



Conservation
Law Foundation

August 13, 2024

**VIA REGISTERED MAIL
RETURN RECEIPT REQUESTED**

Stephen J. Woerner, President
Boston Gas Company d/b/a
National Grid
170 Data Dr.
Waltham, MA 02541

Rudolph L. Wynter, President
Lisa Wieland, New England
President
National Grid USA
170 Data Dr.
Waltham, MA 02541

Daniel Davies, President
National Grid USA Service
Company, Inc.
170 Data Dr.
Waltham, MA 02541

For a thriving New England

CLF Massachusetts 62 Summer Street
Boston, MA 02110
P: 617.350.0990
F: 617.350.4030
www.clf.org

RE: Notice of Violations and Intent to File Suit Under the Resource Conservation and Recovery Act; Pipeline Safety Act; and the Massachusetts Environmental Citizen Suit Statute

To Whom it May Concern:

Conservation Law Foundation (“CLF”)¹ on behalf of itself, GreenRoots,² Boston Parks Advocates,³ Mothers Out Front,⁴ and Affected Citizens⁵ (collectively, “Plaintiffs”) hereby give notice to the addressed persons that Plaintiffs intend to file a civil action in the United States District Court for the District of Massachusetts under the Resource Conservation and Recovery Act (“RCRA”), 42 U.S.C. § 6972(a)(1)(B); Pipeline Safety Act (“PSA”), 49 U.S.C. § 60121; and Massachusetts Environmental Citizen Suit Statute, M.G.L. ch. 214, § 7A against Boston Gas Company d/b/a/ National Grid; National Grid USA; and National Grid USA Service Company, Inc. (collectively “National Grid”) for past and continuing violations. Plaintiffs intend to seek appropriate relief, including but not limited to equitable relief, declaratory relief, and civil penalties, no earlier than ninety days from the postmark of this letter, which serves as notice pursuant to 42 U.S.C. § 6972(b), 40 C.F.R. §§ 254.1–3, 49 U.S.C. § 60121(a)(1)(A), and M.G.L.

¹ CLF is a not-for-profit, member-supported organization dedicated to the conservation and protection of New England’s environment.

² GreenRoots, Inc. is a resident-led organization dedicated to improving and enhancing the urban environment and public health in Chelsea, East Boston, and surrounding communities.

³ Boston Park Advocates is a network of advocates working to increase investment in and stewardship of Boston’s parks, open spaces, and natural resources through expanding access to public-private partnerships between community groups and governing city and state agencies.

⁴ Mothers Out Front (“MOF”) is a member-led climate justice organization. MOF is mothers, sisters, aunts, grandmothers and other caregivers coming together to make climate justice a priority issue that decision-makers can no longer ignore.

⁵ Affected Citizens include Catherine Bordon, Claire Corcoran, Sarah Freeman, Judith Foster, John Kyper, Roy Smith, Dennis Sullivan, and Tim Williamson, who reside in Massachusetts.

ch. 214, § 7A (the “Notice Letter”). Plaintiffs also reserve the right to file other claims, such as state claims, for the same and related conduct.

The subject of this action is gas leaks from National Grid’s gas distribution pipelines in the cities of Boston and Chelsea, Massachusetts that contribute to: 1) deadly explosions and fires, and 2) the damage and death of public shade trees. These dangerous gas leaks occur in environmental justice communities, defined by Massachusetts law as low-income communities and communities of color that are especially vulnerable to environmental pollution because of existing health burdens and limited access to green spaces.⁶ This Notice Letter covers leaks in the city of Chelsea and the following Boston neighborhoods: Chinatown, Dorchester, East Boston, Jamaica Plain, Mattapan, Roslindale, Roxbury, South End, and Back Bay (collectively, the “affected communities”).⁷ Violations in this Notice Letter are based on: 1) leaks found by investigators and 2) National Grid’s leak data as of the end of the most recent quarter (2024 Quarter 2, June 30, 2024).

According to National Grid’s leak data, there are 609 active leaks in the affected communities and 7,118 active leaks in National Grid’s Massachusetts service area.⁸ Each instance of National Grid’s improper response to a gas leak or a gas leak that poses a risk to health or the environment, which does not comply with RCRA, the PSA, or Massachusetts law, is a violation. As discussed below, there are more than 1,400 instances of National Grid failing to repair gas leaks in a timely manner and of gas leaks causing damage to health and the environment.

FACTUAL BACKGROUND

1. National Grid’s Leaking Pipelines

National Grid owns, operates, and is responsible for maintaining gas pipelines in the affected communities. Almost half (43%) of National Grid’s gas distribution pipelines are leaking because they are made of brittle, leak-prone materials like cast iron, wrought iron, steel, copper, and certain plastics that corrode.⁹ Vibrations from heavy construction equipment and earth

⁶ See *Environmental Justice*, MASS. ENV’T PUBLIC HEALTH TRACKING, <https://matracking.ehs.state.ma.us/Environmental-Data/ej-vulnerable-health/environmental-justice.html> (last updated Apr. 4, 2024); M.G.L. ch. 30, §§ 61–62L.

⁷ *Massachusetts 2020 Environmental Justice Populations*, MASS. EOEEA, <https://mass-coeea.maps.arcgis.com/apps/webappviewer/index.html?id=1d6f63e7762a48e5930de84ed4849212> (last updated Nov. 12, 2022).

⁸ Numbers in this Notice Letter are based on National Grid’s quarterly leak report data from the past five years unless otherwise specified.

⁹ AM. GAS FOUND., GAS DISTRIBUTION INFRASTRUCTURE: PIPELINE REPLACEMENT AND UPGRADES 2 (2012), <https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/docs/07-2012%20Gas%20Distribution%20Infrastructure%20->

movement can cause pipelines to crack.¹⁰ And leakage often occurs at the connection joints of pipelines because the gas dries out the material sealing the joints.¹¹ Even plastic pipes crack and cause leaks from earth movement, joint breakdowns, and stress from aboveground weight.¹² Just last year, a plastic gas pipeline fractured, leaked, and caused an explosion killing seven individuals, injuring eleven, and displacing three families.¹³

State law requires gas companies like National Grid to report its gas leaks every quarter,¹⁴ but a local study found “twice as many leaks” than what gas companies report.¹⁵ In the affected communities, National Grid’s data shows that it did not repair 58% of total leaks in the second quarter of this year; more than 600 leaks are still leaking. Plaintiffs’ investigators found 15 explosive-level leaks in just seven days in the affected communities. In 2022, National Grid was the only gas company in the Commonwealth that failed to repair all hazardous leaks by the end of the year even though National Grid must repair hazardous leaks immediately.¹⁶

2. Gas Leaks Cause Deadly Explosions and Fires

Leaked gas from National Grid’s pipelines is 95–98% methane.¹⁷ Methane ignites in an enclosed space when the methane concentration is within the “explosive range.” The explosive range of methane is 5–15% by volume of total air; the lower explosive limit (“LEL”) of methane is about

[%20Pipeline%20Replacement%20and%20Upgrades.pdf](#); D.P.U. Dkt. No. 23-GSEP-03, Ex. NG-GPP-3 at 2 (Oct. 21, 2023), <https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/18158863>; D.P.U. Dkt. No. 20-80, Local Distribution Cos. Decarbonization Pathways Reports, App. 3 at 43 (Mar. 18, 2022), <https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/14633267>; D.P.U. Dkt. No. 23-GLC-01, Report to the Legislature on the Prevalence of Natural Gas Leaks in the Natural Gas System at 1 (Dec. 31, 2023), <https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/18749314>.

