

PROSPECTUS SUPPLEMENT
(To Prospectus dated June 1, 2023)



PERMA-FIX ENVIRONMENTAL SERVICES, INC.
2,051,282 Shares of Common Stock

Pursuant to this prospectus supplement and the accompanying prospectus, and the securities purchase agreement dated May 21, 2024, we are offering in a registered direct offering to certain purchasers, 2,051,282 shares of our common stock, par value \$0.001 per share, at an offering price of \$9.75 per share.

Our common stock is traded on The Nasdaq Capital Market under the symbol “PESI.” On May 21, 2024, the last reported sale price of our common stock on The Nasdaq Capital Market was \$11.49 per share.

We have engaged Craig-Hallum Capital Group LLC and Wellington Shields & Co., LLC to act as our exclusive placement agents in connection with the sale of shares of common stock offered by this prospectus supplement and the accompanying prospectus. The placement agents have agreed to use their best efforts to arrange for the sale of the common stock in this offering. The placement agents are not purchasing or selling any of the shares of common stock we are offering pursuant to this prospectus supplement and accompanying prospectus, and the placement agents are not required to arrange the purchase or sale of any specific number of shares of common stock or dollar amount. We have agreed to pay to the placement agents the placement agent fees set forth in the table below, which assumes we sell all of the shares of common stock offered by this prospectus supplement and the accompanying prospectus. See “Plan of Distribution” in this prospectus supplement for more information regarding these arrangements.

Investing in our common stock involves a high degree of risk. See “Risk Factors” beginning on page S-6 of this prospectus supplement and in the documents incorporated by reference in this prospectus supplement and the accompanying prospectus.

	Per Share	Total
Public Offering price	\$ 9.75	\$ 20,000,000
Placement agent fees (1)	\$ 0.585	\$ 1,200,000
Offering proceeds, before expenses, to us	\$ 9.165	\$ 18,800,000

(1) In addition, we have agreed to reimburse the placement agents for certain of their offering-related expenses. We have also agreed to issue to the placement agents unregistered warrants to purchase up to a number of shares of our common stock equal to 3% of the number of shares of common stock being offered at an exercise price equal to 125% of the offering price of the shares of common stock being offered pursuant to this prospectus supplement and the accompanying prospectus. We refer you to the section titled “Plan of Distribution” beginning on page S-12 of this prospectus supplement for a description of the compensation to be received by the placement agents.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

Delivery of the shares of common stock will be made on or about May 24, 2024, subject to the satisfaction of certain closing conditions.

CRAIG-HALLUM

WELLINGTON SHIELDS

Prospectus Supplement dated May 21, 2024.

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ABOUT THIS PROSPECTUS SUPPLEMENT

This document is part of a “shelf” registration statement on Form S-3 (File No. 333-272074) that we filed with the U.S. Securities and Exchange Commission, or SEC, and is in two parts. The first part is the prospectus supplement, including the documents incorporated by reference, which describes the specific terms of this offering, and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus. The second part, the accompanying prospectus dated June 1, 2023, including the documents incorporated by reference, provides more general information. Generally, when we refer to this “prospectus,” we are referring to both parts of this document combined.

Before you invest, you should carefully read this prospectus supplement, the accompanying prospectus, all information incorporated by reference herein and therein, as well as the additional information described under “Where You Can Find More Information” and “Incorporation of Certain Information by Reference” on page S-15 of this prospectus supplement. These documents contain information you should consider when making your investment decision. This prospectus supplement may add, update, or change information contained in the accompanying prospectus. To the extent that any statement that we make in this prospectus supplement is inconsistent with statements made in the accompanying prospectus or any documents incorporated by reference, the statements made in this prospectus supplement will be deemed to modify or supersede those made in the accompanying prospectus and such documents incorporated by reference; however, if any statement in one of these documents is inconsistent with a statement in another document having a later date and that is incorporated by reference herein, the statement in the document having the later date modifies or supersedes the earlier statement.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference herein were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

You should rely only on the information contained or incorporated by reference in this prospectus supplement, the accompanying prospectus and in any free writing prospectuses we may provide to you in connection with this offering. Neither we nor the placement agents have authorized any other person to provide you with any information that is different. If anyone provides you with different or inconsistent information, you should not rely on it. We are not, and the placement agents are not, making an offer to sell the common stock offered hereby in any jurisdiction where offers and sales are not permitted. The distribution of this prospectus supplement and the accompanying prospectus and the offering of the common stock offered hereby in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement and the accompanying prospectus must inform themselves about, and observe any restrictions relating to, the offering of the securities offered hereby and the distribution of this prospectus supplement and accompanying prospectus outside the United States. This prospectus supplement and the accompanying prospectus does not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus supplement and the accompanying prospectus by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

Unless otherwise indicated, information contained in this prospectus supplement, the accompanying prospectus, or the documents incorporated by reference, concerning our industry and the markets in which we operate, including our general expectations and market position, market opportunity and market share, is based on information from our own management estimates and research, as well as from industry and general publications and research, surveys and studies conducted by third parties. Management estimates are derived from publicly available information, our knowledge of our industry and assumptions based on such information and knowledge, which we believe to be reasonable. In addition, assumptions and estimates of our and our industry’s future performance are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described in “Risk Factors” in this prospectus supplement and accompanying prospectus and under similar headings in the other documents that are incorporated by reference into this prospectus supplement. These and other important factors could cause our future performance to differ materially from our assumptions and estimates. See “Special Note Regarding Forward-Looking Statements.”

When we refer to “Perma-Fix,” “we,” “our,” “us” and the “Company” in this prospectus supplement, we mean Perma-Fix Environmental Services, Inc. and its consolidated subsidiaries, unless otherwise specified. General information about us can be found on our website at www.perma-fix.com. The information on our website is for informational purposes only and should not be relied on for investment purposes. The information on our website is not incorporated by reference into either this prospectus supplement or the accompanying prospectus and should not be considered part of this or any other report filed with the SEC.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus, and the documents incorporated by reference herein and therein contain “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and the Private Securities Litigation Reform Act of 1995, as amended (“PSLRA”), that involve substantial risks and uncertainties. These forward-looking statements are intended to be covered by the safe harbor for forward-looking statements provided by the PSLRA. Forward-looking statements generally relate to future events or our future financial or operating performance. In some cases, you can identify forward-looking statements because they contain words such as “may,” “should,” “expects,” “could,” “intends,” “plans,” “anticipates,” “believes,” “estimates,” “projects,” “contemplates,” “targets,” “predicts,” “potential,” or “continue” or the negative of these terms or other similar terms or expressions that concern our expectations, strategy, plans, or intentions. Our forward-looking statements are based on a series of expectations, assumptions, estimates, and projections about our Company, are not guarantees of future results or performance, and involve substantial risks and uncertainty. We may not actually achieve the plans, intentions, or expectations disclosed in these forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in these forward-looking statements. Forward-looking statements contained in this prospectus supplement, the accompanying prospectus, and the documents incorporated by reference in this prospectus supplement and the accompanying prospectus include, but are not limited to, statements about:

