for plaintiffs to prove.⁵⁰ A plaintiff can prove deliberate indifference by presenting evidence of the defendant's attitude and conduct,⁵¹ or by offering circumstantial evidence that allows for the inference that the defendant had knowledge of the risk and failed to mitigate it.⁵² Additionally, "a factfinder may conclude that a prison official knew of a substantial risk from the very fact that the risk was obvious."⁵³ To illustrate, in *Vinning-El v. Long*,⁵⁴ the Seventh Circuit held that a reasonable jury could infer that guards who worked in proximity to a grimy cell with a broken toilet, flooded floors, feces and blood on the wall, and no mattress, would have had knowledge of the risks given the obviousness of the conditions.⁵⁵

C. Doctrinal Evolution of the Standard

In the 1990s, the Supreme Court decided three cases that gave structure to the two-prong proof requirement.⁵⁶ In 1991, the Court in *Wilson*

immunity is not violated by claim for injunctive relief against state official sued in official capacity); 13D CHARLES ALAN WRIGHT ET AL., FEDERAL PRACTICE AND PROCEDURE § 3573.1, at 568 (3d ed. 2008) ("State and Territory officials sued in their personal capacities are 'persons' and may be held liable for damages under § 1983 for actions taken in their official capacities.").

⁴⁸ *Helling v. McKinney*, 509 U.S. 25, 36 (1993).

⁴⁹ *Id.* at 33.

⁵⁰ The Seventh Circuit pointed out the difficulty with the deliberate indifference standard in *McGill v. Duckworth*: "This seeming oxymoron has given us, in company with other courts of appeals, fits. How do we simultaneously honor both the 'deliberate' and the 'indifference' aspects?" 944 F.2d 344, 351 (7th Cir. 1991).

⁵¹ *See Helling*, 509 U.S. at 36.

⁵² *See Farmer v. Brennan*, 511 U.S. 825, 842–43 (1994).

⁵³ *Id.* at 842.

⁵⁴ 482 F.3d 923 (7th Cir. 2007).

⁵⁵ *Id.* at 924–25.

⁵⁶ Prior to 1991, the Supreme Court had not yet established a definitive test for adjudging Eighth Amendment unconstitutional conditions claims. *See* Alexander J. Spanos, Note, *The Eighth Amendment and NutraLoaf: A Recipe for Disaster*, 30 J. CONTEMP. HEALTH L. & POL'Y 222, 225–27 (2013)

*v. Seiter*⁵⁷ articulated the standard for proving the subjective element of an unconstitutional conditions claim. That is, plaintiffs must prove that defendants acted with deliberate indifference.⁵⁸ Two years later, in *Helling v. McKinney*, the Court was confronted with a question regarding the objective element of a plaintiff's claim: must the plaintiff have a current injury, or can a potential future injury be deemed sufficiently substantial to overcome the objective element?⁵⁹ The Court found future injuries could suffice under certain circumstances.⁶⁰ Finally, in the 1994 case of *Farmer v. Brennan*, the Court returned its attention to the subjective element, clarifying the deliberate indifference standard and indicating ways that prison officials could prevail on it.⁶¹ The reasoning in each decision—critical to understanding the contours of the two-pronged test—is elaborated upon below.

In *Wilson*, the Supreme Court held that to meet the subjective component of the standard, plaintiffs would have to prove that prison officials acted with deliberate indifference.⁶² In that case, a state prisoner filed a § 1983 action alleging that several conditions of his confinement violated the Cruel and Unusual Punishment Clause.⁶³ Wilson argued that “to the extent officials’ state of mind is relevant at all,” the proper standard is deliberate indifference.⁶⁴ The defendants responded that deliberate indifference is only proper in cases with a physical injury, but otherwise a malice standard should be required.⁶⁵ The Court rejected distinctions between different categories of conditions claims and held that the proper standard was deliberate indifference.⁶⁶ The definition of deliberate

(reviewing various Eighth Amendment standards that emerged from *Estelle v. Gamble*, 429 U.S. 97 (1976); *Rhodes v. Chapman*, 452 U.S. 337 (1981); and *Whitley v. Albers*, 475 U.S. 312 (1986)).

⁵⁷ 501 U.S. 294 (1991).

⁵⁸ *Id.* at 303.

⁵⁹ 509 U.S. 25, 28, 32–33 (1993).

⁶⁰ *See id.* at 36–37.

⁶¹ 511 U.S. 825, 844 (1994).

⁶² 501 U.S. at 303; *id.* at 306 (White, J., concurring in the judgment); *see also Helling*, 509 U.S. at 29–30 (“[*Wilson*] held that, while the Eighth Amendment applies to conditions of confinement that are not formally imposed as a sentence for a crime, such claims require proof of a subjective component, and that where the claim alleges inhumane conditions of confinement or failure to attend to a prisoner’s medical needs, the standard for that state of mind is the ‘deliberate indifference’ standard of *Estelle v. Gamble*, 429 U.S. 97 (1976).”).

⁶³ *Wilson*, 501 U.S. at 296 (majority opinion). The conditions Wilson complained of included “overcrowding, excessive noise, insufficient locker storage space, inadequate heating and cooling, improper ventilation, unclean and inadequate restrooms, unsanitary dining facilities and food preparation, and housing with mentally and physically ill inmates.” *Id.*

⁶⁴ *Id.* at 303.

⁶⁵ *Id.*

⁶⁶ *Id.*

indifference is far from concrete, but the Court at least clarified that it is a more culpable state of mind than “mere negligence,” but not as culpable as acting “maliciously and sadistically for the very purpose of causing harm.”⁶⁷

Helling was groundbreaking in its interpretation of the objective standard plaintiffs need to prove in conditions claims. Also a § 1983 case, the prisoner–plaintiff, McKinney, alleged that his exposure to his cellmate’s secondhand smoke was sufficiently substantial to constitute unconstitutional conditions.⁶⁸ In response, the defendants argued McKinney needed to prove a *current* injury from the secondhand smoke to have an Eighth Amendment claim.⁶⁹ In other words, the defendants maintained that unconstitutional conditions claims required a threshold showing of existing health problems.⁷⁰ The Supreme Court disagreed.⁷¹ It found that the secondhand smoke could create a substantial risk of serious harm to his future health sufficient to satisfy the objective prong of the standard.⁷²

The following year, in *Farmer*, prisoner Dee Farmer brought a *Bivens* action against federal prison officials, claiming that they “violated the Eighth Amendment by their deliberate indifference to [her] safety.”⁷³ The Supreme Court granted certiorari to clarify the test for proving deliberate indifference.⁷⁴ The Court held a prison official cannot be found liable

⁶⁷ See *id.* at 305. The case was vacated and remanded for consideration under the newly articulated standard. *Id.* at 306.

⁶⁸ *Helling v. McKinney*, 509 U.S. 25, 28 (1993).

⁶⁹ *Id.* at 32.

⁷⁰ *Id.* at 32–33.

⁷¹ *Id.* at 33–34.

⁷² The Court ultimately held that McKinney stated a cause of action “by alleging that [the defendants] have, with deliberate indifference, exposed him to levels of [environmental tobacco smoke] that pose an unreasonable risk of serious damage to his future health.” *Id.* at 35. Shedding more light on the subjective second element, the Court stated:

On remand, the subjective factor, deliberate indifference, should be determined in light of the prison authorities’ current attitudes and conduct, which may have changed considerably since the judgment of the Court of Appeals. Indeed, the adoption of the smoking policy mentioned above will bear heavily on the inquiry into deliberate indifference. . . . The inquiry into this factor also would be an appropriate vehicle to consider arguments regarding the realities of prison administration.

Id. at 36–37.

⁷³ *Farmer v. Brennan*, 511 U.S. 825, 829 (1994). Dee Farmer, a transgender woman, alleged she was beaten and raped by another incarcerated person. *Id.* at 829–30. She brought suit against prison officials alleging that her transfer to a federal penitentiary and placement in general population placed her in a violent environment and left her vulnerable to sexual attacks. *Id.* at 830–31. For more information on the life and legacy of Dee Farmer, see Alison Flowers, *Dee Farmer Won a Landmark Supreme Court Case on Inmate Rights. But That’s Not the Half of It*, VILLAGE VOICE (Jan. 29, 2014), <http://www.villagevoice.com/news/dee-farmer-won-a-landmark-supreme-court-case-on-inmate-rights-but-thats-not-the-half-of-it-6440783> [<http://perma.cc/DQ9U-ABUB>].

⁷⁴ *Farmer*, 511 U.S. at 832, 834.