¹⁰ 49 C.F.R. §§ 192.721, 192.755; 84 Fed. Reg. 18919 (May 2, 2019).

¹¹ *Cast and Wrought Iron Inventory*, U.S. DEP’T OF TRANSP. PHMSA, <https://www.phmsa.dot.gov/data-and-statistics/pipeline-replacement/cast-and-wrought-iron-inventory> (last updated Apr. 9, 2024).

¹² AM. GAS FOUND., GAS DISTRIBUTION INFRASTRUCTURE: PIPELINE REPLACEMENT AND UPGRADES, *supra* note 9, at 3; Bo Gao et al., *Study of Methane Migration in the Shallow Subsurface from a Gas Pipe Leak*, 9 ELEMENTA: SCI. OF THE ANTHROPOCENE 1 (2021), <https://doi.org/10.1525/elementa.2021.00008>.

¹³ *UGI Corporation Natural Gas-Fueled Explosion and Fire*, NAT’L TRANSP. SAFETY BD. (July 18, 2023), <https://www.nts.gov/investigations/Pages/PLD23LR002.aspx>.

¹⁴ 220 CMR 114.08.

¹⁵ *Shared Action Plan Annual Results Year 3 2022–2023*, HEET, <https://www.heet.org/gas-leaks/shared-action-plan-year-3> (last visited May 16, 2024); M.G.L. ch. 164, §§ 76, 105A; 49 C.F.R. § 192.603(b).

¹⁶ Report to the Legislature on the Prevalence of Natural Gas Leaks in the Natural Gas System, *supra* note 9, at 11; 220 CMR 114.04.

¹⁷ *Overview of the Oil and Natural Gas Industry*, EPA, <https://www.epa.gov/natural-gas-star-program/overview-oil-and-natural-gas-industry#:~:text=Production%3A%20Taking%20raw%20natural%20gas,95%2D98%20percent%20methane> (last updated May 3, 2023).

5%, and the upper explosive (“UEL”) limit is about 15%.¹⁸ Enclosed spaces include homes, buildings, crawlspaces, manholes, and other enclosed structures.¹⁹ Gas leaks of methane concentrations outside the explosive range are still dangerous because their concentrations can fluctuate in enclosed spaces and become ignitable.²⁰

Methane can be ignited by static electricity; electric sparks and arcs (electrical appliances, motors, light switches, etc.); mechanical sparks (friction, falling objects, tools, machinery, etc.); lightning; and open flames (matches, lit cigarettes, fireworks, etc.).²¹

In December 2017, a National Grid gas leak ignited and fueled flames as high as a two-story home for more than 24 hours in Roslindale.²² In 2018, several gas-fueled explosions damaged 131 structures (including five homes), killed a teenager, and injured 22 individuals in Merrimack Valley.²³ In December 2019, gas leaks caused 12 manhole covers to explode in Brookline where residents had been smelling gas for years.²⁴ Also in 2019, a gas-fueled basement fire was reported in Mattapan. In June 2022, gas leaks caused two manhole covers (each weighing 200 pounds) to explode in the Financial District of Boston, shattering windows and injuring one.²⁵

¹⁸ *Cameo Chemicals: Methane*, NAT’L OCEANIC & ATM. ADMIN., <https://cameochemicals.noaa.gov/chemical/8823> (last visited Jan 30, 2024).

¹⁹ See, e.g., *Confined Spaces*, OSHA, <https://www.osha.gov/confined-spaces> (last visited Jan. 15, 2024).

²⁰ 88 Fed. Reg. 31890, 31910 (May 5, 2023); Bo Gao et al., *Study of Methane Migration in the Shallow Subsurface from a Gas Pipe Leak*, *supra* note 12.

²¹ Pengliang Li et al., *Experimental Study on Vented Explosion Overpressure of Methane/Air Mixtures in Manhole*, 374 J. HAZARDOUS MATERIALS 349 (2019), <https://doi.org/10.1016/j.jhazmat.2019.04.046>; *Ignition*, UNITED KINGDOM HEALTH & SAFETY EXEC., <https://www.hse.gov.uk/offshore/strategy/ignition.htm> (last visited Jan. 30, 2024).

²² Abbey Niezgoda & Kaitlin McKinley, *Crews Working on Temporary Line for Fiery Gas Leak Fix in Boston*, NBC10 BOS. (Jan. 1, 2018), <https://www.nbcboston.com/news/local/crews-monitoring-fiery-gas-leak-in-roslindale/41767/>.

²³ NAT’L TRANSP. SAFETY BD., NTSB/PAR-19/02, PB2019-101365, OVERPRESSURIZATION OF NATURAL GAS DISTRIBUTION, EXPLOSIONS, AND FIRES IN MERRIMACK VALLEY, MASSACHUSETTS SEPTEMBER 13, 2018 (2019), <https://www.nts.gov/investigations/AccidentReports/Reports/PAR1902.pdf>.

²⁴ Danny McDonald & Adam Sennott, *Gas Leak Causes Underground Explosion in Brookline, Blowing Off Manhole Covers*, BOS. GLOBE (Dec. 4, 2019), <https://www.bostonglobe.com/metro/2019/12/04/multiple-manhole-explosions-shutdown-part-route-brookline/vAIfqOYPDMK5MqIespRBKI/story.html>; *Brookline Street Closed After 12 Explosions From Manhole*, CBS NEWS BOS. (May 26, 2019), <https://www.cbsnews.com/boston/news/brookline-hammond-street-closed-manhole-fire-explosions/>.

²⁵ Jim Morelli, *Manhole Explosions Add Chaos to Morning Rush*, BOSTON 25 NEWS (June 2, 2022), <https://www.boston25news.com/news/local/1-person-taken-hospital-after-manhole-explosions-blow-out-windows-boston-buildings/QDMFIOIXIFH6FNOHPHLWOFEKKI/>; see generally Alexander Thompson, *The Solution to Boston’s Manhole Explosions Is an Engineering ‘Game Changer,’* BOS. GLOBE (Aug. 10, 2022), <https://www.bostonglobe.com/2022/08/10/metro/whats-causing-bostons-manhole-explosions-how-eversource-is-trying-prevent-them/> (explaining how gas leaks cause manhole explosions).

Just two days ago, on August 11, 2024, a gas leak explosion destroyed a home and killed two people in Baltimore.²⁶

3. Gas Leaks Kill Trees, Exacerbating Heat Islands and Heat-Related Illnesses

Methane from leaking gas pipelines contributes to climate change and extreme temperatures. In 2015, the number of 90°F+ days per year was 22—this number will almost double by 2030.²⁷ These skyrocketing temperatures are more dangerous in Boston and Chelsea, which are heat islands.

The heat island effect refers to urban areas that are much hotter than outlying areas (sometimes by as much as 60°F) because urban areas lack trees and greenspace, and contain more heat-retaining buildings and pavement.²⁸ EPA calls heat “the leading weather-related killer” in the U.S.²⁹ as excess heat contributes to and exacerbates health problems, such as heat cramps, heat exhaustion, and heat stroke.³⁰ The city of Boston recognizes that heat islands worsen existing health conditions, like asthma, diabetes, and respiratory and cardiovascular conditions.³¹

Although hundreds are hospitalized in Massachusetts every year due to heat-related illnesses,³² a recent study showed that maximizing tree cover in a city can help reduce emergency visits by

²⁶ Zenebou Sylla et al., *2 Dead in Maryland House Explosion, Authorities Say*, CNN (Aug. 12, 2024), <https://www.cnn.com/2024/08/11/us/harford-county-maryland-house-explosion/index.html>.