- our anticipated uses of the proceeds of this offering;
- demand for our services;
- reductions in the level of government funding in future years and its effect on the Company;
- the possibility that accelerated investments could adversely affect our operations on an ongoing basis;
- our belief that our base business is well-positioned for the second half of fiscal 2024;
- our belief that advancement of certain initiatives should have a positive impact beginning in the second half of fiscal 2024;
- our ability to reduce operating costs and non-essential expenditures;
- our ability to meet loan agreement quarterly covenant requirements;
- our cash flow requirements;
- our belief that we have sufficient liquidity to fund operations for the next 12 months through cash from operations, borrowing availability under our credit facility, financing, and the collection of accounts receivable;
- the timing and amount of revenue under a multi-year contract awarded by the European Commission to our joint venture with Campoverde Srl;

- our ability to obtain additional grants or bid awards internationally;
- the manner in which applicable governmental entities are required to spend funding to remediate various sites containing environmental hazards;
- our belief that our new PFAS destruction technology process is superior to currently available treatment options;
- our belief that our PFAS technology is highly scalable with minimal capital expenditures;
- our ability to install an operational PFAS destruction unit and accept commercial waste for destruction by the end of 2024;
- our ability to fund remediation expenditures for sites from funds generated internally;
- compliance with environmental regulations;
- our ability to obtain procurement contracts from the Department of Energy (“DOE”) and other government agencies;
- potential effect of being a “Potentially Responsible Party,” or PRP, as such term is defined in 40 CFR § 304.12; and
- potential violations of environmental laws and attendant remediation at our facilities.

We caution you that the forward-looking statements highlighted above do not encompass all the forward-looking statements made in this prospectus supplement, the accompanying prospectus, and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus.

While the Company believes the expectations reflected in such forward-looking statements are reasonable, it can give no assurance such expectations will prove to be correct. There are a variety of factors which could cause future outcomes to differ materially from those expressed in such forward-looking statements, including, but not limited to:

- general economic conditions;
- contract bids, including international markets;
- material reduction in revenues;
- inability to meet our primary lender’s covenant requirements;
- inability to collect in a timely manner a material amount of receivables;
- increased competitive pressures;
- inability to maintain and obtain required permits and approvals to conduct operations;
- inability to develop new and existing technologies in the conduct of operations;
- inability to maintain and obtain closure and operating insurance requirements;
- inability to retain or renew certain required permits;
- discovery of additional contamination or expanded contamination at any of the sites or facilities leased or owned by us or our subsidiaries which would result in a material increase in remediation expenditures;
- delays at our third-party disposal site can extend collection of our receivables greater than twelve months;
- refusal of third-party disposal sites to accept our waste;
- changes in federal, state and local laws and regulations, especially environmental laws and regulations, including changes in the interpretation thereof;

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- inability of the federal government to adopt a budget in a timely manner;
- a change in regulations reducing or even eliminating existing requirements to obtain permits for treatment, storage, and disposal (TSD) activities or licensing to handle low-level radioactive materials;
- management retention and development;
- financial valuation of intangible assets is substantially more/less than expected;
- the need to use internally generated funds for purposes not presently anticipated;
- inability of the Company to maintain the listing of its common stock on The Nasdaq Capital Market;
- terminations of contracts with government agencies or subcontracts involving government agencies, or reduction in amount of waste delivered to the Company under the contracts or subcontracts;
- failure of our Italian joint venture partner to meet its performance obligations under the terms of the European Commission bid award;
- changes in the scope of work relating to existing contracts;
- occurrence of an event similar to COVID-19 and its effect on the U.S. and world economies;
- renegotiation of contracts involving government agencies;
- the risk that disposal expense accrual could prove to be inadequate in the event the waste requires re-treatment;
- inability to raise capital on commercially reasonable terms;
- inability to increase profitable revenue;
- economic uncertainties;
- non-acceptance of our new PFAS destruction technology;
- delays in waste shipments and contract awards;
- new governmental regulations; and
- risk factors and other factors set forth in “Special Note Regarding Forward-Looking Statements” contained in our 2023 Form 10-K and “Forward-Looking Statements” contained in the Management’s Discussion and Analysis of Financial Condition and Results of Operations” of our first quarter 2024 10-Q.

We have based the forward-looking statements contained in this prospectus supplement, the accompanying prospectus and any related free-writing prospectus, and in the documents incorporated by reference into this prospectus supplement and the accompanying prospectus primarily on our current expectations and projections about future events and trends that we believe may affect our business, financial condition, results of operations and prospects. The outcome of the events described in these forward-looking statements is subject to risks, uncertainties and other factors that could cause actual results and experience to differ from those projected, including, but not limited to, the risk factors noted above and set forth in Part I-Item 1A, “Risk Factors,” in our Annual Report on Form 10-K for the year ended December 31, 2023, as filed with the SEC on March 13, 2024, in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2024, as filed with the SEC on May 9, 2024, and elsewhere in the documents incorporated by reference into this prospectus supplement and the accompanying prospectus. Moreover, we operate in a very competitive and challenging environment. New risks and uncertainties emerge from time to time, and it is not possible for us to predict all risks and uncertainties that could have an impact on the forward-looking statements contained in this prospectus supplement, the accompanying prospectus and any related free-writing prospectus, and in the documents incorporated by reference into this prospectus supplement and the accompanying prospectus. We cannot assure you that the results, events, and circumstances reflected in the forward-looking statements will be achieved or occur, and actual results, events, or circumstances could differ materially from those described in the forward-looking statements.

The foregoing does not represent an exhaustive list of matters that may be covered by the forward-looking statements contained herein or risk factors that we are faced with that may cause our actual results to differ from those anticipated in our forward-looking statements. You should carefully read and consider the information beginning on page S-6 of this prospectus supplement and on page 5 of the accompanying prospectus under the headings “Risk Factors” and all other information set forth in this prospectus supplement, the accompanying prospectus, and the documents incorporated herein and therein by reference before deciding to invest in our securities.

You should read this prospectus supplement, the accompanying prospectus and the documents that we incorporate by reference herein or therein completely and with the understanding that our actual future results may be materially different from what we currently expect. You should assume that the information appearing in this prospectus supplement, the accompanying prospectus and any document incorporated by reference herein or therein is accurate as of its date only. Because the risks referred to above could cause actual results or outcomes to differ materially from those expressed in any forward-looking statements made by us or on our behalf, you should not place undue reliance on any forward-looking statements. Further, any forward-looking statement speaks only as of the date on which it is made, and we undertake no obligation to update any forward-looking statement to reflect events or circumstances after the date on which the statement is made or to reflect the occurrence of unanticipated events. New factors emerge from time to time, and it is not possible for us to predict which factors may arise. In addition, we cannot predict the impact of each factor on our business or the extent to

which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements. We qualify all of the information presented in this prospectus supplement, the accompanying prospectus and any document incorporated herein or therein by reference, and particularly our forward-looking statements, by these cautionary statements.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights certain information about us, this offering and selected information contained elsewhere in or incorporated by reference into this prospectus supplement and the accompanying prospectus. This summary is not complete and does not contain all of the information that you should consider before deciding whether to invest in our common stock. For a more complete understanding of the Company and this offering, we encourage you to read and consider carefully the more detailed information in this prospectus supplement and in the accompanying prospectus, including the information incorporated by reference into this prospectus supplement or in the accompanying prospectus, and the information referred to under the heading "Risk Factors" in these documents and in the documents incorporated by reference into this prospectus supplement and in the accompanying prospectus.