“unless the official knows of and disregards an excessive risk to inmate health or safety.”⁷⁵ Knowledge of an excessive risk could be shown if “the official [is] both . . . aware of facts from which the inference could be drawn that a substantial risk of serious harm exists, and he . . . also draw[s] the inference.”⁷⁶

In dicta, the *Farmer* Court provided defendants with a few possible defenses. First, it stated that prison officials could combat claims of deliberate indifference by showing that they were not aware of the “underlying facts indicating a sufficiently substantial danger and that they were therefore unaware of a danger.”⁷⁷ Alternatively, prison officials could argue that while they were aware of the underlying facts, they believed “the risk to which the facts gave rise was insubstantial or nonexistent.”⁷⁸ Finally, prison officials could prevail on deliberate indifference by showing they responded reasonably to the risk, despite not preventing it.⁷⁹

The Court clarified the two-pronged standard in *Wilson*, *Helling*, and *Farmer* in significant ways, but whether a given claim meets the standard remains a fact-intensive inquiry. Some might loathe its imprecision, but the standard helps safeguard the purpose of the Cruel and Unusual Punishment Clause—to protect the ever-evolving dignity of man.⁸⁰

D. *Excessive Heat: An Unconstitutional Prison Condition*

The standard for evaluating unconstitutional conditions claims, as clarified by the above three cases, has been applied to a variety of contexts. Notably, several courts have found that unmitigated excessive heat can constitute or contribute to unconstitutional prison conditions. The success of these claims supports the viability of unconstitutional conditions claims based on human-made environmental hazards, as will be demonstrated in Part III.

For example, in *Hope v. Pelzer*,⁸¹ a prisoner in Alabama alleged that being punitively handcuffed to an outdoor hitching post in the middle of

⁷⁵ *Id.* at 837.

⁷⁶ *Id.*

⁷⁷ *Id.* at 844.

⁷⁸ *Id.*

⁷⁹ *Id.* The court of appeals’ decision was vacated, and the case was remanded so that the clarified standard could be applied. *Id.* at 851. The circuit court remanded the case to the district court, which found for the prison officials. *Farmer v. Brennan*, 81 F.3d 1444, 1445 (7th Cir. 1996). Upon appeal, however, the decision was again remanded because the plaintiff was not given “meaningful opportunity to respond to the Supreme Court’s action.” *Id.*

⁸⁰ See *supra* notes 31–34 and accompanying text.

⁸¹ 536 U.S. 730 (2002).

summer amounted to unconstitutional cruel and unusual punishment.⁸² The Supreme Court agreed, although exposure to heat was only one aspect of the prisoner's claim.⁸³ The prisoner, hitched to the pole for seven hours, was made to take off his shirt, was taunted with and denied water, and was denied bathroom breaks.⁸⁴ The Supreme Court recognized the health concerns caused by prolonged exposure to excessive heat, which contributed to the viability of the plaintiff's unconstitutional conditions claim.

Cases in the lower courts have produced similar results, gradually cementing the precedent that unmitigated excessive heat is an unconstitutional prison condition. For instance, in *Graves v. Arpaio*, the Ninth Circuit affirmed a district court's order requiring that Maricopa County jails address "dangerously high" temperatures, a condition found to violate the Eighth Amendment.⁸⁵ One of the provisions upheld was that officials must provide housing with cooler temperatures to pretrial detainees who take psychotropic medications.⁸⁶

In upholding this aspect of the remedial order, the Ninth Circuit discussed the distinction between uncomfortable temperatures and unconstitutional temperatures.⁸⁷ Simply put, constitutionally inadequate temperatures pose "a substantial risk of serious harm."⁸⁸ Because the district court made a factual finding that temperatures over 85°F "greatly increase the risk of heat-related illness for pretrial detainees taking psychotropic medications," the housing temperature for that class of prisoners was constitutionally inadequate.⁸⁹ Thus, as long as the factual findings support that excessive heat poses significant risks to health, the Eighth Amendment requires that jails mitigate that condition.

The Fifth Circuit reached a similar conclusion in 2015. In *Ball v. LeBlanc*,⁹⁰ three prisoner-plaintiffs sued the Louisiana Department of Corrections alleging unconstitutional conditions due to extreme heat

⁸² *Id.* at 733–35. The issue in front of the Supreme Court concerned the qualified immunity of the defendants. *Id.* at 733. However, because at the time of this decision "[t]he threshold inquiry a court must undertake in a qualified immunity analysis is whether plaintiff's allegations, if true, establish a constitutional violation," *id.* at 736, the Supreme Court had reason to determine whether punitively hitching someone to a post was unconstitutional under the Eighth Amendment.

⁸³ *See id.* at 737–38.

⁸⁴ *Id.* at 734–35.

⁸⁵ 623 F.3d 1043, 1045, 1049 (9th Cir. 2010) (per curiam).

⁸⁶ *Id.* at 1045, 1048.

⁸⁷ *See id.* at 1049.

⁸⁸ *Id.* (quoting *Farmer v. Brennan*, 511 U.S. 825, 834 (1994)).

⁸⁹ *Id.*

⁹⁰ 792 F.3d 584 (5th Cir. 2015).

exacerbating their medical conditions.⁹¹ At the Angola death row prison facility where the plaintiffs lived, the heat index exceeded 100°F in the summer.⁹² There were some fans and vents in the housing tiers, but no air conditioning.⁹³ During the one hour per day that prisoners were not confined to their cells, they had access to an ice chest that may or may not have actually contained ice.⁹⁴

The district court, in analyzing whether the excessive heat posed a sufficiently serious risk of harm, found it “axiomatic” that unmitigated extreme temperatures may violate the Constitution.⁹⁵ The court supported its decision with a review of cases around the country that reached a similar conclusion.⁹⁶ The Fifth Circuit affirmed the district court’s finding that “housing these prisoners in very hot cells without sufficient access to heat-relief measures, while knowing that each suffers from conditions that render him extremely vulnerable to serious heat-related injury, violates the Eighth Amendment.”⁹⁷

Current prisoners in Texas are making the same arguments in pending class action litigation. Despite high summer temperatures, air conditioning is presently not mandated in Texas prisons.⁹⁸ Although wrongful death lawsuits have previously been filed on behalf of prisoners who died from heat-related illnesses, a 2014 lawsuit filed in Houston attempted to bring pending prison-heat cases together for the first time in a class action.⁹⁹

⁹¹ *Id.* at 589–90. Their conditions included hypertension, diabetes, obesity, hepatitis, depression, and high cholesterol. *Id.*

⁹² *Id.* at 590.

⁹³ *Id.*

⁹⁴ *See id.* (noting that at times the only ice machine would break or not produce enough ice).

⁹⁵ *Ball v. LeBlanc*, 988 F. Supp. 2d 639, 662 (M.D. La. 2013).

⁹⁶ *Id.* at 662–63. In addition to a number of Fifth Circuit decisions, the court cited *Walker v. Schult*, 717 F.3d 119, 126 (2d Cir. 2013) (“[I]t is well settled that exposing prisoners to extreme temperatures without adequate ventilation may violate the Eighth Amendment.”); *Graves v. Arpaio*, 623 F.3d 1043, 1049 (9th Cir. 2010) (per curiam) (“The district court did not err . . . in concluding that dangerously high temperatures that pose a significant risk to detainee health violate the Eighth Amendment.”); and *Chandler v. Crosby*, 379 F.3d 1278, 1294 (11th Cir. 2004) (“[T]he Eighth Amendment applies to prisoner claims of inadequate cooling and ventilation.”).

⁹⁷ *Ball*, 792 F.3d at 596. Despite holding that such conditions violate the Constitution, the Fifth Circuit vacated and remanded the district court’s injunction requiring the prison to install air conditioning. *Id.* at 599–600. The court found that the scope of the injunction violated the Prison Litigation Reform Act because it could have been more narrowly drawn and because it applied beyond the three plaintiffs in front of the court. *Id.* at 598–600.

⁹⁸ As of August 2014, “only 21 of 111 [Texas Department of Criminal Justice] facilities have full climate control, while others have air conditioning only in certain areas such as medical units.” Matt Clarke & David M. Reutter, *Heat-Related Deaths in Texas Prisons Lead to Lawsuits, Reluctant Changes*, PRISON LEGAL NEWS (Aug. 8, 2014), <https://www.prisonlegalnews.org/news/2014/aug/8/heat-related-deaths-texas-prisons-lead-lawsuits-reluctant-changes/> [<https://perma.cc/V9JH-X6X9>].

⁹⁹ The plaintiffs filed § 1983 claims alleging constitutional violation under the Eighth and Fourteenth Amendments. *In re Tex. Prison Conditions-of-Confinement Litig.*, 52 F. Supp. 3d 1379,

These and other cases around the country¹⁰⁰ demonstrate that unmitigated excessive heat can constitute an unconstitutional prison condition in violation of the Eighth Amendment's Cruel and Unusual Punishment Clause. That the natural environmental hazard of heat can establish successful claims supports the argument that human-made environmental hazards can similarly do so. Indeed, the only facial distinction is the source of the hazard.