²⁷ *Preparing for Heat*, CITY OF BOS., <https://www.boston.gov/departments/environment/preparing-heat> (last updated June 26, 2023).

²⁸ *Learn About Heat Islands*, EPA, <https://www.epa.gov/heatislands/learn-about-heat-islands> (last updated Aug. 28, 2023).

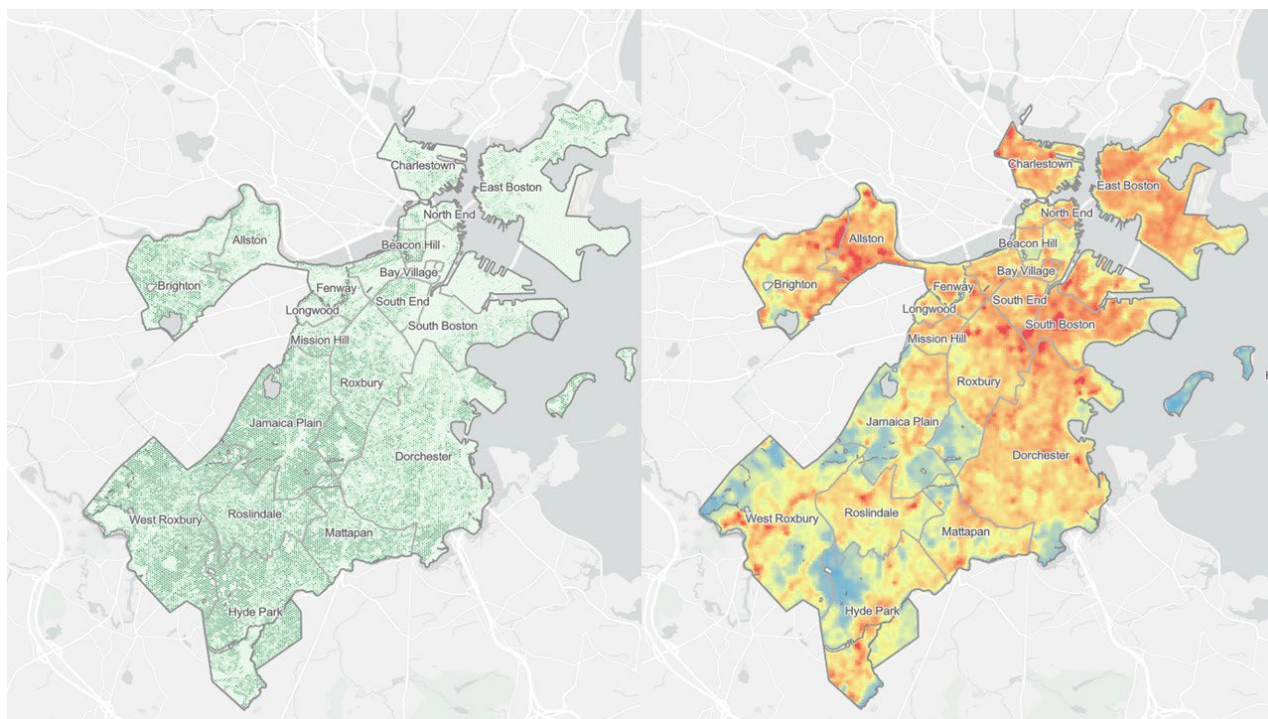
²⁹ *Climate Change Indicators: Heat-Related Deaths*, EPA, <https://www.epa.gov/climate-indicators/climate-change-indicators-heat-related-deaths#:~:text=Heat%20is%20the%20leading%20weather,heat%20events%20guidebook> (last updated July 23, 2024).

³⁰ *Heat Island Impacts*, EPA, <https://www.epa.gov/heatislands/heat-island-impacts> (last updated Aug. 28, 2023).

³¹ CITY OF BOSTON, *HEAT RESILIENCE SOLUTION FOR BOSTON 38* (2022), https://www.boston.gov/sites/default/files/file/2022/04/04212022_Boston%20Heat%20Resilience%20Plan_highres-with%20Appendix%20%281%29.pdf.

³² Miriam Wasser, *Most New England States Don't Track 'Heat-Related' Deaths. Experts Say That's a Problem*, WBUR (Aug. 31, 2023), <https://www.wbur.org/news/2023/08/31/heat-waves-mortality-excess-deaths-climate-change>.

47% and even more in environmental justice communities.³³ Tree equity maps show that in Boston, lower tree cover overlaps with higher temperatures and vice versa:³⁴



Gas leaks are killing vital public shade trees. The methane in gas removes oxygen and moisture in the soil, which trees need to survive.³⁵ As a result, National Grid’s tree-killing gas leaks will increase disastrous health effects from extreme heat and heat islands.

4. Deadly Gas Leaks Disproportionately Harm Environmental Justice Communities

National Grid’s gas pipelines are leaking in environmental justice communities, such as the city of Chelsea and the following Boston neighborhoods: Chinatown, Dorchester, East Boston,

³³ Scott Sheridan et al., *Increasing Tree Cover and High-Albedo Surfaces Reduces Heat-Related ER Visits in Los Angeles, CA*, 68 INT’L J. BIOMETEOROLOGY 1603 (2024), <https://doi.org/10.1007/s00484-024-02688-4>.

³⁴ *Tree Canopy vs Other Variables*, SPEAK FOR THE TREES, <https://experience.arcgis.com/experience/ae4b00f4f94d466cabfdaa4779b0b18f/> (last visited May 1, 2024).

³⁵ E.g., Claire Schollaert et al., *Natural Gas Leaks and Tree Death: A First-Look Case-Control Study of Urban Trees in Chelsea, MA USA*, 263 ENV’T POLLUTION 114464 (2020), <https://doi.org/10.1016/j.envpol.2020.114464>; A.D. Adamse et al., *Microbial Activities in Soil Near Natural Gas Leaks*, 83 ARCHIV. MIKROBIOL. 32 (1972), <https://doi.org/10.1007/BF00425043>.

Jamaica Plain, Mattapan, Roslindale, and Roxbury.³⁶ Boston Gas d/b/a/ National Grid supplies gas to almost half (46%) of the total environmental justice population in the Commonwealth.³⁷

In environmental justice communities, explosion-causing and tree-killing gas leaks are more prevalent and take longer to get repaired.³⁸ Environmental justice communities also have fewer trees and higher temperatures.³⁹ In Massachusetts, 94% of people of color and low-income communities live in a nature-deprived area.⁴⁰ Fewer trees mean less shading and cooling, making low-income communities and communities of color more susceptible to heat-related and heat-intensified illnesses, like strokes and asthma.

LEGAL BACKGROUND

1. Resource Conservation and Recovery Act

The purpose of RCRA is to “reduce[] or eliminate[] . . . the generation of hazardous waste . . . as expeditiously as possible” and to “minimize the present and future threat to human health and the environment” from hazardous waste that is nevertheless generated. 42 U.S.C. § 6902.

Under RCRA, the definition of “hazardous waste” is

a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may—
(A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or
(B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

³⁶ *Massachusetts 2020 Environmental Justice Populations*, *supra* note 7.

³⁷ D.P.U. Dkt. No. 20-80, Local Distribution Cos. Decarbonization Pathways Reports, App. 3 at 26 (Mar. 18, 2022), <https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/14633267>.