Our Company and Business

We are an environmental services and environmental technology know-how company providing waste treatment, processing, and disposal services for nuclear, low-level radioactive, mixed, hazardous, and non-hazardous waste, primarily through four treatment and storage facilities that are licensed by the Nuclear Regulatory Commission (or state equivalent agency) and permitted by the U.S. Environmental Protection Agency ("EPA") or state-equivalent agency. We also conduct research and development ("R&D") activities to identify, develop and implement innovative waste processing techniques for problematic waste streams, as well as provide technical services and on-site waste management services to commercial and governmental customers.

Headquartered in Atlanta, Georgia, we provide services across the United States and internationally to research institutions, commercial companies, public utilities, and governmental agencies (domestic and foreign), including the U.S. Department of Energy ("DOE") and U.S. Department of Defense ("DOD"). The distribution channels for our services are through direct sales to customers or via intermediaries.

Our business is conducted through two operating segments, treatment and services, which contributed approximately 48.5% and 51.5%, respectively, to our total revenue in 2023. Historically, we have focused our business strategy in the treatment segment on upgrading our treatment facilities to increase efficiency and modernize and expand treatment capabilities to meet the changing markets associated with the waste management industry. Within our services segment, we continue to revitalize and expand our business development programs to further increase competitive procurement effectiveness and broaden the market penetration within both the commercial and government sectors. The Company also remains focused on expansion into both commercial and international markets to supplement government spending in the United States, from which a significant portion of the Company's revenue is derived. Inherent in our strategy is the development of new services, new customers, and increased market share in our current markets.

Recent Developments

On April 3, 2024, we announced the successful completion of pilot plant testing on our new, patent-pending process for the destruction of Per- and Polyfluorinated Substances, commonly known as "PFAS." Also known as "forever chemicals," not only do PFAS compounds not degrade over time through any natural process or environmental conditions, PFAS compounds are known to bioaccumulate and are harmful to humans and the environment. Our testing, designed to demonstrate the destruction of commercial quantities of PFAS-contaminated liquids and better define the parameters needed to construct the first commercial unit, demonstrated that our patent-pending process is effective and can be applied to a variety of potential markets, including liquids, solids, soils, biosolids, and sludges.

Present disposal options for PFAS liquids include deep wells, incineration and landfills, all of which have serious environmental liability issues. We believe that the Perma-Fix's process will virtually eliminate PFAS compounds (minimum of 99.9999% destruction) and reduce the environmental liability associated with these materials. Additionally, the process is designed to operate at a highly competitive price compared to traditional disposal options.

We believe that our process is highly scalable with minimal capital expenditures or labor costs required since we are employing a non-incineration, chemical-based process. We are now in the process of final design and fabrication for installation of the first operational unit and plan to be operational and accepting commercial waste for PFAS destruction by the end of the year. We have established goals for additional units to be installed at each existing treatment plant to follow in 2025.

Corporate Information

We are a Delaware corporation incorporated in December 1990. Our principal executive offices are located at 8302 Dunwoody Place, Suite 250, Atlanta, Georgia 30350, and our telephone number is (770) 587-9898. Our website address is www.perma-fix.com. The information on our website is not incorporated by reference into this prospectus supplement and should not be considered to be a part of this prospectus supplement. Our internet address is included in this prospectus supplement as an inactive textual reference only.

THE OFFERING

Common stock offered by us	2,051,282 shares
Total common stock outstanding immediately before this offering	13,737,104 shares
Placement agents' warrants	In connection with this offering, we will also issue to the placement agents unregistered warrants to purchase up to a number of shares of our common stock equal to 3% of the number of shares of common stock being offered to investors in this offering, at an exercise price equal to 125% of the offering price of the shares of common stock being offered pursuant to this prospectus supplement and the accompanying prospectus.
Total common stock to be outstanding immediately after this offering	15,788,386 shares. Assuming the exercise in full of the placement agents' warrants, there will be 15,849,924 shares outstanding.

Use of proceeds	We estimate that the aggregate net proceeds to us from this offering will be approximately \$18,650,000. We intend to use the net proceeds from this offering to fund (i) continued R&D and business development relating to our patent-pending process for the destruction of PFAS, as well as the cost of installing at least one commercial treatment unit; (ii) ongoing facility cap-ex and maintenance costs; as well as (iii) general corporate and working capital purposes. See “Use of Proceeds” on page S-8 of this prospectus supplement for a more complete description of the intended use of proceeds from this offering.
Risk factors	Investing in our securities is highly speculative and involves a high degree of risk. You should carefully read and consider the information beginning on page S-6 of this prospectus supplement and on page 5 of the accompanying prospectus under the headings “Risk Factors” and all other information set forth in this prospectus supplement, the accompanying prospectus, and the documents incorporated herein and therein by reference before deciding to invest in our securities.
Exchange listing	Our common stock is listed on The Nasdaq Capital Market under the symbol “PESI.”
Lock-up agreements	We and each of our directors and executive officers have agreed, subject to certain exceptions, that we and they will not, for a period 90 days following the closing date of this offering, offer or contract to sell any of our shares of common stock.
The number of shares of our common stock to be outstanding immediately after this offering is based on 13,737,104 shares of common stock outstanding as of May 10, 2024. The number of shares outstanding as of May 10, 2024, as used throughout this prospectus supplement, unless otherwise indicated, excludes:	
·	978,600 shares of common stock issuable upon exercise of outstanding stock options under our stock incentive plans as of May 10, 2024 at a weighted average exercise price of \$5.66 per share; and
·	980,252 shares of common stock reserved for future issuance under our equity incentive plans as of May 10, 2024.

Unless otherwise indicated, all information in this prospectus supplement assumes no exercise of the outstanding options or placement agents’ warrants described above.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should consider carefully the risks and uncertainties and all other information contained in or incorporated by reference into this prospectus supplement and the accompanying prospectus, including the risks and uncertainties described below and under the caption “Risk Factors” in the accompanying prospectus and in our most recently filed Annual Report on Form 10-K filed with the SEC, in each case as these risk factors are amended or supplemented by subsequent Annual Reports on Form 10-K or Quarterly Reports on Form 10-Q that have been or will be incorporated by reference in this prospectus supplement, including any amendments thereto. The risks set forth below and incorporated herein by reference are those which we believe are the material risks that we face. The occurrence of any of such risks may materially and adversely affect our business, financial condition, results of operations and future prospects. In such an event, the market price of our common stock could decline, and you could lose part or all of your investment. Please also read carefully the section beginning on page S-1 entitled “Special Note Regarding Forward-Looking Statements.”