II. ENVIRONMENTAL ISSUES SURROUNDING PRISONS

Prisoners are uniquely vulnerable to the environmental conditions around them for the simple reason that they cannot choose where they live. Nonprisoners can, and often do, modify their homes based on their environment. In hot climates, people can buy air conditioners and fans. In cold climates, people can buy heaters or seal their windows. In locations with toxic pollution, people can attempt to stop the pollution, or even cut one's losses and move away.¹⁰¹ Prisoners have no such choices.

This Part first provides a brief background into prison sites and property, demonstrating that attractive locations for prison sites are often attractive locations for the energy industry, which can lead to human-made environmental hazards. This Part then highlights environmental concerns around the country to demonstrate how human-made environmental health hazards can give rise to prison condition claims.

1379 (J.P.M.L. 2014) ("These seven actions (six individual wrongful death actions and one class action) involve allegations that inmates in various Texas state prison facilities—in particular, prisoners with disabilities—have suffered injury or death as a result of conditions in inmate living quarters alleged often to be brutally hot during the summer months."). For interesting commentary about the case's venture in front of the Inter-American Commission on Human Rights, see Kevin Diaz, *International Rights Panel Scrutinizes Texas Prison Heat*, HOUS. CHRON. (Oct. 27, 2014, 9:00 PM), <http://www.houstonchronicle.com/news/houston-texas/houston/article/International-rights-panel-scrutinizes-Texas-5851394.php> [<http://perma.cc/E37W-5YWY>].

¹⁰⁰ *E.g.*, *Jones-El v. Berge*, 374 F.3d 541, 543 (7th Cir. 2004) (affirming enforcement order to air condition cells in Wisconsin prison); *see also* Juliet Linderman & Brian Witte, *ACLU: Squalid Conditions at Troubled Baltimore Jail*, SEATTLE TIMES (June 2, 2015, 2:19 PM), <http://www.seattletimes.com/nation-world/aclu-squalid-conditions-at-troubled-baltimore-jail/> [<http://perma.cc/465U-VXY8>] (reporting on a motion to reopen prison conditions litigation against a Maryland jail for, among other allegations, excessive heat).

¹⁰¹ Despite the varying success rates of political and legal action, especially among different socioeconomic classes, prisoners are deprived of even the choice to meaningfully engage as compared to people in free society. For example, in LaBelle, Pennsylvania, residents have complained about the coal ash dump and its effects, some former residents have moved away, and an industry watchdog group has filed a civil suit against the company that manages the coal ash dump. Markowitz, *supra* note 13.

A. *Prison Sites and Property*

Since 1980, the total number of prisoners in the United States has been sharply rising.¹⁰² By the end of 2013, approximately 1,574,700 people were incarcerated in federal and state prisons.¹⁰³ Unsurprisingly, the increase in incarceration has also resulted in increased spending.¹⁰⁴ But with government budgets tightening, “politicians and lawmakers are embracing policies that will decrease the cost of operating the corrections system and incarcerating individuals.”¹⁰⁵ One way to decrease costs is to be mindful of property prices in new prison locations.

As long as prisoner populations continue to rise, concerns about space will persist.¹⁰⁶ New prisons will need to be built; older prisons will be closed to open newer, larger prisons.¹⁰⁷ One of the first questions will be: where to build? Government officials must balance a variety of factors in planning a prison’s physical location. Some of these factors include “proximity to courts and hospitals, accessibility by either public transportation or major highways, community interest and support.”¹⁰⁸ Environmental factors specific to a proposed site are also sometimes considered in the decisionmaking process.¹⁰⁹

¹⁰² See NATHAN JAMES, CONG. RESEARCH SERV., R42937, THE FEDERAL PRISON POPULATION BUILDUP: OVERVIEW, POLICY CHANGES, ISSUES, AND OPTIONS 1 (2014), <http://fas.org/spp/crs/misc/R42937.pdf> [<http://perma.cc/B94J-KBDT>] (“The number of inmates under the BOP’s jurisdiction has increased from approximately 25,000 in FY1980 to over 219,000 in FY2013. . . . Since FY1980, the federal prison population has increased, on average, by approximately 5,900 inmates each fiscal year.”).

¹⁰³ Press Release, Bureau of Justice Statistics, U.S. Dep’t of Justice, In 2013 the State Prison Population Rose for the First Time Since 2009; Federal prison population declined for first time since 1980 (Sept. 16, 2014), <http://www.bjs.gov/content/pub/press/p13pr.cfm> [<http://perma.cc/GNP3-DGQB>]. This figure does not purport to include detainees in jails or immigration detention.

¹⁰⁴ Andrew Webster, *Environmental Prison Reform: Lower Costs and Greener World*, 36 NEW ENG. J. CRIM. & CIV. CONFINEMENT 175, 175 (2010) (“Spending on the corrections system has increased by approximately 600% between 1982 and 2006.”); see also TRACEY KYCKELHAHN, BUREAU OF JUSTICE STATISTICS, U.S. DEPT. OF JUSTICE, STATE CORRECTIONS EXPENDITURES, FY 1982–2010, at 1 (2014), <http://www.bjs.gov/content/pub/pdf/scefy8210.pdf> [<http://perma.cc/GNP3-DGQB>] (“Between 1982 and 2001, total state corrections expenditures increased each year, rising from \$15.0 billion to \$53.5 billion in real dollars. Between 2002 and 2010, expenditures fluctuated between \$53.4 billion and \$48.4 billion.”).

¹⁰⁵ Webster, *supra* note 104, at 175.

¹⁰⁶ See *Brown v. Plata*, 131 S. Ct. 1910, 1923 (2011) (affirming a lower court’s order to significantly reduce prison population in face of overcrowding).

¹⁰⁷ See, e.g., Marissa Lang, *Utah Lawmakers Discuss Where to Move Draper Prison*, SALT LAKE TRIB. (May 22, 2014, 3:30 PM), <http://www.sltrib.com/sltrib/politics/57977277-90/prison-state-commission-utah.html.csp> [<http://perma.cc/DB4F-TMCX>].

¹⁰⁸ *Id.*

¹⁰⁹ See, e.g., Alicia Nieves, *Environmental Concerns at New Prison Site*, WNEP.COM (July 15, 2015, 11:50 PM), <http://wnep.com/2015/07/15/environmental-concerns-at-new-prison-site/> [<http://perma.cc/6YV6-68TL>] (reporting on ground contamination at a proposed new prison site).

Since the beginning of the rapid prisoner population growth in 1980, the vast majority of new prisons have been built in rural, as opposed to metropolitan, locations.¹¹⁰ In the 1980s, an average of sixteen new prisons were built in rural areas each year.¹¹¹ In the 1990s, an average of twenty-five new prisons were built in rural areas each year, resulting in 245 new rural prisons between 1990 and 1999.¹¹²

The same rural areas that attract new prisons also attract businesses looking to profit from the land's energy resources.¹¹³ This is because rural land is typically less expensive; smaller populations result in less people to disagree with either the proposed prison or the proposed energy industry operation; and the lands tend to be in depressed areas, so the people who populate the lands are more easily convinced that a new prison or energy industry operation will be an economic boon.¹¹⁴ As a result, prisons and energy industry operations frequently become neighbors.

¹¹⁰ Tracy Huling, *Building a Prison Economy in Rural America*, in *INVISIBLE PUNISHMENT: THE COLLATERAL CONSEQUENCES OF MASS IMPRISONMENT* (Marc Mauer & Meda Chesney-Lind eds., 2002), <http://www.prisonpolicy.org/scans/building.html> [<http://perma.cc/7F2T-M7WL>].

¹¹¹ *Id.*

¹¹² *Id.*

¹¹³ See, e.g., JASON P. BROWN ET AL., U.S. DEP'T OF AGRIC., *EMERGING ENERGY INDUSTRIES AND RURAL GROWTH* 2, 29 (2013), <http://www.ers.usda.gov/media/1229549/err159.pdf> [<http://perma.cc/RP3Q-RU5P>] (“Unconventional natural gas extraction [hydraulic fracking] . . . [is] most likely to occur in rural areas because of resource availability. The growth in gas production largely follows the location of unconventional gas formations, covering large rural areas in Colorado, Wyoming, Arkansas, Louisiana, Oklahoma, and Texas, as well parts of the Appalachian region such as areas in New York, Pennsylvania, Ohio, and West Virginia. . . . [T]he abundance of natural gas and the profitability of extraction under normal market conditions suggest that natural gas development will continue to expand across the United States.”); Stratford Douglas & Anne Walker, *Coal Mining and the Resource Curse in the Eastern United States* 4 (Aug. 18, 2015) (unpublished manuscript), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2385560 [<http://perma.cc/RQ7K-EQXS>] (discussing the abundance of coal in the Appalachian region, and noting its production in the region “currently accounts for over one third of all coal produced annually in the United States, and over half of cumulative U.S. coal production to date”).