³⁸ Marcos Luna & Dominic Nicholas, *An Environmental Justice Analysis of Distribution-Level Natural Gas Leaks in Massachusetts, USA*, 162 ENERGY POL’Y 112778 (2022), <https://doi.org/10.1016/j.enpol.2022.112778>.

³⁹ CITY OF BOSTON, HEAT RESILIENCE SOLUTION FOR BOSTON 26, 44 (2022), https://www.boston.gov/sites/default/files/file/2022/04/04212022_Boston%20Heat%20Resilience%20Plan_highres-with%20Appendix%20%281%29.pdf; Alison Kuznitz, *Neighborhoods in Mass. Could Get More Shade from Trees Under New Climate Bill*, WBUR (May 5, 2023), <https://www.wbur.org/news/2023/05/05/tree-canopy-heat-island-shade-climate>; Vince Dixon, *In Boston’s Redlined Neighborhoods, the Summer’s Heat Waves Are Even Hotter*, BOS. GLOBE (Aug. 1, 2024), <https://apps.bostonglobe.com/metro/graphics/2024/08/racial-wealth-gap-heat-disparity/>.

⁴⁰ Jenny Rowland-Shea et al., *The Nature Gap*, CTR. FOR AM. PROGRESS 24–25 (2020), <https://www.americanprogress.org/wp-content/uploads/sites/2/2020/07/The-Nature-Gap4.pdf>.

Id. § 6903(5).

“Solid waste” is defined as any “discarded material.” *Id.* § 6903(27). “Discarded” includes materials that are “[d]isposed of.” 40 C.F.R. § 261.2(b)(1). RCRA defines “disposal” as

the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters.

42 U.S.C. § 6903(3).

Under RCRA, waste is “hazardous” if it is ignitable, *inter alia*. 40 C.F.R. §§ 261.20, 261.21; *see* 42 U.S.C. §§ 6903(5), 6921. Leaked natural gas is “hazardous waste” because the discarded gas is 95–98% methane that is highly flammable (ignitable). 40 C.F.R. §§ 261.20, 261.21(a)(3); 49 C.F.R. § 173.115; *see* 42 U.S.C. §§ 6903(5), 6921.

Additionally, RCRA prohibits “any solid waste management practice or disposal of solid waste or hazardous waste which constitutes the open dumping of solid waste or hazardous waste.” 42 U.S.C. § 6945(a). In enacting RCRA, Congress found that “open dumping is particularly harmful to health . . . and pollutes the air and the land.” *Id.* § 6901(b)(4). “Open dumping” is defined as “any facility or site where solid waste is disposed of which is not a sanitary landfill which meets the criteria promulgated under section 6944 of this title and which is not a facility for disposal of hazardous waste.” *Id.* § 6903(14).

Pursuant to 42 U.S.C. § 6944, EPA created criteria for determining when the disposal of solid or hazardous waste constitutes open dumping in 40 C.F.R. Part 257. Facilities or practices “failing to satisfy any of the criteria in §§ 257.1 through 257.4 or §§ 257.5 through 257.30 or §§ 257.50 through 257.107 are considered open dumps, which are prohibited under section 4005 [42 U.S.C. § 6945] of the Act.” 40 C.F.R. § 257.1(a). “Facility” is defined as “all contiguous land and structures, other appurtenances, and improvements on the land used for the disposal of solid waste.” *Id.* § 257.2. “Practice” is defined as “the act of disposal of solid waste.” *Id.*

The open dumping criterion in 40 C.F.R. § 257.3-8(a) provides that the “concentration of explosive gases generated by the facility or practice shall not exceed . . . [t]wenty-five percent (25%) of the lower explosive limit for the gases in facility structures.” “Explosive gas” is defined as methane. *Id.* § 257.3-8(e)(3). “Facility structures” are defined as “any buildings and sheds or utility or drainage lines on the facility.” *Id.* § 257.3-8(e)(4). The open dumping criterion in 40 C.F.R. § 257.3-8(b) provides that a “facility or practice shall not pose a hazard to the safety of persons or property from fires.”

As discussed below, in the affected communities, National Grid’s leak data shows there are at least 24 instances of National Grid’s gas leaks causing or contributing to an imminent and substantial endangerment and at least 37 instances of open dumping.

RCRA authorizes any person to “commence a civil action” against any person “who is alleged to be in violation of any permit, standard, regulation, condition, requirement, prohibition, or order” or “who has contributed or who is contributing to the past or present handling, storage, treatment, transportation, or disposal of any solid or hazardous waste which may present an imminent and substantial endangerment to health or the environment.” 42 U.S.C. § 6972(a)(1). Each day of a violation of RCRA can result in a civil penalty of \$90,702. *Id.* § 6972(a); 40 C.F.R. § 19.4.

2. Pipeline Safety Act

The purpose of the PSA is to “provide adequate protection against risks to life and property posed by pipeline transportation and pipeline facilities.” 49 U.S.C. § 60102. The PSA prescribes, *inter alia*, minimum safety standards on pipeline operators on gas pipeline leak detection and repair. *Id.* § 60102(q). Violations of certain “safety standard[s] or practice[s] of a State” also constitute a violation of the PSA. *Id.* The Commonwealth of Massachusetts has authority to regulate intrastate pipelines under the PSA. *Id.* § 60105; M.G.L. ch. 164, § 105A.

Under the PSA, “[n]o person may operate a segment of pipeline” unless that person complies with the PSA. 49 C.F.R. § 192.703. The PSA requires that “Hazardous leaks must be repaired promptly.” *Id.* “Hazardous leak” is defined as a “leak that represents an existing or probable hazard to persons or property and requires immediate repair or continuous action until the conditions are no longer hazardous.” *Id.* § 192.1001. Gas companies also must “take steps to minimize the danger of accidental ignition of gas in any structure or area where the presence of gas constitutes a hazard of fire or explosion.” *Id.* § 192.751.

Similarly, Massachusetts prescribes a time frame for the repair of leaks according to the leak’s “grade.” 220 CMR 114.04. A Grade 1 leak is a leak that “represents an existing or probable hazard to persons or property. Grade 1 leaks require the immediate commencement of repair-and continuous action until the conditions are no longer hazardous, the source of the leak is eliminated, and permanent repairs have been completed.” *Id.* 114.04(3)(a).

Government and industry sources define a Grade 1 leak as a “leak that represents an existing or probable hazard to persons or property” and includes the following:⁴¹

- i. Any leak that, in the judgment of operating personnel at the scene, constitutes an immediate hazard;
- ii. Escaping gas that is ignited;
- iii. Any indication of gas which has migrated into or under a building, or into a tunnel;
- iv. Any indication of gas which has migrated to an outside wall of a building where gas would likely migrate or into a tunnel;

⁴¹ 88 Fed. Reg. at 31917 (discussing the Gas Piping Technology Committee (“GPTC”)’s Guide for Gas Transmission and Distribution Piping Systems).