Risks Related to this Offering

Purchasers of shares of our common stock in this offering will experience immediate and substantial dilution in the book value of their investment.

The offering price per share of common stock in this offering is substantially higher than the net tangible book value per share of our common stock before giving effect to this offering. Accordingly, if you purchase shares of common stock in this offering, you will incur immediate substantial dilution of approximately \$7.29 per share, representing the difference between the offering price per share, and our as adjusted net tangible book value as of March 31, 2024. Furthermore, if outstanding options are exercised, you could experience further dilution. For a further description of the dilution that you will experience immediately after this offering, see the section in this prospectus supplement entitled “Dilution.”

You may experience future dilution of your ownership interests because of the future issuance of additional shares of the common stock

In the future, we may issue additional authorized but previously unissued equity securities, resulting in the dilution of the ownership interests of our stockholders. We are currently authorized to issue an aggregate of 30,000,000 shares of common stock and 2,000,000 shares of preferred stock, \$0.001 par value per share. As of May 10, 2024, there were 13,737,104 shares of common stock outstanding. At such date, there were no shares of preferred stock outstanding. In addition, as of May 10, 2024, there was an aggregate of approximately 978,600 shares of common stock reserved for future issuance upon exercise of our outstanding stock options. We may also issue additional shares of common stock or preferred stock or other securities that are convertible into or exercisable for common stock in connection with hiring or retaining employees, future acquisitions, future sales of securities for capital raising purposes, or for other business purposes. The future issuance of any such additional shares of common stock may create downward pressure on the trading price of the common stock. There can be no assurance that we will not be required to issue additional shares, warrants or other convertible securities in the future in conjunction with any capital raising efforts, including at a price (or exercise prices) below the offering price of the shares of common stock in this offering.

Management will have broad discretion as to the use of the proceeds from this offering and may not use the proceeds effectively.

While management has identified broad categories of uses of the net proceeds we receive in this offering, including for any of the purposes described in the section entitled “Use of Proceeds,” management necessarily retains broad discretion in the actual application of the net proceeds from this offering and could spend the proceeds in ways that may not improve our results of operations or enhance the value of our securities. Our failure to apply these funds effectively could have a material adverse effect on our business and cause the price of our common stock to decline. Pending their use, we may invest our net proceeds from this offering in short-term, investment-grade, interest-bearing securities. These investments may not yield a favorable return to our stockholders. See “Use of Proceeds” on page S-8 of this prospectus supplement.

We may be required to raise additional financing by issuing new securities with terms or rights superior to those of our existing stockholders, or at a price per share that is less than the price per share paid by investors in this offering, which could adversely affect the market price of shares of our common stock and our business.

We expect to require additional financing to fund future operations. We may not be able to obtain financing on favorable terms, if at all. If we raise additional funds by issuing equity securities, we may sell shares of our common stock or other securities in any other offering at a price per share that is less than the price per share paid by investors in

this offering. Additionally, if we raise additional funds by issuing equity securities, the percentage ownership of our current stockholders will be reduced, and, if the equity securities issued are preferred shares, the holders of the new preferred shares may have rights superior to those of our existing securityholders, which could adversely affect rights of our existing securityholders and the market price of our common stock. If we raise additional funds by issuing debt securities, the holders of those debt securities would have some rights senior to those of our existing securityholders, and the terms of these debt securities could impose restrictions on operations and create a significant interest expense for us, which could have a materially adverse effect on our business.

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The price of our common stock may be volatile.

The market price of our common stock may fluctuate substantially. For example, from May 16, 2023 through May 21, 2024 the market price of our common stock has fluctuated between \$6.50 and \$14.17. The price of our common stock that will prevail in the market after this offering may be higher or lower than the price that you have paid, depending on many factors, some of which are beyond our control and may not be related to our operating performance. Stock market volatility may also adversely affect the trading price of our common stock. In the past, following periods of volatility in the market price of a company's securities, stockholders have often instituted class action securities litigation against those companies. Such litigation, if instituted, could result in substantial costs and diversion of management attention and resources, which could significantly harm our profitability and reputation.

Our failure to comply with the continued listing requirements of Nasdaq could adversely affect the price of our common stock and our liquidity.

Our common stock is currently listed on The Nasdaq Capital Market. In order to maintain that listing, we must satisfy minimum financial and other continued listing requirements and standards related to, among other things, stockholders' equity, market value, minimum bid price, and corporate governance in order to remain so listed. Although we are currently in compliance with such listing requirements, there can be no assurances that we will be able to continue to comply with the applicable listing requirements.

If we do not remain compliant with Nasdaq's continued listing requirements, we could be delisted from The Nasdaq Capital Market. If we were delisted, it would likely have a negative impact on the price of our common stock and our liquidity. If we are delisted from The Nasdaq Capital Market and we are not able to list our common stock on another exchange, our common stock could be quoted on one of the markets maintained by OTC Markets Group Inc. As a result, we could face significant adverse consequences including, among others:

- a limited availability of market quotations for our securities;
- a determination that our common stock is a "penny stock," which would require broker-dealers trading in our common stock to adhere to more stringent rules and possibly result in a reduced level of trading activity in the secondary trading market for our securities;
- a limited amount of news and little or no analyst coverage of the Company;
- we would no longer qualify for exemptions from state securities registration requirements, which may require us to comply with applicable state securities laws; and
- a decreased ability to issue additional securities (including pursuant to short-form registration statements on Form S-3) or obtain additional financing in the future.

As a result of these factors, the value of our common stock could decline significantly.

We do not intend to pay dividends on our common stock for the foreseeable future.

We have never declared or paid any cash dividends on our common stock and do not intend to pay any cash dividends in the foreseeable future. We anticipate that we will retain all of our future earnings for use in the development of our business and for general corporate purposes. Any determination to pay dividends in the future will be at the discretion of our Board. In addition, we have agreed with our principal lender not to pay dividends without the consent of the lender. Accordingly, investors must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investments.

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USE OF PROCEEDS

Based upon the public offering price of \$9.75 per share, we estimate that the net proceeds from the sale of the shares of common stock offered under this prospectus supplement, after deducting the placement agents' fees and commissions and estimated offering expenses payable by us, will be approximately \$18,650,000.