¹¹⁴ See Huling, *supra* note 110 (“[T]he competition for prison ‘development projects’ has become fierce and political. In order to be considered competitive in the bidding wars for public prisons, rural counties and small towns give up a lot to gain what they hope will be more: offering financial assistance and concessions such as donated land, upgraded sewer and water systems, housing subsidies, and, in the case of private prisons, property and other tax abatements.”); RYAN S. KING, MARC MAUER & TRACY HULING, *THE SENTENCING PROJECT, BIG PRISONS, SMALL TOWNS: PRISON ECONOMICS IN RURAL AMERICA* 19 (2003), http://www.sentencingproject.org/doc/inc_bigprisons.pdf [<http://perma.cc/PB6Y-NG3J>] (arguing that supposed economic benefits of prisons to rural areas are not actually realized); see also, e.g., ABOLITIONIST LAW CTR. & HUMAN RIGHTS COAL., *supra* note 1, at 15 (discussing a politician’s push “to bring [a] new prison to Fayette County, hailing it as an important form of economic development for the poorest county in the state”); Markowitz, *supra* note 13 (analyzing the relationship between former coal industry towns, economic depression, and the willingness of communities to accept new prisons, as well as describing the history behind State Correctional Institution Fayette’s construction).

*B. Current Examples of Human-Made Environmental Hazards
Facing Prisons*

1. *Mountaintop Mining in Appalachia.*—In the 1990s, nine new prisons opened in Appalachia’s Southern Coal Fields region, and by 2001, three new federal prisons were under construction.¹¹⁵ The Southern Coal Fields region is also a booming region for mountaintop mining. Mountaintop mining (also called mountaintop removal) is a kind of surface mining that “involves stripping vegetation and topsoil from ridges and peaks, using explosives to remove up to hundreds of feet of rock above and between the coal seams, and disposing of excess rock into adjacent valleys.”¹¹⁶ It has become a widespread industry since the mid-1990s.¹¹⁷ The environmental impacts of mountaintop mining are well documented. The process results in deforestation, the burial of headwater streams, and “[t]he evidence is strong that [mountaintop mining] is highly polluting to the air and water of local environments during and after mining activity.”¹¹⁸ A recent study found that “[r]esidents of mountaintop mining counties [in Kentucky, Tennessee, Virginia, and West Virginia] reported significantly more days of poor physical, mental, and activity limitation and poorer self-rated health” than those in other areas.¹¹⁹ When faced with these types of environmental and health concerns, residents of a community can take political action, like petitioning the Environmental Protection Agency (EPA), or even filing a lawsuit to halt the allegedly hazardous process.¹²⁰ Prisoners housed in prisons located near the same environmental hazards, however, have no such options.¹²¹

2. *Coal Ash Dump in Pennsylvania.*—In September of 2014, the Abolitionist Law Center and the Human Rights Coalition issued a report

¹¹⁵ See Huling, *supra* note 110.

¹¹⁶ Michael Hendryx, *Poverty and Mortality Disparities in Central Appalachia: Mountaintop Mining and Environmental Justice*, J. HEALTH DISPARITIES RES. & PRAC., Spring 2011, at 44, 45.

¹¹⁷ See *id.*

¹¹⁸ *Id.*

¹¹⁹ Keith J. Zullig & Michael Hendryx, *Health-Related Quality of Life Among Central Appalachian Residents in Mountaintop Mining Counties*, 101 AM. J. PUB. HEALTH 848, 848 (2011), http://ohvec.org/issues/mountaintop_removal/articles/health/hrqol_mtm_ajph_2011.pdf [<http://perma.cc/292U-4RLV>].

¹²⁰ See, e.g., Press Release, Earthjustice, Groups Petition U.S. Environmental Protection Agency for Water Quality Standard in Appalachia to Protect Communities from Mountaintop Removal Mining Pollution (May 7, 2013), <http://earthjustice.org/news/press/2013/groups-petition-u-s-environmental-protection-agency-for-water-quality-standard-in-appalachia-to-protect-communit> [<http://perma.cc/FKC5-ADCX>].

¹²¹ Whether prisoners have standing to file citizen suits for EPA violations is a question worth exploring, as it offers another solution for prisoners facing human-made environmental health hazards, but is beyond the scope of this Note.

detailing the poor health of prisoners at State Correctional Institution (SCI) Fayette.¹²² The report theorized that such health problems are a result of the prison's close proximity to a coal ash dump.¹²³ The report detailed high rates of cancer and other health problems among the prison population that prisoners did not experience before they arrived at the prison.¹²⁴ For example: "Eleven prisoners died from cancer at SCI Fayette between January of 2010 and December of 2013. Another six prisoners have reported being diagnosed with cancer at SCI Fayette, and a further eight report undiagnosed tumors and lumps."¹²⁵

Questions about causation and confounding variables for each particular case have merit, yet the report suggests a strong link between environmental toxins from the coal ash dump and the health impact it has on nearby prisoners. The report maintains that the prison's location next to the coal ash dump may violate the Eighth Amendment.¹²⁶ Although the problems at SCI Fayette are striking, they are not unique. Several prisons around the country sit dangerously close to coal ash dump sites.¹²⁷

3. *Coal Ash Spill in Tennessee.*—On December 22, 2008, a dike in the Tennessee Valley Authority Kingston Fossil power plant failed, releasing 5.4 million cubic yards of coal ash sludge into the nearby river and over 300 acres of land.¹²⁸ It was the largest coal ash spill in the country's history.¹²⁹ As explained by the Tennessee Department of Health,

¹²² ABOLITIONIST LAW CTR. & HUMAN RIGHTS COAL., *supra* note 1.

¹²³ *Id.* at 2.

¹²⁴ Specifically, the Report documented the following findings:

More than 81% of responding prisoners (61/75) reported respiratory, throat, and sinus conditions, including shortness of breath, chronic coughing, sinus infections, lung infections, chronic obstructive pulmonary disease, extreme swelling of the throat, as well as sores, cysts, and tumors in the nose, mouth, and throat. 68% (51/75) of responding prisoners experienced gastrointestinal problems, including heart burn, stomach pains, diarrhea, ulcers, ulcerative colitis, bloody stools, and vomiting. 52% (39/75) reported experiencing adverse skin conditions, including painful rashes, hives, cysts, and abscesses. 12% (9/75) of prisoners reported either being diagnosed with a thyroid disorder at SCI Fayette, or having existing thyroid problems exacerbated after transfer to the prison.

Id. at 1.

¹²⁵ *Id.* at 2.

¹²⁶ *Id.*

¹²⁷ Markowitz, *supra* note 13 ("Paul Wright, the director of the Human Rights Defense Center (HRDC), says building prisons near dump sites has happened for the last 15 years, if not longer Wright, working with Prison Ecology, a project that grew out of the HRDC, is currently fighting the U.S. Bureau of Prisons, which is planning to build a new federal prison in Letcher County, Kentucky, right on top of a former coal mine.").

¹²⁸ Duane W. Gang, *5 Years After Coal-Ash Spill, Little Has Changed*, USA TODAY (Dec. 23, 2013, 12:31 PM), <http://www.usatoday.com/story/news/nation/2013/12/22/coal-ash-spill/4143995/> [<http://perma.cc/6EXT-DTZB>].

¹²⁹ *Id.*

“When coal is burned, the metals in the coal become concentrated in the ash. The metals in the coal ash have the potential to cause harm to the environment[] and to people.”¹³⁰

Even though the Tennessee Department of Health’s conclusions were positive overall, the Department found hazards related to breathing in air without “adequate dust suppression measures,” and that airborne matter could “harm people’s health, especially for those persons with pre-existing respiratory or heart conditions.”¹³¹ “Such harm could include upper airway irritation and aggravation of pre-existing conditions such as asthma, emphysema, and other respiratory or cardiovascular conditions.”¹³² In the wake of the disaster, nearly all of the residents who lived near the spill moved away.¹³³

One population of people who could not move away were those incarcerated at Roane County Jail, less than four miles from the plant.¹³⁴ Morgan County Correctional Complex and Loudon County Jail are also located nearby. If any of these people experienced, or continue to experience, health issues potentially connected to the spill or its residual effects, they might have colorable Eighth Amendment conditions claims. Still, the distance between the above facilities and the spill site make it a less compelling case than the SCI Fayette prison in LaBelle, Pennsylvania.¹³⁵ However, given that there are “over 1,000 operating coal ash landfills and ponds and many more hundreds of ‘retired’ coal ash disposal sites”¹³⁶ in the country, people who live in prisons near these

¹³⁰ TENN. DEP’T OF HEALTH, PUBLIC HEALTH ASSESSMENT xvii (2010), http://health.state.tn.us/Environmental/PDFs/pha-e-TVA_Kingston_Fossil_Plant_Final.pdf [<http://perma.cc/CJY9-4TBS>].

¹³¹ *Id.* at xxxi.