- v. Any reading of 80% of the lower explosive limit (“LEL”) [4%], or greater, in a confined space;
- vi. Any reading of 80% LEL, or greater, in small substructures (other than gas-associated substructures) from which gas would likely migrate to the outside wall of a building; or
- vii. Any leak that can be seen, heard, or felt, and which is in a location that may endanger the general public or property.⁴²

A Grade 2 leak is a leak that “is recognized as nonhazardous to persons or property at the time of detection” and must be repaired or the pipeline replaced within “12 months from the date the leak was classified.” *Id.* 114.04(3)(b). Grade 2 leaks may become hazardous.⁴³

A Grade 3 leak is a leak that “is recognized as nonhazardous to persons or property at the time of detection and can be reasonably expected to remain non-hazardous.” *Id.* 114.04(3)(c). A Grade 3 leak has a significant environmental impact (“G3SEI”) if: 1) “the highest barhole reading shows a gas-in-air reading of 50% or higher or,” 2) “the Leak Extent is 2,000 square feet or greater.” *Id.* 114.07(1). The first method is the “Barhole method,” and the second method is the “leak extent method.” Gas companies are allowed to redesignate a G3SEI leak “initially designated as [G3SEI] by the Barhole method”—but not the leak extent method—“to a standard Grade 3 leak if subsequent annual survey measurement indicates that the leak no longer qualifies as environmentally significant.” *Id.* 114.07(4).

G3SEI leaks are also known as “super-emitters” because they disproportionately emit methane: a 2016 study shows that only seven out of 100 leaks were responsible for half of the total methane emissions from such 100 leaks in the Greater Boston area.⁴⁴

In addition, National Grid is required to monitor and report detailed information about its gas leaks every quarter, including: 1) leaks carried forward from the previous quarter, i.e., leaks that were still leaking at the end of the previous quarter; 2) new leaks identified by classification; 3) each leak repaired or eliminated; and 4) active, unrepaired leaks at the end of the quarter, among others. *Id.* 114.08(2).

As discussed below, in the affected communities, National Grid’s leak data shows there were at least 879 instances where National Grid failed to promptly repair hazardous leaks; at least 879 instances where National Grid failed to immediately commence repair and continuous action for

⁴² *Id.*

⁴³ D.P.U. Dkt. No. 20-120, Order (Sept. 30, 2021), <https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/14035554>.

⁴⁴ Margaret F. Hendrick et al., *Fugitive Methane Emissions from Leak-Prone Natural Gas Distribution Infrastructure in Urban Environments*, 213 ENV’T POLLUTION 710 (2016), <https://doi.org/10.1016/j.envpol.2016.01.094>; *Fixing Super-Emitting Gas Leaks: Shared Action Plan Update*, HEET (Nov. 23, 2022), <https://www.heet.org/blog-items/fixing-super-emitting-gas-leaks-shared-action-plan-update>.

hazardous Grade 1 leaks until it removes the hazardous conditions, eliminates the source of the leak, and completes permanent repairs; at least 290 instances where National Grid failed to timely repair Grade 2 leaks; at least 59 instances where National failed to timely eliminate Grade 3SEI (super-emitter) leaks; and at least 20 instances where National Grid failed to comply with monitoring and reporting requirements.

The PSA authorizes any person to “bring a civil action” against another person for violating the statute, which includes certain state standards. 49 U.S.C. § 60121. Each day of a violation of the PSA can result in a civil penalty of \$266,015. *Id.* §§ 60122(a), 60118(a); 49 C.F.R. § 190.223.

3. **Massachusetts Environmental Citizen Suit Statute**

The Massachusetts Environmental Citizen Suit Statute authorizes Massachusetts-domiciled persons (at least 10) to enjoin “damage to the environment” if such damage “constitutes a violation of a statute, ordinance, by-law or regulation the major purpose of which is to prevent or minimize damage to the environment.” M.G.L. ch. 214, § 7A. “Person” includes individuals, associations, and corporations. *Id.* “Damage to the environment” is defined as:

any destruction, damage or impairment, actual or probable, to any of the natural resources of the commonwealth, whether caused by the defendant alone or by the defendant and others acting jointly or severally. Damage to the environment shall include, but not be limited to, air pollution, water pollution, improper sewage disposal, pesticide pollution, excessive noise, improper operation of dumping grounds, impairment and eutrophication of rivers, streams, flood plains, lakes, ponds or other water resources, destruction of seashores, dunes, wetlands, open spaces, natural areas, parks or historic districts or sites. Damage to the environment shall not include any insignificant destruction, damage or impairment to such natural resources.

Id.

The Massachusetts Environmental Citizen Suit authorizes injunctive relief and cost recovery for expert witness fees. *Id.*

As discussed below, in the affected communities, there are more than 200 instances of National Grid’s gas leaks causing damage to the environment by damaging public shade trees that help mitigate the heat island effect.

NATIONAL GRID’S VIOLATIONS

National Grid has violated, is violating, and will continue to violate RCRA, the PSA, and the Massachusetts prohibition on damage to the environment.

1. National Grid Is Violating, Has Violated, and Will Continue Violating RCRA.

National Grid generates, stores, transports, and/or disposes of hazardous waste and thus is subject to RCRA.

A. National Grid Has Contributed, Is Contributing, and Will Continue Contributing to an Imminent and Substantial Endangerment to Health and the Environment.

Through its actions and omissions, National Grid contributes to the past and present handling, storage, treatment, transportation, and/or disposal of hazardous waste which may and does present an imminent and substantial endangerment to health or the environment. 42 U.S.C. § 6972(a)(1)(B). National Grid disposes of natural gas, which is “hazardous waste” because the leaked gas is more than 95–98% methane that is highly flammable (ignitable). 40 C.F.R. §§ 261.20, 261.21(a)(3); 49 C.F.R. § 173.115; *see* 42 U.S.C. §§ 6903(5), 6921.

Over the seven days listed below, Plaintiffs’ investigators found 15 locations⁴⁵ in the affected neighborhoods where National Grid’s gas leaks pose an imminent explosion and fire hazard, which constitutes an imminent and substantial endangerment to health and the environment:

<u>Date</u>	<u>Methane Concentration</u>	<u>Location of Gas</u>	<u>Type of Hazardous Leak (Grade 1) under GPTC Guide*</u>
7/24/2023	6%	Manhole at 1916 Dorchester Ave, Boston, MA 02124 (near Ashmont Station)	Any reading of 80% of the LEL (4%), or greater, in a confined space
7/24/2023	5%	Manhole at Intersection of Commonwealth Ave and Arlington St, Boston, MA 02116	Any reading of 80% of the LEL (4%), or greater, in a confined space
11/27/2023	9%	Foundation of 39 Heard St, Chelsea, MA 02150	Any indication of gas which has migrated to an outside wall of a building where gas would likely migrate or into a tunnel
11/27/2023	0.25%	Foundation of 452 Bennington St, East Boston, MA 02128	Any indication of gas which has migrated to an outside wall of a building where gas would likely migrate or into a tunnel

⁴⁵ There is documentation that indicates some of these leaks may have been repaired.