We intend to use the net proceeds from this offering to fund (i) continued R&D and business development relating to our patent-pending process for the destruction of PFAS, as well as the cost of installing at least the first operational unit; (ii) ongoing facility cap-ex and maintenance costs; as well as for (iii) general corporate and working capital purposes, as set forth in the table below. Investors are cautioned, however, that expenditures may vary substantially from these uses. Investors will be relying on the judgment of our management, who will have broad discretion regarding the application of the proceeds of this offering. The amounts and timing of our actual expenditures will depend upon numerous factors, including the amount of cash generated by our operations, the amount of competition we face and other operational factors, as well as the factors described under "Risk Factors" in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein. We may find it necessary or advisable to use portions of the proceeds from this offering for other purposes. Pursuant to the credit agreement between us and our lender, PNC Bank, N.A., the net proceeds of this offering are considered collateral but may be utilized by us at our discretion, so long as no Event of Default (as defined in the credit agreement) exists. In the event that any such Event of Default were to exist, any uninvested proceeds existing at the time of such default could be applied by the lender against any of our outstanding indebtedness with it.

Assuming gross proceeds of approximately \$20,000,000, we anticipate using such proceeds as follows:

PFAS R&D and installation cost of at least one commercial treatment unit	\$	4,000,000
Ongoing facility cap-ex and maintenance costs	\$	11,000,000
	\$	3,650,000
General corporate and working capital		
Placement agent fees	\$	1,200,000
Other expenses of the offering	\$	150,000 ⁽¹⁾
Total	\$	<u>20,000,000</u>

(1) See "Plan of Distribution" at S-12 of this prospectus supplement for further information regarding the other expenses of this offering.

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CAPITALIZATION

The following table sets forth our cash and capitalization as of March 31, 2024, as follows:

- on an actual basis; and
- on an as adjusted basis to reflect (i) our issuance and sale of shares of our common stock in this offering at the offering price of \$9.75 per share (assuming no exercise of the placement agents' warrants), after deducting estimated placement agent fees and estimated offering expenses payable, and (ii) the application of the estimated net proceeds of this offering as described under "Use of Proceeds."

You should read the data set forth in the table below in conjunction with the section of this prospectus supplement under the caption "Use of Proceeds," as well as our "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and other financial information included or incorporated by reference in this prospectus supplement.

	As of March 31, 2024	
	(in thousands, except share amounts)	
	(Unaudited)	
	Actual	As Adjusted ⁽¹⁾
Cash and cash equivalents	\$ 2,374	\$ 21,024
Total liabilities	37,799	37,799
Stockholders' equity:		
Preferred stock, \$.001 par value, 2,000,000 shares authorized, no shares issued and outstanding		
Common stock, \$.001 par value, 30,000,000 shares authorized, actual and as adjusted, 13,730,580 shares issued, actual, and 15,781,862 shares issued, as adjusted	14	16
Additional paid-in capital	116,981	135,629
Accumulated deficit	(80,511)	(80,511)
Accumulated other comprehensive loss	(156)	(156)
Less common stock in treasury, at cost, 7,642	(88)	(88)
Total stockholders; equity	36,240	54,890
Total capitalization	\$ 74,039	\$ 92,689

(1) The above table excludes the following securities:

985,000 shares of common stock issuable upon exercise of outstanding stock options under our stock incentive plans as of March 31, 2024 at a weighted average exercise price of \$5.66 per share; and

990,217 shares of common stock reserved for future issuance under our equity incentive plans as of March 31, 2024.

In addition, the discussion and table above do not include the 61,538 shares of common stock issuable pursuant to the placement agents' warrants.

To the extent that any options are exercised, new options are issued under our equity incentive plans, or we issue additional shares of common stock pursuant to the placement agents' warrants referenced above or otherwise, investors purchasing shares in this offering could experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

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DILUTION

If you invest in our common stock, your interest will be diluted immediately to the extent of the difference between the offering price per share and the adjusted net tangible book value per share of our common stock after this offering. Net tangible book value per share is equal to the amount of our total tangible assets, less total liabilities (other than deferred tax liabilities), divided by the number of outstanding shares of our Common Stock. As of March 31, 2024, our net tangible book value was approximately \$20,222,000, or approximately \$1.47 per share, based on 13,722,938 shares of Common Stock outstanding at that date. Dilution in net tangible book value per share represents the difference between the amount per share paid by purchasers of shares of common stock in this offering and the net tangible book value per share of our common stock immediately after this offering.

After giving effect to the sale by us of 2,051,282 shares of Common Stock being offered in this offering at an offering price of \$9.75 per share and after deducting the placement agent fees and estimated offering expenses payable by us, our as-adjusted net tangible book value as of March 31, 2024 would have been approximately \$38,872,000, or \$2.46 per share of Common Stock. This represents an immediate increase in the net tangible book value of \$0.99 per share to our existing stockholders and an immediate and substantial dilution in net tangible book value of \$7.29 per share to new investors. The following table illustrates this per share dilution:

Offering price per share	\$ 9.75
Net tangible book value per share as of March 31, 2024	\$ 1.47
Increase in net tangible book value per share attributable to this offering	\$ 0.99
As adjusted net tangible book value per share as of March 31, 2024, after giving effect to this offering	\$ 2.46
Dilution per share to new investors purchasing shares in this offering	\$ 7.29

The above discussion and table are based on 13,722,938 shares of Common Stock outstanding as of March 31, 2024 and excludes the following securities:

985,000 shares of common stock issuable upon exercise of outstanding stock options under our stock incentive plans as of March 31, 2024 at a weighted average exercise price of \$5.66 per share; and

990,217 shares of common stock reserved for future issuance under our equity incentive plans as of March 31, 2024.

In addition, the discussion and table above do not include the 61,538 shares of common stock issuable pursuant to the placement agents' warrants.

To the extent that any options are exercised, new options are issued under our equity incentive plans, or we issue additional shares of common stock pursuant to the placement agents' warrants referenced above or otherwise, investors purchasing shares in this offering could experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

DIVIDEND POLICY

We have never declared dividends on our equity securities, and currently do not plan to declare dividends on shares of our common stock in the foreseeable future. We expect to retain our future earnings, if any, for use in the operation and expansion of our business. The payment of cash dividends in the future, if any, will be at the discretion of our Board of Directors and will depend upon such factors as earnings levels, capital requirements, our overall financial condition and any other factors deemed relevant by our Board of Directors. In addition, we have agreed with our principal lender not to pay dividends without the consent of the lender.

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DESCRIPTION OF THE SECURITIES OFFERED

We are offering 2,051,282 shares of our common stock. As of the date of this prospectus supplement, our certificate of incorporation authorizes us to issue up to 30,000,000 shares of common stock, \$0.001 par value. As of May 10, 2024, there were 13,737,104 shares of our common stock outstanding.

Common Stock

The holders of shares of our common stock are entitled to one vote per share on all matters to be voted on by stockholders. Common stockholders are entitled to receive dividends declared by the board of directors out of funds legally available for the payment of dividends, subject to the rights, if any, of preferred stockholders. However, we have never paid a dividend and we do not anticipate paying a dividend in the foreseeable future. Our current secured credit facility prohibits us from paying cash dividends on our common stock. Upon any liquidation, dissolution or winding up of our business, the holders of common stock are entitled to share equally in all assets available for distribution after payment of all liabilities and provision for liquidation preference of shares of preferred stock then outstanding. The holders of common stock have no preemptive rights and no rights to convert their common stock into any other securities. There are no redemption or sinking fund provisions applicable to our common stock. All outstanding shares of common stock are fully paid and nonassessable.