¹³² *Id.*

¹³³ Gang, *supra* note 128 (“TVA bought 180 properties and 960 acres from private landowners in the wake of the spill.”); *see also* TENN. DEP’T OF HEALTH, *supra* note 130, at xvii (“As of August 2009, TVA had compensated more than 100 property owners living near or affected by the spill. Many residents, whose yards backed up to the coves, were concerned about the health effects of ash in their yards and in the coves. People farther from the site were concerned about health effects of airborne ash.”).

¹³⁴ *See* Driving Directions from Tennessee Valley Authority Kingston Fossil Power Plant, Steam Plant Road, Harriman, TN, to Roane County Jail, Kingston, TN, GOOGLE MAPS, www.google.com/maps (searched “from Steam Plant Road, Harriman, TN to Roane County Jail”).

¹³⁵ For maps of the affected area, *see* Ryan Carlyle, *Illiteracy About this Energy Source Is Outright Killing Millions of People Worldwide Every Year*, BUS. INSIDER (June 20, 2015, 10:00 AM), <http://www.businessinsider.com/heres-how-science-illiteracy-is-outright-killing-millions-of-people-every-year-2015-6> [<http://perma.cc/L6DV-KQN2>], and *Site of the Spill and How Fly Ash is Produced*, N.Y. TIMES (Dec. 25, 2008), http://www.nytimes.com/imagepages/2008/12/25/us/20081225_SLUDGE_GRAPHIC.html [<http://perma.cc/PV7H-WWZJ>].

¹³⁶ *Coal Ash Contaminated Sites*, EARTHJUSTICE, <http://earthjustice.org/features/coal-ash-contaminated-sites> [<http://perma.cc/P37F-5FPD>].

potentially hazardous sites could consider Eighth Amendment conditions claims—especially in the wake of dangerous spills.

4. *Prisons Near Hydraulic Fracking Operations.*—Other potential claims might stem from prisons housed near sites of a growing arm of the energy industry: hydraulic fracking. Fracking is a “process of drilling down into the earth before a high-pressure water mixture is directed at the rock to release the gas inside.”¹³⁷ “Water, sand and chemicals are injected into the rock at high pressure which allows the gas to flow out to the head of the well.”¹³⁸ The fracking industry is controversial for several reasons, including its health effects on people.¹³⁹ A recent Yale study found that people in closer proximity to “natural gas fracking wells were more likely to have skin and respiratory symptoms than those living farther away.”¹⁴⁰ Moreover, numerous studies have found connections between hydraulic fracking and groundwater contamination.¹⁴¹ Increasing seismic activity has also been noted as a potential concern.¹⁴² With more than 2.3 million

¹³⁷ David Shukman, *What Is Fracking and Why Is It Controversial?*, BBC NEWS (June 27, 2013), <http://www.bbc.com/news/uk-14432401> [<http://perma.cc/2QMT-A85C>].

¹³⁸ *Id.*

¹³⁹ See, e.g., N.Y. STATE DEP’T OF HEALTH, A PUBLIC HEALTH REVIEW OF HIGH VOLUME HYDRAULIC FRACTURING FOR SHALE GAS DEVELOPMENT 2 (2014), http://www.health.ny.gov/press/reports/docs/high_volume_hydraulic_fracturing.pdf [<http://perma.cc/X5EP-2FX3>] (“[T]he overall weight of the evidence from the cumulative body of information contained in this Public Health Review demonstrates that there are significant uncertainties about the kinds of adverse health outcomes that may be associated with [fracking], the likelihood of the occurrence of adverse health outcomes, and the effectiveness of some of the mitigation measures in reducing or preventing environmental impacts which could adversely affect public health. Until the science provides sufficient information to determine the level of risk to public health . . . and whether the risks can be adequately managed, DOH recommends that [fracking] should not proceed in New York State.”); Peter M. Rabinowitz et al., *Proximity to Natural Gas Wells and Reported Health Status: Results of a Household Survey in Washington County, Pennsylvania*, 123 ENVTL. HEALTH PERSP. 21, 21 (2015), <http://ehp.niehs.nih.gov/wp-content/uploads/advpub/2014/9/ehp.1307732.pdf> [<http://perma.cc/LGU8-CDYZ>] (providing preliminary conclusions from a study on the public health impact of fracking near residential areas and finding that “proximity of natural gas wells may be associated with the prevalence of health symptoms including dermal and respiratory conditions in residents living near natural gas extraction activities”).

¹⁴⁰ Ed Stannard, *Yale Study: Health Problems Found in People Living Near Fracking Wells*, NEW HAVEN REG. (Sept. 10, 2014, 12:58 AM), <http://www.nhregister.com/general-news/20140910/yale-study-health-problems-found-in-people-living-near-fracking-wells> [<http://perma.cc/SBX2-7KA5>] (discussing the study described in Rabinowitz et al., *supra* note 139).

¹⁴¹ N.Y. STATE DEP’T OF HEALTH, *supra* note 139, at 5–6 (summarizing studies that have variously found methane migration into groundwater, contamination caused by gas leakage, the potential for explosions, concerns regarding surface spills and improper disposal of radioactive waste, stray gas contamination, and radium isotope accumulation in disposal and spill sites, all of which can affect the quality of drinking water).

¹⁴² *Id.* at 6; see also Kelly Connelly et al., *How Oil and Gas Disposal Wells Can Cause Earthquakes*, STATEIMPACT, <http://stateimpact.npr.org/texas/tag/earthquake/> [<http://perma.cc/K7RY-MYHX>] (explaining that “the disposal of drilling wastewater used in fracking has now been scientifically linked to earthquakes” and noting the increasing frequency and strength of earthquakes near Dallas and Fort Worth, Texas, home to a growing fracking industry).

fracking wells across the country,¹⁴³ it is likely that some sites neighbor existing prisons and jails,¹⁴⁴ which could allow for Eighth Amendment unconstitutional conditions claims.

People who live near energy industry operations face serious health risks. Unlike local populations, prisoners are uniquely vulnerable to such risks. They lack the same level of political agency to effect change, they lack the same access to healthcare, and they cannot simply move away if they believe they are in the crossfires of human-made environmental health hazards. Fortunately, prisoners can seek a remedy for such conditions under the Eighth Amendment's Cruel and Unusual Punishment Clause.

III. HUMAN-MADE ENVIRONMENTAL HAZARDS AS THE BASIS FOR EIGHTH AMENDMENT PRISON CONDITIONS CLAIMS

As demonstrated by the excessive heat cases, environmental hazards left unmitigated by prison officials can form the basis for Eighth Amendment prison conditions claims. When the environmental hazards are human-made, the result should be no different. This Part will present a litigation roadmap, arguing for an application of the excessive heat case precedent, as well as other similar precedent, to situations in which prisons neighbor human-made environmental hazards. To do so, this Part first discusses the best types of proof to meet the objective and subjective elements of a claim, while also anticipating and addressing defenses. It then offers policy arguments that further support the viability of conditions claims based on human-made environmental hazards.

A. Proving the First Element: Substantial Risk of Serious Harm

As previously stated, there are two elements in proving an unconstitutional prison conditions claim. The first element—the objective element—is that the plaintiff faced a substantial risk of serious harm.¹⁴⁵ If the plaintiff has a current injury from the allegedly unconstitutional condition, evidence of that injury may suffice to prove this element.¹⁴⁶ If, however, the plaintiff fears of a future injury from the allegedly unconstitutional condition, the plaintiff must do more. She or he must demonstrate that the future injury is serious, is likely to occur, and that it

¹⁴³ See *How Many People Are Affected By Fracking?*, FORBES (Mar. 24, 2014, 10:08 AM), <http://www.forbes.com/sites/quora/2014/03/24/how-many-people-are-affected-by-fracking/> [<http://perma.cc/NRA3-3XNW>].

¹⁴⁴ See *supra* Section II.A.

¹⁴⁵ See *supra* note 40 and accompanying text.

¹⁴⁶ See *supra* notes 68–72 and accompanying text.

“violates contemporary standards of decency to expose *anyone* unwillingly to such a risk.”¹⁴⁷

Certain health concerns created by human-made environmental hazards undoubtedly can be deemed sufficiently serious. For example, coal ash chemicals can “cause or contribute to . . . skin, eye, nose and throat irritation; asthma; emphysema; hypertension; anemia; heart problems; nervous system damage; brain damage; liver damage; stomach and intestinal ulcers; and many forms of cancer including skin, stomach, lung, urinary tract, and kidney cancers.”¹⁴⁸ Mountaintop mining can cause contaminated groundwater, airborne toxins, and hazardous dust, which are associated with health issues like chronic pulmonary disorders, hypertension, lung cancer, and “chronic heart, lung, and kidney disease.”¹⁴⁹ Such health concerns are comparable to heat stroke and other heat-related illnesses, which courts have affirmed can be sufficiently serious for a finding of unconstitutional conditions.¹⁵⁰

Faced with this kind of claim, defendants are likely to dispute the existence of a link between the industry operation and any prisoner health problems. This factual issue complicates the first prong and highlights how vital the underlying causation evidence would be. Types of proof to demonstrate causation as well as the seriousness of the risk might include

¹⁴⁷ *Helling v. McKinney*, 509 U.S. 25, 36 (1993).