<u>Date</u>	<u>Methane Concentration</u>	<u>Location of Gas</u>	<u>Type of Hazardous Leak (Grade 1) under GPTC Guide*</u>
11/27/2023	5%	Manhole at 451 Bennington St, East Boston, MA 02128	Any reading of 80% of the LEL (4%), or greater, in a confined space
11/27/2023	5%	Manhole at 2909 Washington St, Roxbury, MA 02119	Any reading of 80% of the LEL (4%), or greater, in a confined space
11/27/2023	7%	Manhole at 4109 Washington St, Roxbury, MA 02119	Any reading of 80% of the LEL (4%), or greater, in a confined space
11/27/2023	20%	Manhole at 4109 Washington St, Roxbury, MA 02119 (separate from above)	Any reading of 80% of the LEL (4%), or greater, in a confined space
11/28/2023	4%	Manhole at 4499 Washington St, Roslindale, MA 02131	Any reading of 80% of the LEL (4%), or greater, in a confined space
11/28/2023	11%	Manhole at Intersection of Adams St and Whitten St, Dorchester, MA 02122	Any reading of 80% of the LEL (4%), or greater, in a confined space
11/30/2023	2.7%	Foundation of Massachusetts Government Offices, 100 Cambridge St, Boston, MA 02114	Any indication of gas which has migrated to an outside wall of a building where gas would likely migrate or into a tunnel
11/30/2023	1%	Foundation of 215 Neponset Ave, Dorchester, MA 02122 (Boutwell St side)	Any indication of gas which has migrated to an outside wall of a building where gas would likely migrate or into a tunnel
6/1/2024	4%	Foundation of Melvin H. King South Academy, (McKinley Elementary School), 90 Warren Ave, Boston, MA 02116 (Dartmouth St side)	Any indication of gas which has migrated to an outside wall of a building where gas would likely migrate or into a tunnel
7/23/2024	10%	Foundation of Liberty Mutual Tower, 157 Berkeley St, (145 Columbus Ave), Boston, MA 02116	Any indication of gas which has migrated to an outside wall of a building



<u>Date</u>	<u>Methane Concentration</u>	<u>Location of Gas</u>	<u>Type of Hazardous Leak (Grade 1) under GPTC Guide*</u>
			where gas would likely migrate or into a tunnel
7/24/2024	40%	Foundation of 1562 Dorchester Ave, Dorchester, MA 02122	Any indication of gas which has migrated to an outside wall of a building where gas would likely migrate or into a tunnel

*This table cites the GPTC Guide’s definitions of Grade 1 leaks because such leaks are an imminent and substantial endangerment: Grade 1 leaks are within or dangerously near the explosive range and in or dangerously near an enclosed space where the gas can ignite and result in an explosion or fire. National Grid itself recognizes that methane in enclosed spaces is an emergency even when methane is not in the explosive range (5–15%) and when methane is detected near but not inside an enclosed space.⁴⁶ Similarly, the U.S. Pipeline Hazardous Material Safety Administration recognizes that the PSA definition of “hazardous leak” mirrors the GPTC Grade 1 leak definition.⁴⁷

In addition, since at least 2019, National Grid’s leak reports show that in the affected neighborhoods, there are at least nine hazardous Grade 1 leaks that continue to leak as of June 30, 2024, and constitute an imminent and substantial endangerment to health and the environment, as shown in Exhibit A. One of these hazardous Grade 1 leaks has been leaking for two and a half years before disappearing from National Grid’s leak data despite not being repaired. In the second quarter of 2024, National Grid identified 261 new hazardous Grade 1 leaks in the affected neighborhoods. Upon information and belief, further investigation will indicate more imminent and substantial endangerments.

Each instance of an imminent and substantial endangerment to health and the environment is a violation of RCRA. Each day National Grid violates RCRA amounts to a maximum civil penalty of \$90,702.

B. National Grid Has Open Dumped, Is Open Dumping, and Will Continue Open Dumping By Exceeding the Methane Limitation in Facility Structures.

Through its actions and omissions, National Grid disposes of solid and hazardous waste. RCRA prohibits open dumping, which is the disposal of solid or hazardous waste that fails to meet any open dumping criteria. 42 U.S.C. §§ 6945, 6903(14). The open dumping criteria limits the “concentration of explosive gases generated by the facility or practice . . . [to] [t]wenty-five

⁴⁶ D.P.U. Dkt. No. 22-ERP-05, Ex. 1 Boston Gas Co. National Grid Mass. Emergency Response Plan 33 (July 8, 2022), <https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/15178101>.

⁴⁷ 88 Fed. Reg. at 31917; *supra* notes 41–42 and accompanying text.

percent (25%) of the lower explosive limit for the gases in facility structures.” 40 C.F.R. § 257.3-8(a). Twenty-five percent of the lower explosive limit of methane is 1.25%.⁴⁸

The concentration of National Grid’s gas leaks has exceeded the 1.25% limitation on the methane concentration at building foundations at least 13 times:

<u>Date</u>	<u>Methane Concentration</u>	<u>Location of Gas</u>
7/24/2023	6%	Manhole at 1916 Dorchester Ave, Boston, MA 02124 (near Ashmont Station)
7/24/2023	5%	Manhole at Intersection of Commonwealth Ave and Arlington St, Boston, MA 02116
11/27/2023	9%	Foundation of 39 Heard St, Chelsea, MA 02150
11/27/2023	5%	Manhole at 451 Bennington St, East Boston, MA 02128
11/27/2023	5%	Manhole at 2909 Washington St, Roxbury, MA 2119
11/27/2023	7%	Manhole at 4109 Washington St, Roxbury, MA 02119
11/27/2023	20%	Manhole at 4109 Washington St, Roxbury, MA 02119 (separate from above)
11/28/2023	4%	Manhole at 4499 Washington St, Roslindale, MA 02131
11/28/2023	11%	Manhole at Intersection of Adams St and Whitten St, Dorchester, MA 02122
11/30/2023	2.7%	Foundation of Massachusetts Government Offices, 100 Cambridge St, Boston, MA 02114
6/1/2024	4%	Foundation of Melvin H. King South Academy, (McKinley Elementary School), 90 Warren Ave, Boston, MA 02116 (Dartmouth St side)
7/23/2024	10%	Foundation of Liberty Mutual Tower, 157 Berkeley St, (145 Columbus Ave), Boston, MA 02116
7/24/2024	40%	Foundation of 1562 Dorchester Ave, Dorchester, MA 02122

Upon information and belief, further investigation will indicate more open dumping where gas leaks exceed the 1.25% limitation.

Each day that National Grid’s disposal of solid and hazardous waste exceeds the methane limitation in facility structures constitutes open dumping and is a violation of RCRA. Each day National Grid violates RCRA amounts to a maximum civil penalty of \$90,702.

⁴⁸ See *supra* note 18 and accompanying text.

C. National Grid Has Open Dumped, Is Open Dumping, and Will Continue Open Dumping By Posing a Fire Hazard to Persons and Property.

Through its actions and omissions, National Grid disposes of solid and hazardous waste. RCRA prohibits open dumping, which is the disposal of solid or hazardous waste that fails to meet any open dumping criteria. 42 U.S.C. §§ 6945, 6903(14). The open dumping criteria prohibits a facility or practice from “pos[ing] a hazard to the safety of persons or property from fires.” 40 C.F.R. § 257.3-8(b).

Since at least 2019, National Grid’s facilities and practices have posed a hazard to the safety of persons or property from fires at least 24 times. Plaintiffs’ investigators found 15 locations in the affected neighborhoods where National Grid’s gas leaks pose an imminent fire and explosion hazard. *Supra* at 12–14. In addition, National Grid’s leak reports, show that in the affected neighborhoods, there are at least nine unrepaired hazardous Grade 1 leaks that continue to leak as of June 30, 2024, that pose an imminent fire and explosion hazard, as shown in Exhibit A. One of these hazardous Grade 1 leaks has been leaking for more than two and a half years. In the second quarter of 2024, National Grid identified 261 new hazardous Grade 1 leaks in the affected neighborhoods. Upon information and belief, further investigation will indicate more leaks that pose a fire hazard to persons and property.

Each day that National Grid’s disposal of solid and hazardous waste poses a fire hazard to persons and property constitutes open dumping and is a violation of RCRA. Each day National Grid violates RCRA amounts to a maximum civil penalty of \$90,702.