Options and Other Equity Awards

Our certificate of incorporation authorizes us to issue shares of common stock and options, rights, and warrants relating to the common stock for the consideration and on the terms and conditions established by our board of directors in its sole discretion, whether in connection with acquisitions or otherwise. As of March 31, 2024, we had options to purchase 985,000 shares of common stock outstanding under various incentive stock option plans of the Company.

Antitakeover Effects of Delaware Law and Our Certificate of Incorporation and Bylaws

We are a Delaware corporation governed by the General Corporation Law of Delaware, or the DGCL, including the provisions of Section 203 of the DGCL, an anti-takeover law. In general, Section 203 prohibits a Delaware public corporation from engaging in a “business combination” with an “interested stockholder” for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner. As a result of Section 203, potential acquirers may be discouraged from attempting to effect acquisition transactions with us, thereby possibly depriving our security holders of certain opportunities to sell, or otherwise dispose of, such securities at above-market prices pursuant to such transactions. Further, certain of our option plans provide for the immediate acceleration of, and removal of restrictions from, options and other awards under such plans upon a “change of control” (as defined in the respective plans). Such provisions may also have the result of discouraging acquisition of us.

As of March 31, 2024, out of 30,000,000 shares of common stock authorized, we had 13,722,938 shares of common stock outstanding and 7,642 shares of treasury stock. In addition, at March 31, 2024, we had outstanding options to purchase 985,000 shares of our common stock at a weighted average exercise price of \$5.66 per share. Assuming the issuance of the common stock underlying such options, as of March 31, 2024, we had available for future issuance 15,292,062 shares of authorized and unissued common stock (not including 7,642 treasury shares), and 2,000,000 shares of our preferred stock. Future sales of authorized and unissued shares could be used by our management to make it more difficult for, and thereby discourage, an attempt to acquire control of us.

Undesignated Preferred Stock

The authorization of undesignated preferred stock in our certificate of incorporation will make it possible for our board of directors to issue preferred stock with super voting, special approval, dividend or other rights or preferences on a discriminatory basis that could impede the success of any attempt to acquire us. These and other provisions may have the effect of deferring, delaying or discouraging hostile takeovers, or changes in control or management of our company.

Requirements for Advance Notification of Stockholder Meetings, Nominations and Proposals

Our certificate of incorporation provides that special meetings of the stockholders may be called only by either the Chairman of the Board, if one has been elected, or the Chief Executive Officer, and shall be called by either such officer or the Secretary at the request in writing of a majority of the Board of Directors, but such special meetings may not be called by any other person or persons. In addition, any stockholder who wishes to bring business before an annual meeting or nominate directors must comply with the requirements set forth in our bylaws. These provisions may have the effect of deferring, delaying or discouraging hostile takeovers or changes in control or management of our company.

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No Cumulative Voting

The DGCL provides that stockholders are not entitled to the right to cumulate votes in the election of directors unless our amended and restated certificate of incorporation provides otherwise. Our certificate of incorporation does not provide for cumulative voting.

Transfer Agent and Registrar

The transfer agent and registrar for the common stock is Continental Stock Transfer & Trust Company, 1 State Street, 30th Floor, New York, New York 10004-1561.

Exchange Listing

Our common stock is listed on the Nasdaq Capital Market under the symbol “PESI.”

PLAN OF DISTRIBUTION

Craig-Hallum Capital Group LLC and Wellington Shields & Co., LLC, which we refer to as the placement agents, have agreed to act as the exclusive placement agents in connection with this offering, subject to the terms and conditions of the placement agency agreement dated May 21, 2024 (the “Placement Agency Agreement”). The placement agents are not purchasing or selling shares of common stock by this prospectus supplement, nor are the placement agents required to arrange the purchase or sale of any specific

number of shares of common stock, but have agreed to use their best efforts to arrange for the sale of all of the common stock offered hereby. Further, the placement agents do not guarantee that they will be able to raise new capital in any prospective offering. The placement agents may engage sub-agents or selected dealers to assist with the offering.

On May 21, 2024, we entered into securities purchase agreements directly with the investors in connection with this offering for the sale of an aggregate of 2,051,282 shares of our common stock at an offering price per share of \$9.75, pursuant to this prospectus supplement and the accompanying prospectus.

We expect that delivery of the shares of our common stock to the investors, and the delivery of the placement agents' warrants, will be made on or about May 24, 2024, subject to customary closing conditions.

Fees and Expenses

We have agreed to pay to the placement agents a cash fee equal to 6.0% of the aggregate gross proceeds raised in this offering. In addition, we agreed to reimburse the Placement Agent for certain of its expenses, including its reasonable fees and expenses of counsel, up to an aggregate of \$90,000, and to issue warrants to the placement agents. See "Placement Agents' Warrants" below for additional detail. The following table shows the total placement agents' cash fees we will pay in connection with the sale of the securities in this offering, assuming the purchase of all of the shares of common stock we are offering.

	Per Share		Total	
Total Placement Agent Fees	\$	0.585	\$	1,200,000
Proceeds to us, before expenses	\$	9.165	\$	18,800,000

We estimate the total expenses payable by us for this offering, excluding the placement agents' fees, to be approximately \$150,000.

Placement Agents' Warrants

We have agreed to issue to the placement agents unregistered warrants to purchase up to 61,538 shares of our common stock, which represent 3% of the number of shares of common stock being sold in this offering. The placement agents' warrants will have a term of five years from the date of commencement of sales in this offering, be exercisable at any time and from time to time, in whole or in part, during the four and one-half (4 ½) year period commencing 180 days from the last date of closing of the offering, and have an exercise price equal to 125% of the offering price per share to investors in this offering.

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Tail Financing Payments

We have also agreed to pay the placement agents, subject to certain exceptions, a tail fee equal to the cash fee payable to the placement agents in this offering, if any investor, other than our officers, directors, and employees, who was contacted by the placement agents during the term of their engagement, provides us with capital in any public or private offering of securities or securities convertible into, or exchangeable for, equity securities or other financing (excluding borrowings by us under any credit or lending facility with a bank or other lender) or equity capital-raising transaction of any kind during the 6-month period following expiration or termination of our engagement of the placement agents.

The Nasdaq Capital Market Listing

Our common stock is currently traded on The Nasdaq Capital Market under the symbol "PESI." On May 21, 2024, the last reported sale price of our common stock was \$11.49 per share. We do not plan to list the placement agents' warrants on The Nasdaq Capital Market or any other securities exchange or trading market.

Indemnification

We have agreed to indemnify the placement agents and specified other persons against some civil liabilities, including liabilities under the Securities Act and the Exchange Act, and to contribute to payments that the placement agents may be required to make in respect of such liabilities.