¹⁴⁸ ABOLITIONIST LAW CTR. & HUMAN RIGHTS COAL., *supra* note 1, at 5 (citing BARBARA GOTTLIEB ET AL., *COAL ASH: THE TOXIC THREAT TO OUR HEALTH AND ENVIRONMENT: A REPORT FROM PHYSICIANS FOR SOCIAL RESPONSIBILITY AND EARTHJUSTICE*, 1–5 (2010)).

¹⁴⁹ M.A. Palmer et al., *Mountaintop Mining Consequences*, 327 *SCIENCE*, Jan. 8, 2010, at 148, 148, [http://www.filonverde.org/images/Mountaintop_Mining_Consequences_Science1\[1\].pdf](http://www.filonverde.org/images/Mountaintop_Mining_Consequences_Science1[1].pdf) [<http://perma.cc/32AJ-CCV7>] (“Even after mine-site reclamation (attempts to return a site to premined conditions), groundwater samples from domestic supply wells have higher levels of mine-derived chemical constituents than well water from unmined areas. Human health impacts may come from contact with streams or exposure to airborne toxins and dust. State advisories are in effect for excessive human consumption of Se in fish from MTM/VF affected waters. Elevated levels of airborne, hazardous dust have been documented around surface mining operations. Adult hospitalizations for chronic pulmonary disorders and hypertension are elevated as a function of county-level coal production, as are rates of mortality; lung cancer; and chronic heart, lung, and kidney disease.” (endnotes omitted)).

¹⁵⁰ *E.g.*, *Ball v. LeBlanc*, 792 F.3d 584, 593–94 (5th Cir. 2015) (affirming a finding of substantial risk of serious harm based on heat stroke and heat-related illnesses); *Gates v. Cook*, 376 F.3d 323, 340 (5th Cir. 2004) (“Based on the evidence presented, we cannot say that the trial court’s finding that the probability of heat-related illness is extreme at Unit 32–C was clearly erroneous. Thus, this condition presents a substantial risk of serious harm to the inmates.”).

scientific studies,¹⁵¹ medical expert testimony,¹⁵² and even government rules and regulations.¹⁵³

Plaintiffs alleging future injury claims will also need to present evidence that the injury is likely to occur. The *Helling* Court made clear that “a remedy for unsafe conditions need not await a tragic event,” citing a variety of contexts in which future injury conditions claims had been won.¹⁵⁴ In addition, the Court posited that prisoners likely could “successfully complain about demonstrably unsafe drinking water without waiting for an attack of dysentery.”¹⁵⁵ *Helling* therefore suggests that prisoners could also successfully complain about demonstrably unsafe *environmental hazards* without waiting for an illness or injury to materialize. Some environmental hazards may result in more immediate injuries,¹⁵⁶ but conceivably the injuries from other hazards may take years to manifest. Given the uniqueness of claims based on human-made environmental health hazards, experts who can speak to the likelihood of the injury or illness would be vital to a plaintiff’s case.¹⁵⁷

¹⁵¹ *E.g.*, *supra* notes 139–140.

¹⁵² *See, e.g.*, *Ball*, 792 F.3d at 593 (affirming the district court’s finding of substantial risk of serious harm, which was largely based on a doctor’s testimony).

¹⁵³ *E.g.*, Disposal of Coal Combustion Residuals From Electric Utilities, 80 Fed. Reg. 21,302, 21,302 (Apr. 17, 2015) (EPA Final Rule for coal combustion residuals (coal ash) disposal, effective in October 2015, explicitly acknowledging the environmental and human health risks of coal ash operations).

¹⁵⁴ *Helling v. McKinney*, 509 U.S. 25, 33–34 (1993) (first citing *Hutto v. Finney*, 437 U.S. 678 (1978) (crowded cells with sick prisoners constituted a claim even though the infection might not affect everyone and the harm might not be immediate); then citing *Gates v. Collier*, 501 F.2d 1291 (5th Cir. 1974) (threats to safety from exposed wiring and deficient firefighting measures allowed for relief); and then citing *Ramos v. Lamm*, 639 F.2d 559, 572 (10th Cir. 1980) (court found that prisoners need not wait to be assaulted before gaining relief)). In the context of an excessive heat case, the Fifth Circuit recently confirmed that “inmates need not show that death or serious injury has already occurred” to prove unconstitutional conditions. *Ball*, 792 F.3d at 593. In *Ball*, that the prisoner–plaintiffs had not yet suffered any heat-related illness did not rebut the conclusion that excessive heat caused a substantial risk of serious harm to the plaintiffs. *Id.*

¹⁵⁵ *Helling*, 509 U.S. at 33.

¹⁵⁶ *See* ABOLITIONIST LAW CTR. & HUMAN RIGHTS COAL., *supra* note 1, at 8–9 (discussing symptoms in prisoners consistent with coal ash exposure that commenced soon after arriving at the prison).

¹⁵⁷ For example, in *Gates v. Cook*, the lower court’s injunction requiring the prison to mitigate the high temperatures was affirmed, with the circuit court citing the plaintiff’s expert who testified “it was ‘very likely’ that, under current conditions on Death Row, an inmate will die of heat stroke or some other heat-related illness.” 376 F.3d 323, 339 (5th Cir. 2004); *see also* Melvin Gutterman, *The Contours of Eighth Amendment Prison Jurisprudence: Conditions of Confinement*, 48 SMU L. REV. 373, 406–07 (1995) (discussing the benefits of scientific evidence in showing harm, but concluding that “[d]etermining an acceptable degree of risk is extremely problematic” since “[a]t the bottom, there is no way for the Court to conclusively capture society’s ‘contemporary notions of decency’ and, ultimately, individual justices do read their own values into the Eighth Amendment.” (footnotes omitted)).

Lastly, plaintiffs must argue that the risk of injury violates contemporary standards of decency.¹⁵⁸ This can be approached in several ways. For instance, plaintiffs could argue that the severity of the future injury itself violates standards of decency—a strong argument for injuries that could result in death.

Conversely, plaintiffs may face difficulty if they argue that the right to be free from human-made environmental hazards, not the resulting injury, violated standards of decency. Still, prisoners could potentially contend that their very lack of agency in relation to their proximity to harmful energy operations violates contemporary standards of decency. Such an argument would best be supported by evidence that nonprisoner community members moved away from the industry for health or safety reasons.¹⁵⁹ Additionally, evidence of communities trying to stop the energy industry from placing roots nearby—perhaps via political or legal action¹⁶⁰—would also strengthen a claim that a prisoner’s proximity alone constitutes a violation of contemporary decency standards. Although the available evidence depends on the facts of a given case, precedent at least makes it plausible that plaintiffs alleging unconstitutional conditions based on human-made environmental hazards could establish a substantial risk of serious harm.

B. Proving the Second Element: Deliberate Indifference

In addition to proving the objective element, a successful Eighth Amendment conditions claim requires plaintiffs to prove the subjective element, that prison officials were deliberately indifferent to the risk.¹⁶¹ As discussed, *Farmer v. Brennan* is the landmark Supreme Court case that gave meaning to the amorphous term.¹⁶² In short, deliberate indifference means prison officials must have (1) known of the risk and (2) disregarded the risk.

1. Knowledge of the Risk.—Whether a prison official knows about the risk is a factual question “subject to demonstration in the usual ways, including inference from circumstantial evidence.”¹⁶³ Moreover, “a

¹⁵⁸ See *Helling*, 509 U.S. at 36 (“[Proving the objective element] requires a court to assess whether society considers the risk that the prisoner complains of to be so grave that it violates contemporary standards of decency to expose anyone unwillingly to such a risk. In other words, the prisoner must show that the risk of which he complains is not one that today’s society chooses to tolerate.”).

¹⁵⁹ See *supra* note 133 and accompanying text for an example.

¹⁶⁰ See, e.g., Press Release, Earthjustice, *supra* note 120.

¹⁶¹ *Wilson v. Seiter*, 501 U.S. 294, 303 (1991); see also *Farmer v. Brennan*, 511 U.S. 825, 842 (1994).

¹⁶² See *supra* notes 73–76 and accompanying text.

¹⁶³ *Gates v. Cook*, 376 F.3d 323, 333 (5th Cir. 2004) (citing *Farmer*, 511 U.S. at 842).

factfinder may conclude that a prison official knew of a substantial risk from the very fact that the risk was obvious.”¹⁶⁴ Plaintiffs alleging unconstitutional conditions based on human-made environmental hazards could consider both approaches, which often overlap.