2. **National Grid Has Violated, Is Violating, and Will Continue Violating the Pipeline Safety Act.**

National Grid must comply with the PSA because it owns and operates a pipeline facility, which includes “a pipeline, a right of way, a facility, a building, or equipment used in transporting gas or treating gas during its transportation.” 49 U.S.C. § 60101(a)(3).

National Grid is violating the PSA by failing to promptly repair hazardous leaks, immediately commence repair and continuous action for hazardous Grade 1 leaks, timely repair Grade 2 leaks, and timely eliminate super-emitter (G3SEI) leaks.

A. National Grid Has Failed, Is Failing, and Will Continue Failing to Promptly Repair Hazardous Leaks.

The PSA requires National Grid to “promptly” repair hazardous leaks. 49 C.F.R. § 192.703. The PSA requires that “Hazardous leaks must be repaired promptly.” *Id.* “Hazardous leak” is synonymous with Massachusetts’ definition of Grade 1 leaks.⁴⁹

⁴⁹ See 88 Fed. Reg. at 31911.

Since at least 2019, according to National Grid’s leak data, National Grid has failed to “promptly” repair hazardous leaks in Boston and Chelsea at least 879 times, as shown in Exhibit A. National Grid’s leak data shows it allows hazardous leaks to continue leaking for more than two and a half years. Upon information and belief, further investigation will indicate more hazardous leaks that National Grid failed to promptly repair.

Each instance of National Grid’s failure to promptly repair hazardous leaks is a violation of the PSA. Each day National Grid violates the PSA amounts to a maximum civil penalty of \$266,015.

B. National Grid Has Failed, Is Failing, and Will Continue Failing to Immediately Commence Repair and Continuous Action to Eliminate Hazardous Grade 1 Leaks.

Massachusetts’s gas leaks regulations are incorporated in the PSA. 49 U.S.C. § 60121(c). The Commonwealth mandates the repair of leaks within specified time frames. 220 CMR 114.04. A Grade 1 leak is a leak that “represents an existing or probable hazard to persons or property,” and if present, National Grid must “immediate[ly] commence[] repair-and continuous action until the conditions are no longer hazardous, the source of the leak is eliminated, and permanent repairs have been completed.” *Id.* 114.04(3)(a).

Since at least 2019, according to National Grid’s leak data, National Grid failed to “immediate[ly] commence[] repair-and continuous action until the conditions are no longer hazardous, the source of the leak is eliminated, and permanent repairs have been completed” for at least 879 hazardous Grade 1 leaks in Boston and Chelsea, as shown in Exhibit A. And National Grid stopped reporting on eight of those 879 active hazardous Grade 1 leaks, disappearing from its quarterly leak reports. National Grid’s leak data shows it allows hazardous Grade 1 leaks to continue leaking for more than two and a half years. Upon information and belief, further investigation will indicate more hazardous Grade 1 leaks for which National Grid did not immediately commence repair and continuous action until elimination of such leaks.⁵⁰

Each instance of National Grid’s failure to “immediate[ly] commence[] repair-and continuous action until the conditions are no longer hazardous, the source of the leak is eliminated, and permanent repairs have been completed” for hazardous Grade 1 leaks is a violation of the PSA. Each day National Grid violates the PSA amounts to a maximum civil penalty of \$266,015.

C. National Grid Has Failed, Is Failing, and Will Continue Failing to Timely Repair Grade 2 Leaks.

Massachusetts’s gas leaks regulations are incorporated in the PSA. 49 U.S.C. § 60121(c). A Grade 2 leak is a leak that “is recognized as nonhazardous to persons or property at the time of detection, but justifies scheduled repair based on probable future hazard.” 220 CMR

⁵⁰ *Shared Action Plan Annual Results Year 3 2022–2023*, HEET, *supra* note 15 and accompanying text.

114.04(3)(b). National Grid must repair Grade 2 leaks within “12 months” from the date the leak was classified. *Id.*

Since at least 2019, according to National Grid’s leak data, National Grid failed to repair at least 290 Grade 2 leaks within 12 months in Boston and Chelsea, as shown in Exhibit B. And National Grid stopped reporting on 12 of those 290 active Grade 2 leaks, disappearing from its quarterly leak reports. Upon information and belief, further investigation will indicate more Grade 2 leaks National Grid did not repair within 12 months.

Each instance of National Grid’s failure to timely repair Grade 2 leaks is a violation of the PSA. Each day National Grid violates the PSA amounts to a maximum civil penalty of \$266,015.

D. National Grid Has Failed, Is Failing, and Will Continue Failing to Timely Eliminate Super-Emitter Gas Leaks (Grade 3 Leaks with A Significant Environmental Impact).

Massachusetts’s gas leaks regulations are incorporated in the PSA. 49 U.S.C. § 60121(c). The Commonwealth mandates the designation and timely elimination of super-emitter leaks. 220 CMR 114.07.

Since at least 2019, according to National Grid’s leak data, National Grid has failed to timely eliminate super-emitter leaks at least 59 times, including by failing to designate leaks as super-emitter when the leak meets the super-emitter leak threshold, *id.* 114.07(1); or improper downgrading super-emitter leak to a standard Grade 3 leak when National Grid used the leak extent method for the initial super-emitter designation, *id.* 114.07(4), as shown in Exhibit C. *Id.* 114.07(2). Some super-emitter leaks in the affected neighborhoods have been leaking for more than 20 years. Upon information and belief, further investigation will indicate more super-emitter leaks that National Grid failed to timely eliminate.

Each instance of National Grid’s failure to timely eliminate a G3SEI leak is a violation of the PSA. Each day National Grid violates the PSA amounts to a maximum civil penalty of \$266,015.

E. National Grid Has Failed, Is Failing, and Will Continue Failing to Comply with Monitoring and Reporting Requirements.

In each quarter, National Grid must report leaks that are carried forward from the last quarter until they are eliminated, i.e., leaks that were still leaking at the end of the previous quarter, as well as leaks that are newly identified in the current quarter. 220 CMR 114.08(2).

Since at least 2019, National Grid has failed to continue reporting on active leaks on which it should have continued to report in subsequent quarters at least 20 times, five of which Plaintiffs’ investigators were able to confirm are still leaking. According to National Grid’s leak data, National Grid has deleted from its data eight active hazardous Grade 1 leaks and 12 active Grade 2 leaks. These abandoned leaks, each with a unique leak identification number, continue to leak

and pose safety risks. In 2014 and 2015, MIT researchers found that National Grid deleted almost 20% (17%) of its active leaks from its leak reports.⁵¹ Upon information and belief, further investigation will indicate more instances of monitoring and reporting violations.

Each instance of National Grid’s failure to properly monitor and report a leak is a violation of the PSA. Each day National Grid violates the PSA amounts to a maximum civil penalty of \$266,015.

3. **National Grid Has Caused, Is Causing, and Will Continue Causing Damage to the Environment.**

Under the Massachusetts Environmental Citizen Suit Statute, National Grid’s gas leaks have caused “damage to the environment” in the form of killing and weakening public shade trees by displacing oxygen in the soil and drying the soil.⁵² Such damage to the environment constitutes a violation of the PSA, 49 U.S.C. § 60102(b); Massachusetts gas leak regulations, 220 CMR Part 114; Massachusetts Public Shade Tree Law, M.G.L. ch. 87, §§ 1–14; and common law torts, the major purpose of which is to prevent or minimize damage to the environment.