Regulation M

The placement agents may be deemed to be underwriters within the meaning of Section 2(a)(11) of the Securities Act and any fees received by it and any profit realized on the sale of the securities by them while acting as principal might be deemed to be underwriting discounts or commissions under the Securities Act. The placement agents will be required to comply with the requirements of the Securities Act and the Exchange Act including, without limitation, Rule 10b-5 and Regulation M under the Exchange Act. These rules and regulations may limit the timing of purchases and sales of our securities by the placement agents. Under these rules and regulations, the placement agent may not (i) engage in any stabilization activity in connection with our securities; and (ii) bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities, other than as permitted under the Exchange Act, until they have completed their participation in the distribution.

Electronic Distribution

This prospectus supplement and the accompanying prospectus may be made available in electronic format on websites or through other online services maintained by the placement agents or by affiliates of the placement agents. Other than this prospectus supplement and the accompanying prospectus, the information on the placement agents' website and any information contained in any other website maintained by a placement agent is not part of this prospectus supplement and the accompanying prospectus or the registration statement of which this prospectus supplement and the accompanying prospectus form a part, has not been approved and/or endorsed by us or the placement agents, and should not be relied upon by investors.

Other Relationships

From time to time, the placement agents may provide in the future, various advisory, investment and commercial banking and other services to us in the ordinary course of business, for which they may receive customary fees and commissions. In addition, from time to time, the placement agents and their affiliates may effect transactions for their own account or the account of customers, and hold on behalf of themselves or their customers, long or short positions in our equity securities or loans, and may do so in the future. However, except as disclosed in this prospectus supplement, we have no present arrangements with the placement agents for any services.

Other Information

The foregoing does not purport to be a complete statement of the terms and conditions of the Placement Agency Agreement and the securities purchase agreement. A copy of the form of securities purchase agreement with the purchasers will be included as an exhibit to our Current Report on Form 8-K to be filed with the SEC in connection with this offering and incorporated by reference into the registration statement of which this prospectus supplement and the accompanying prospectus form a part. See "Information Incorporated by Reference" and "Where You Can Find More Information."

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Determination of Offering Price

The offering price of the securities we are offering were negotiated between us and the investors in the offering based on the trading of our common stock prior to the offering, among other things. Other factors considered in determining the offering price of the securities we are offering include our history and prospects, the stage of development of our business, our business plans for the future and the extent to which they have been implemented, an assessment of our management, the general conditions of the securities markets at the time of the offering and such other factors as were deemed relevant.

Lock-Up Agreements

Pursuant to certain “lock-up” agreements, (a) our directors and executive officers have agreed, subject to certain exceptions, not to offer, issue, sell, contract to sell, encumber, grant any option for the sale of or otherwise dispose of any securities of the Company for a period of 90 days from the closing date of the offering, and (b) we have agreed, subject to certain exceptions, for a period of 90 days from the closing date of the offering not to (1) issue, enter into any agreement to issue or announce the issuance or proposed issuance of any common stock and (2) file any registration statement relating to the offering of common stock or securities convertible into or exercisable for any common stock. Additionally, we have agreed for 180 days not to enter into any agreement relating to, or effect the issuance of any, “Variable Rate Transaction” (as defined in the purchase agreement).

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Continental Stock Transfer & Trust Company, 1 State Street, 30th Floor, New York, New York 10004-1561.

LEGAL MATTERS

The validity of the shares of common stock offered hereby will be passed upon for us by Steptoe & Johnson PLLC. Troutman Pepper Hamilton Sanders LLP represented the placement agents in this offering.

EXPERTS

The audited consolidated financial statements incorporated by reference in this prospectus supplement have been so incorporated by reference in reliance upon the report of Grant Thornton LLP, independent registered public accountants, upon the authority of said firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are required to file annual, quarterly and special reports, proxy statements and other information with the SEC. Our filings with the SEC are available to the public at the SEC’s Internet web site at <http://www.sec.gov> and on our website at www.perma-fix.com. The information contained on or accessible through the SEC’s website or our website is not part of this prospectus supplement or the accompanying prospectus, other than the documents that we file with the SEC that are specifically incorporated by reference into this prospectus supplement or the accompanying prospectus.

We have filed a registration statement, of which this prospectus supplement and the accompanying prospectus form a part, covering the securities offered hereby. As allowed by SEC rules, this prospectus supplement and the accompanying prospectus do not include all of the information contained in the registration statement and the included exhibits, financial statements and schedules. You are referred to the registration statement, the included exhibits, financial statements and schedules for further information. This prospectus supplement and the accompanying prospectus are qualified in their entirety by such other information.

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INFORMATION INCORPORATED BY REFERENCE

The SEC permits us to “incorporate by reference” the information contained in documents we file with the SEC, which means that we can disclose important information to you by referring you to those documents rather than by including them in this prospectus supplement or the accompanying prospectus. Information that is incorporated by reference is considered to be part of this prospectus supplement and the accompanying prospectus and you should read it with the same care with which you read this prospectus supplement and the accompanying prospectus. Information that we file later with the SEC will automatically update and supersede the information that is either contained, or incorporated by reference, in this prospectus supplement or the accompanying prospectus, and will be considered to be a part of this prospectus supplement and the accompanying prospectus from the date those documents are filed. We incorporate by reference into this prospectus supplement and the accompanying prospectus the following documents or information filed with the SEC:

- our Annual Report on [Form 10-K](#) for the fiscal year ended December 31, 2023, filed with the SEC on March 13, 2024;
- our Quarterly Report on [Form 10-Q](#) for the quarterly period ended March 31, 2024, filed with the SEC on May 9, 2024;
- our Current Report on [Form 8-K](#) filed with the SEC on April 10, 2024;
- our Current Report on [Form 8-K](#) filed with the SEC on May 14, 2024; and
- The description of our common stock that is contained in the Registration Statement on Form 8-A filed pursuant to Section 12 of the Exchange Act, which became effective on October 30, 1992, including any amendments or reports filed for the purpose of updating such description.

In addition, all documents subsequently filed by us pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act until the offering is terminated or completed are deemed to be incorporated by reference into, and to be a part of, this prospectus supplement and the accompanying prospectus. In no event, however, will any of the information, including exhibits, that we disclose under Item 2.02 and Item 7.01 of any Current Report on Form 8-K that has been or may, from time to time, be furnished to the SEC be incorporated into or otherwise become a part of this prospectus supplement.

Any statement contained in this prospectus supplement, the accompanying prospectus or in a document incorporated or deemed to be incorporated by reference into this prospectus supplement or the accompanying prospectus will be deemed to be modified or superseded for purposes of this prospectus supplement and the accompanying prospectus to the extent that a statement contained in this prospectus supplement or any other subsequently filed document that is deemed to be incorporated by reference into this prospectus supplement and the accompanying prospectus modifies or supersedes the statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement and the accompanying prospectus.