Circumstantial evidence that suggests prison officials know about a risk may include conversations among officials about the risk, prisoner grievances or medical records drawing attention to the risk,¹⁶⁵ or governmental regulations discussing the risk.¹⁶⁶ Other kinds of circumstantial evidence might include whether the environmental hazard was known prior to the prison’s construction,¹⁶⁷ whether there was any publicity surrounding the industry or its risks, and whether there were any lawsuits challenging the industry based on health or safety concerns.¹⁶⁸ The more a plaintiff can show that the risk was “longstanding, pervasive, well-documented, or expressly noted by prison officials in the past,” or even that prison officials were “exposed to information concerning the risk,” the greater argument plaintiffs have in proving a defendant’s knowledge of the risk.¹⁶⁹

For example, the federal government recently proposed building a new prison in Letcher County, Kentucky.¹⁷⁰ The proposal has drawn sharp opposition from environmental and prisoner rights organizations.¹⁷¹ One of

¹⁶⁴ *Id.*

¹⁶⁵ *See, e.g., id.* at 340 (affirming trial court’s deliberate indifference finding “based on the open and obvious nature of these conditions and the evidence that inmates had complained of symptoms of heat-related illness”).

¹⁶⁶ *See, e.g.,* Disposal of Coal Combustion Residuals From Electric Utilities, 80 Fed. Reg. 21,302, 21,302 (Apr. 17, 2015) (EPA Final Rule for coal combustion residuals (coal ash) disposal, effective in October 2015, explicitly acknowledging the environmental and human health risks of coal ash operations). Given that governmental officials are the defendants in prison conditions cases, government acknowledgment in final rules that there are serious risks associated with a hazard is strong circumstantial evidence of knowledge of risk.

¹⁶⁷ *See, e.g.,* Nieves, *supra* note 109 and accompanying text.

¹⁶⁸ *See, e.g.,* Citizens Coal Council v. Matt Canestrone Contracting, Inc., 51 F. Supp. 3d 593, 595 (W.D. Pa. 2014) (denying a motion to dismiss a lawsuit “to abate an imminent and substantial endangerment to health or the environment allegedly caused by solid waste located on the LaBelle Coal Refuse Disposal Area”).

¹⁶⁹ *Farmer v. Brennan*, 511 U.S. 825, 842 (1994). Sometimes, prison officials may complain about the very same conditions as prisoners—strong evidence of their knowledge of the risk. *See* Markowitz, *supra* note 13 (noting a guard at State Correctional Institution Fayette filed a complaint with the Department of Environmental Protection about the nearby coal ash dump).

¹⁷⁰ Meeting Notice, 80 Fed. Reg. 7497, 7497 (Feb. 10, 2015).

¹⁷¹ *E.g.,* Press Release, Ctr. for Biological Diversity & Human Rights Def. Ctr., Kentucky Prison Project Opposed Over Threats to Endangered Wildlife, Water and People (July 31, 2015), http://www.biologicaldiversity.org/news/press_releases/2015/letcher-county-prison-07-30-2015.html [<http://perma.cc/L83Y-BMHU>]; *see also* Ryan Adams, *Proposed Letcher County Federal Prison Brings Opposition*, WYMT (Mar. 31, 2015, 6:36 PM), <http://www.wkyt.com/>

the reasons is that the proposed location is a former mountaintop mining site, which carries with it a host of health and safety concerns for the would-be prisoners.¹⁷² The Federal Bureau of Prisons held public meetings and accepted public comment on its Environmental Impact Statement in which citizens could share their concerns.¹⁷³ Were the proposed prison constructed, and were a future prisoner to bring an Eighth Amendment conditions claim based on the mountaintop mining hazards, prison officials would be hard-pressed to deny their knowledge of the alleged risks. This knowledge is crucial for proving the element of deliberate indifference.

Outside reports of health risks seen by prison officials can also bolster claims of defendants' knowledge of a risk. For example, in *Smith v. United States*,¹⁷⁴ the Tenth Circuit relied upon the allegation that prison guards were aware of a survey that documented the existence of asbestos in the prison to find that the prisoner–plaintiff had alleged enough to show deliberate indifference at the pleading stage.¹⁷⁵ Plaintiffs could employ a similar strategy in Eighth Amendment conditions claims based on human-made environmental hazards. Conducting research about the risks of a nearby industry and presenting it to prison officials preempts a possible defense that the officials were not aware of the “underlying facts indicating a sufficiently substantial danger and that they were therefore unaware of a danger.”¹⁷⁶

The Abolitionist Law Center and Human Rights Coalition's report offers an illustration. The report first argues that prison officials' awareness that the prison “was built on and around a toxic dump would demonstrate

wymt/home/headlines/Proposed-sites-of-Letcher-County-federal-Prison-bring-opposition—298206561.html [http://perma.cc/GG5N-MRK8].

¹⁷² Paul Wright, Exec. Dir., Human Rights Def. Ctr., Comment Letter on Proposed USP/FPC Letcher County Environmental Impact Statement 6–12 (Mar. 30, 2015), <https://www.prisonlegalnews.org/media/publications/Letcher%20Co%20KY%20HRDC%20comment%20on%20BOP%20Draft%20EIS%203-30-15.pdf> [http://perma.cc/R6VQ-86RC] (discussing in depth the health and safety hazards caused by construction of the proposed prison).

¹⁷³ See Meeting Notice, 80 Fed. Reg. at 7497.

¹⁷⁴ 561 F.3d 1090 (10th Cir. 2009).

¹⁷⁵ See *id.* at 1105; see also *LaBounty v. Coughlin*, 137 F.3d 68, 73 (2d Cir. 1998) (finding summary judgment inappropriate due to fact issues surrounding whether prison officials had notice of plaintiff's exposure to asbestos).

¹⁷⁶ *Farmer v. Brennan*, 511 U.S. 825, 844 (1994). In arguing they did not perceive any risk, and thus had no knowledge of the risk, defendants may rely on a lack of scientific evidence, scientific evidence that is in dispute, or, most simply of all, that they were unaware of any scientific evidence. Again, whether or not they *should* have been aware does not amount to deliberate indifference. See *id.* at 837–38 (“[A]n official's failure to alleviate a significant risk that he should have perceived but did not, while no cause for commendation, cannot under our cases be condemned as the infliction of punishment.”). Faced with this kind of defense, plaintiffs should carefully consider who they name as defendants. Perhaps some officials, like those at the policy-making level, would be aware of risks, and others, like guards, would not.

actual knowledge of a risk of adverse health consequences from imprisoning people at the site.”¹⁷⁷ The report also argues:

Aggregated medical records may . . . show patterns of health problems consistent with exposure to environmentally toxic living conditions, establishing that [the prison] officials knew . . . that prisoners were being harmed by these toxins. Additionally, prisoner grievances and reports such as this one will also create a record of actual knowledge of the harms imposed upon prisoners at SCI Fayette.¹⁷⁸

While the report makes strong arguments as to what evidence could be used to show deliberate indifference, the report itself might be the strongest evidence of all. As long as prison officials were made aware of the report, its in-depth analysis of the health effects of the coal waste plant on the nearby prisoner population would aid in proving the officials had knowledge of the risk. Even more, a comprehensive report may contribute to proving that the risk was disregarded—the second aspect of deliberate indifference.

2. *Risk Was Disregarded.*—It is not enough that officials simply knew of a substantial risk of serious harm; the element of deliberate indifference requires that they disregarded the risk by “failing to take reasonable measures to abate it.”¹⁷⁹ Important to keep in mind, however, is that deliberate indifference requires more than negligence.¹⁸⁰ In conditions cases based on human-made environmental hazards, one way plaintiffs can prove that officers deliberately disregarded the risk is by showing the absence of a prison policy addressing the risk.

In *Helling*, the Court noted that the prison’s new smoking policy would “bear heavily on the inquiry into deliberate indifference,” because the policy might show that prison officials were *not indifferent* to the dangers of environmental tobacco smoke (secondhand smoke).¹⁸¹ That is, the fact that prison officials had crafted a policy about secondhand smoke showed some responsiveness to the risk. The opposite could have similar persuasive force: the absence of a prison policy about a risk suggests that prison officials were indifferent to the dangers at issue.

¹⁷⁷ ABOLITIONIST LAW CTR. & HUMAN RIGHTS COAL., *supra* note 1, at 19.

¹⁷⁸ *Id.*

¹⁷⁹ *Farmer*, 511 U.S. at 847.

¹⁸⁰ The *Farmer* Court rejected a standard that a “prison official who was unaware of a substantial risk of harm to an inmate may nevertheless be held liable under the Eighth Amendment if the risk was obvious and a reasonable prison official would have noticed it.” *Farmer*, 511 U.S. at 842; *see also* *Perez v. Oakland County*, 466 F.3d 416, 431 (6th Cir. 2006) (“A finding of negligence does not satisfy the deliberate indifference standard.”).