In the affected neighborhoods, throughout 2023 and 2024, Plaintiffs’ investigators found more than 200 gassed trees that show signs of damage or were dead with high methane concentrations in their tree pits and corresponding low oxygen concentrations. Some trees had as high as 90% methane and only 1% oxygen of total air in their tree pits—normally, the air in soil should contain no more than 0.1% methane and should contain 20% oxygen.⁵³ National Grid itself acknowledges that dead vegetation is a sign of a gas leak.⁵⁴

Since at least 2019, on the urban, concrete streets of Boston and Chelsea, National Grid’s gas leaks are killing trees that mitigate the heat island effect and provide other public health benefits. Boston and Chelsea residents “rely” on such trees to stay cool in hot weather.⁵⁵ Most of these individuals are in environmental justice communities and are especially vulnerable to heat-

⁵¹ Michael Webber & Al Carter, *Lost Leaks*, MASS. INST. TECH., <http://lostleaks.csail.mit.edu/> (last visited July 15, 2024).

⁵² *Supra* note 35 and accompanying text.

⁵³ Ana Maria Carmen Ilie & Carmela Vaccaro, *Atmospheric and Soil Methane Concentrations Integrating a New Gas Detection Technology*, PROCEEDINGS, Nov. 2020, <https://doi.org/10.3390/ASEC2020-07564>; Edward John Russel & Alfred Appleyard, *The Atmosphere of the Soil: Its Composition and the Causes of Variation*, 7 J. AGRIC. SCI. 1, <https://doi.org/10.1017/S0021859600002410>.

⁵⁴ *Report a Gas Emergency*, NATIONAL GRID, <https://www.nationalgridus.com/MA-Gas-Home/Natural-Gas-Safety/report-a-gas-emergency> (last visited July 2, 2024).

⁵⁵ CITY OF BOSTON, HEAT RESILIENCE SOLUTION FOR BOSTON 74 (2022), https://www.boston.gov/sites/default/files/file/2022/04/04212022_Boston%20Heat%20Resilience%20Plan_highres-with%20Appendix%20%281%29.pdf; see CITY OF CHELSEA, URBAN HEAT ISLAND MITIGATION PROJECT (2021), https://cms5.revize.com/revize/chelseama/Document_Center/Departments/Housing%20&%20Community%20Development/Environment%20and%20Climate%20Resilience/5.4_chelsea_uhi_report.pdf.

related and heat-intensified illnesses and death. Upon information and belief, further investigation will indicate more trees that National Grid's gas leaks are damaging.

Each instance of National Grid's gas leaks that damage or kill trees constitutes damage to the environment.

4. **National Grid Has Violated, Is Violating, and Will Continue Violating State Law.**

While there are no special notice requirements for other state claims, like the Massachusetts Public Shade Tree Law and common law torts, Plaintiffs also inform National Grid of its intent to sue for relief related to: 1) explosion and fire risks, and 2) harm to public shade trees, from National Grid's gas leaks.

RELIEF REQUESTED

National Grid is liable for the above-described violations. Each separate violation of RCRA subjects the violator to a penalty of up to \$90,702 per day per violation for all violations occurring after November 2, 2015, where penalties are assessed on or after December 27, 2023. 40 C.F.R. §§ 19.1–19.4. Each separate violation of the PSA subjects the violator to a penalty of up to \$266,015 of civil penalties per day per violation. 49 U.S.C. §§ 60122(a), 60118(a); 49 C.F.R. § 190.223. Plaintiffs will seek the full penalties allowed by law.

In addition to civil penalties, Plaintiffs will seek declaratory relief and injunctive relief to prevent further violations of RCRA, the PSA, and the Massachusetts Environmental Citizen Suit Statute, and such other relief as permitted by law. Plaintiffs will seek an order from the Court requiring National Grid to correct all identified violations through direct implementation of control measures and demonstration of full regulatory compliance. Pursuant to the citizen suit provisions of RCRA and the PSA, and the Massachusetts Environmental Citizen Suit, Plaintiffs will also seek recovery of costs and fees associated with this matter. 42 U.S.C. § 6972(e); 49 U.S.C. § 60121(b); M.G.L. ch. 214, § 7A. Plaintiffs will also seek other remedies, including damages, under state law.

CONCLUSION

National Grid is in past and continuing violation of the Resource Conservation and Recovery Act; Pipeline Safety Act; Massachusetts Environmental Citizen Suit Statute; and state law. Plaintiffs hereby provide this notice for past and continuing violations outlined above and for continuing violations after this notice. Additional information, including information in Plaintiffs' possession, may reveal further details and violations. This Notice Letter covers all such violations.

This Notice Letter is being provided pursuant to the notice provisions of RCRA, 42 U.S.C. § 6972; the PSA, 49 U.S.C. § 60121; and the Massachusetts Environmental Citizen Suit Statute,



M.G.L. ch. 214, §7A. Unless National Grid cures the RCRA violations within ninety days and the PSA violations within sixty days, Plaintiffs reserve the right to bring a civil action to compel National Grid to comply with RCRA, PSA, and state law to protect the communities in Boston and Chelsea from explosion and fire risks and the loss of vital public shade trees.

As of August 13, 2024, the U.S. Environmental Protection Agency, U.S. Department of Transportation, Attorney General of Massachusetts, Massachusetts Department of Environmental Protection, Massachusetts Department of Public Utilities, Boston Parks and Recreation, and Chelsea Department of Public Works have not begun and are not diligently prosecuting an enforcement action for the violations outlined above. 42 U.S.C. § 6972; 49 U.S.C. § 60121; M.G.L. ch. 214, § 7A. Such agencies are also receiving this Notice Letter.

Plaintiffs welcome the opportunity to discuss this matter with you. If you are interested in discussing the matter, or if you believe any of the above information is incorrect, if you take steps to permanently correct the violations outlined above, if you believe you are currently in compliance with the statutes, or if you have any questions concerning this notice, please contact Heather A. Govern, hgovern@clf.org, (617) 850-1765, as soon as possible.

Sincerely,

Heather A. Govern
Conservation Law Foundation
62 Summer Street
Boston, MA 02110
hgovern@clf.org
(617) 850-1765

Ameya Gehi
Conservation Law Foundation
62 Summer Street
Boston, MA 02110
agehi@clf.org
(617) 850-1795

Additional Recipients:

Corporation Service Company
Registered Agent for Boston Gas Company
d/b/a/ National Grid; National Grid USA;
National Grid USA Service Company Inc.
84 State Street
Boston, MA 02109

Michael S. Regan
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Mail Code 1101A
Washington, DC 20460

David Cash
Regional Administrator
U.S. Environmental Protection Agency, Region
1
5 Post Office Square, Suite 100
Boston, MA 02109

Andrea Campbell
Attorney General of Massachusetts
Attorney General Boston Office
1 Ashburton Place
20th Floor
Boston, MA 02108

Bonnie Heiple
Commissioner
Massachusetts Department of Environmental
Protection
100 Cambridge Street
Suite 900
Boston, MA 02114

Jamie Van Nostrand
Chair
Massachusetts Department of Public Utilities
1 South Station, 3rd Floor
Boston, MA 02110

Max Ford-Diamond
Tree Warden / City Arborist
Boston Parks and Recreation
1010 Massachusetts Avenue
3rd Floor
Boston, MA 02118

Cate Fox-Lent
Commissioner
Chelsea Department of Public Works
Chelsea City Hall, Room #310
500 Broadway
Chelsea, MA 02150

Citizen Suit Coordinator
Environment and Natural Resources
Division
Law and Policy Section
P.O. Box 7415
Ben Franklin Station
Washington, DC 20044-07415