¹⁸¹ 509 U.S. 25, 36–37 (1993).

In response, defendants may concede indifference, but argue it was not deliberate. In other words, their failure to address the risk was a result of their ignorance about the severity of the risk.¹⁸² For instance, if officials live in close proximity to the prisons, it cuts against an argument that allowing prisoners to be exposed to these conditions is done with deliberate indifference.

Yet, that prison officials live or work near a dangerous condition is not necessarily a death knell to conditions cases. In Texas, the prison guard union openly supported the heat litigation, calling the high temperatures unbearable and dangerous.¹⁸³ The fact that prison guards continue to work in such conditions—albeit with water, ice, and restrictions during the hottest parts of the day¹⁸⁴—does not detract from their knowledge that the heat was dangerous, and their failure to mitigate it *for prisoners*.

Another possible defense is that prison officials responded to the risk, even if they were unsuccessful. This defense concedes knowledge of the risk, but disputes the allegation that defendants were indifferent to it.¹⁸⁵ For example, in the current Texas heat litigation, the defendants inserted fans and cooling units into some prisons after the lawsuit was filed.¹⁸⁶ These actions arguably show that officials were not indifferent to the risk of heat-related illnesses. In a human-made environmental hazard case, analogous measures could include providing breathing masks to mitigate polluted air, or filtering unsafe water. However, open questions as to whether the measures were adequate,¹⁸⁷ and whether officials took such measures with the genuine intention of mitigating the problem, would likely remain.¹⁸⁸

¹⁸² For clarification purposes, this Note dissects the deliberate indifference element into two requirements: (1) knowledge of the risk and (2) disregarding the risk. Some defenses like this one, however, do not fit neatly into a single category and instead contest deliberate indifference as a whole.

¹⁸³ Mike Ward, *Guards to Join Convict Litigation Over Hot State Prisons*, STATESMAN.COM (Aug. 29, 2013, 4:04 PM), <http://www.statesman.com/news/news/guards-to-join-convict-litigation-over-hot-state-p/nZgSD/> [<http://perma.cc/BVD9-RNTL>].

¹⁸⁴ *Id.*

¹⁸⁵ *E.g.*, *Ball v. LeBlanc*, 792 F.3d 584, 594–95 (5th Cir. 2015) (discussing defendants’ “trick” to mitigate high temperatures after lawsuit was filed, which contributed to an inference that they “knew of a substantial risk of serious harm to the Plaintiffs”); *cf. Helling*, 509 U.S. at 36 (suggesting the adoption of a policy to address cigarette smoke in the middle of litigation could defend against the allegation of deliberate indifference).

¹⁸⁶ Mike Ward, *Coolers Installed in Seven Texas Prisons in Summer-Heat Test*, HOUS. CHRON. (June 18, 2014, 10:34 PM), <http://www.houstonchronicle.com/news/politics/texas/article/Coolers-installed-in-seven-Texas-prisons-in-5562801.php> [<http://perma.cc/9MA8-8Z6C>].

¹⁸⁷ *See De’lonta v. Johnson*, 708 F.3d 520, 526 (4th Cir. 2013) (holding that plaintiff stated an Eighth Amendment claim for relief, after acknowledging “that Appellees have provided De’lonta with some measure of treatment to alleviate her GID symptoms,” but asserting that “just because Appellees have provided De’lonta with *some* treatment consistent with the GID Standards of Care, it does not follow that they have necessarily provided her with *constitutionally adequate* treatment”); *Langford v.*

Finally, in many cases prison officials may have had nothing to do with a nearby hazardous energy operation, which may lead some to question whether an Eighth Amendment claim can stand. Precedent teaches that the answer is yes, regardless of whether prison officials caused the unconstitutional condition. In the excessive heat cases, prison officials need not have caused the extreme heat for plaintiffs to prevail on their claim. Whether and how prison officials mitigate the unconstitutional condition is an issue of remedies.¹⁸⁹

As can be seen, there are ample evidentiary considerations in preparing for Eighth Amendment unconstitutional conditions litigation based on human-made environmental hazards. Based on existing precedent, and given the right evidence, such claims are both actionable and winnable.

C. *Policy Arguments as Additional Support for the Viability of Claims*

Policy arguments also support the viability of conditions claims based on human-made environmental hazards. First, it is a long-settled principle that every violation of a right deserves a remedy.¹⁹⁰ The right to be free from cruel and unusual punishment is violated when prisoners are subjected to serious environmental hazards.

In addition, as has been discussed throughout this Note, prisoners lack agency in removing themselves from the wake of environmental hazards. They cannot participate fully in political activism; the vast majority cannot vote on whether certain industries can operate in proximity to their housing; and it is not clearly established that prisoners have standing to sue agencies like the EPA to enforce environmental regulations more strictly.

Norris, 614 F.3d 445, 460 (8th Cir. 2010) (“[A] total deprivation of care is not a necessary condition for finding a constitutional violation . . .”).

¹⁸⁸ Additionally, plaintiffs should be mindful in cases of hazards being caused by one-time accidents or spills, from which defendants can argue that the temporary nature of the condition does not rise to an Eighth Amendment violation. *See, e.g.,* Whitnack v. Douglas County, 16 F.3d 954, 958 (8th Cir. 1994) (“Here, the intolerable conditions lasted not more than 24 hours before the availability of adequate cleaning supplies would make them tolerable. We recently reasoned that a prisoner confined to an allegedly unsanitary cell for eleven days could not prove an Eighth Amendment violation because of the ‘relative brevity’ of his stay, particularly when cleaning supplies were available to him. Other courts have likewise found that certain conditions are not cruel and unusual because the inmate was subjected to the condition for only a short period of time.” (citation omitted)).

¹⁸⁹ It is worth reminding that the substantial *risk* of serious harm is enough to give rise to an Eighth Amendment claim; one need not wait for the injury to appear. Thus, prison officials must do more than simply provide adequate medical care in response to any human-made environmental health hazards. In the heat cases, remedies were not limited to adding medical staff to address heat stroke after the fact. Remedies included preventative measures like fans and cool showers. *See, e.g.,* Gates v. Cook, 376 F.3d 323, 339 (5th Cir. 2004) (upholding the fourth injunction for the applicable prison population, which required the prison to “provide fans, ice water, and daily showers when the heat index is 90 degrees or above, or alternatively to make such provisions during the months of May through September”).

¹⁹⁰ *See* Marbury v. Madison, 5 U.S. (1 Cranch) 137, 147 (1803).

Given these limitations, allowing Eighth Amendment conditions claims based on human-made environmental hazards is consistent with the Eighth Amendment's core purpose of preserving the dignity of man. It would ensure the government lives up to its affirmative duty to protect based on "the limitation which it has imposed on [prisoners'] freedom to act on [their] own behalf."¹⁹¹

From a practical standpoint, there should be no concern that allowing these kinds of claims would open up the litigation floodgates. Barriers like the Prison Litigation Reform Act,¹⁹² and immunity doctrines, will continue to serve as gatekeepers, letting only the most meritorious claims through. Lastly, there are significant potential costs of ignoring human-made environmental hazards.¹⁹³ By being cognizant of possible risks, prison officials can mitigate health concerns with preventative care, or, for prisons not yet constructed, can select property sites away from energy industries with hazardous side effects.

CONCLUSION

Human-made environmental hazards should constitute a basis for Eighth Amendment unconstitutional conditions claims. Compelling policy reasons and the evolving nature of the Eighth Amendment support the need for such claims. Moreover, as seen from the excessive heat cases, environmental hazards already form the basis for successful claims. It is no leap, then, to find that human-made environmental hazards may also form a basis. In terms of likelihood of success, potential plaintiffs would be wise to keep the two-pronged legal standard in mind when considering how to proceed. Given the ever-growing energy industry, and that prisons and energy industries are often located in the same pockets of the country, prisoners face an ongoing risk of toxic confinement. The Eighth Amendment can, and must, protect them.

¹⁹¹ *DeShaney v. Winnebago Cty. Dep't of Soc. Servs.*, 489 U.S. 189, 200 (1989).

¹⁹² 42 U.S.C § 1997e (2012).

¹⁹³ See *Brown v. Plata*, 131 S. Ct. 1910, 1923 (2011) (upholding a remedial order to reduce prisoner population in California prisons in order to minimize overcrowding, which was deemed to be a contributing factor to unconstitutional medical conditions); see also Don Thompson, *California Spends \$5M to Screen Inmates for Valley Fever*, 89.3 KPCC (Jan. 11, 2015), <http://www.scpr.org/news/2015/01/11/49218/california-spends-5m-to-screen-inmates-for-valley/> [http://perma.cc/6WPS-CWSG] (reporting on the multi-million dollar cost of testing prisoners for valley fever, which can cause blindness, lung failure, and death, among other symptoms, in prisons located in California's Central Valley, which is known to host the fungus that causes the illness).