We will furnish without charge to you, on written or oral request, a copy of any or all of the documents incorporated by reference (other than an exhibit to these documents, unless the exhibit is specifically incorporated by reference into the document requested). You should direct any requests for documents to:

Perma-Fix Environmental Services, Inc.
8302 Dunwoody Place, Suite 250
Atlanta, Georgia 30350

You should rely only on information contained in, or incorporated by reference into, this prospectus supplement and the accompanying prospectus. We have not authorized anyone to provide you with information different from that contained in this prospectus supplement, the accompanying prospectus, or incorporated by reference in those documents. We are not making offers to sell the securities in any jurisdiction in which such an offer or solicitation is not authorized or in which the person making such offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make such offer or solicitation.

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PROSPECTUS

2,500,000 Shares

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

Common Stock

We may offer from time to time up to 2,500,000 shares of our common stock, in amounts, at prices and on terms to be set forth in one or more supplements to this prospectus. We refer to our common stock registered hereunder as the “securities.” This prospectus describes some of the general terms that may apply to these securities and the manner in which they may be offered. We will provide the specific terms of any offering of securities in one or more supplements to this prospectus. Such prospectus supplements may also add, update or change information contained in this prospectus. You should carefully read this prospectus and the applicable prospectus supplement, together with the documents we incorporate by reference, before you invest. This prospectus may not be used to consummate a sale of securities unless accompanied by the applicable prospectus supplement.

We may offer and sell our securities to or through one or more underwriters, dealers, or agents, “at-the-market” to or through a market maker or into an existing trading market, or on an exchange or otherwise, or directly to one or more purchasers, or through a combination of methods of sale, on a continuous or delayed basis. For additional information on the methods of sale, you should refer to the section entitled “Plan of Distribution” in this prospectus. If any underwriters, dealers or agents are involved in the sale of any of the securities, their names, and any applicable purchase price, fee, commission or discount arrangement with, between or among them, will be set forth, or will be calculable from the information set forth, in an accompanying prospectus supplement. For more detailed information, see “Plan of Distribution” in this prospectus. No securities may be sold without delivery of an accompanying prospectus supplement describing the method and terms of the offering of those securities.

You should read this prospectus, any prospectus supplement and the documents incorporated by reference in this prospectus or any prospectus supplement carefully before you invest. **This prospectus may not be used to offer and sell securities unless accompanied by a prospectus supplement.**

Our common stock is traded on the NASDAQ Capital Market under the symbol “PESI”. On May 15, 2023, the closing price of our common stock as reported on the NASDAQ Capital Market was \$11.325.

The aggregate market value of our outstanding common stock held by non-affiliates, computed by reference to the closing price of our common stock on May 15, 2023 (\$11.325 per share), was approximately \$140,089,140, based on 13,419,165 shares of our common stock outstanding as of that date, of which 12,369,902 shares were held by non-affiliates. Pursuant to General Instruction I.B.6 of Form S-3, in no event will we sell securities in a public primary offering during the period of 12 calendar months immediately prior to and including the sale with a value exceeding more than one-third of our public float if at the time of such offering our public float is below \$75.0 million. We have not offered any of our securities pursuant to General Instruction 1.B.6 of Form S-3 during the 12 calendar months prior to and including the date of this prospectus.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading “Risk Factors” on page 5 of this prospectus and any similar section contained in the applicable prospectus supplement and any related free writing prospectus we have authorized for use in connection with a specific offering, as well as the “Risk Factors” incorporated by reference herein from our most recent Annual Report on Form 10-K and other reports and information that we file with the Securities and Exchange Commission, or the SEC.

Neither the SEC nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is June 1, 2023.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or SEC, using a “shelf” registration process for the delayed offering and sale of securities pursuant to Rule 415 under the Securities Act of 1933, as amended, or the Securities Act. Under the shelf registration process, we may, over time, sell the securities described in this prospectus in one or more offerings.

This prospectus provides you with a general description of the securities that we may offer. As allowed by SEC rules, this prospectus does not contain all the information you can find in the registration statement or the exhibits to the registration statement of which this prospectus is a part. Statements contained in this prospectus and any accompanying prospectus supplement or other offering materials about the provisions or contents of any agreement or other document are only summaries. If SEC rules require that any agreement or document be filed as an exhibit to the registration statement, you should refer to that agreement or document for its complete contents.

We will not use this prospectus to offer and sell securities unless it is accompanied by a prospectus supplement that more fully describes the securities being offered and the terms of the offering. Any accompanying prospectus supplement or free writing prospectus may also add to, update or supersede other information contained in this prospectus. Before purchasing any securities, you should carefully read this prospectus, any prospectus supplement and any free writing prospectus together with the information incorporated or deemed to be incorporated by reference herein as described under the heading “Where to Find Additional Information” in this prospectus.

You should rely only on the information contained or incorporated by reference in this prospectus. We have not authorized anyone to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted.

The information contained in this prospectus, any prospectus supplement to this prospectus, any free writing prospectus or the documents incorporated by reference herein or therein are accurate only as of the date of such document. Our business, financial condition, liquidity, results of operations, funds from operations and prospects may have changed since those dates.

Unless the context otherwise requires, references in this prospectus to “Perma-Fix,” the “Company,” “we,” “our,” and “us” refer to Perma-Fix Environmental Services, Inc. and its consolidated subsidiaries.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and any accompanying prospectus supplement, including the documents incorporated by reference herein and therein, contain statements reflecting our views about our future performance that constitute “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. These statements are often identified by the use of words such as “believe,” “intend,” “expect,” “estimate,” “plan,” “outlook,” “project,” “anticipate,” “may,” “will,” “would” and other similar words and expressions that predict or indicate future events or trends that are not statements of historical matters.

Forward-looking statements include statements related to:

- demand for our services;
- reductions and improvement in the level of government funding in future years;
- reducing operating costs and non-essential expenditures;
- ability to meet loan agreement quarterly financial covenant requirements;
- funding of cash flow requirements;
- Canadian receivables;
- sufficient liquidity to continue business;
- future results of operations and liquidity;
- increasing liquidity;
- government funding for our services;
- liquidity to repay debt if our lender accelerates payment of our borrowings;

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- manner in which the applicable governmental customer will be required to spend funding to remediate various sites;
- funding operations;
- continued increases in pricing and/or further tightening supply chain;
- our ability to fund capital expenditures from cash from operations and/or financing;
- impact from COVID-19 and economic conditions;
- continue improvement in waste receipts and project work;
- submitted bids;
- final terms of a proposed joint venture with an affiliate of Westinghouse Electric Company LLC, including the ownership percentage interests of the joint venture partners, as well as final funding requirements;
- positive trends;
- compliance with environmental laws, rules and regulations;
- potential effect of being a Potentially Responsible Party, as such term is defined under Section 107(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980;
- potential sites for violations of environmental laws and remediation of our facilities;
- future price increases;
- sales prices; and
- continuation of contracts with federal government.

While we believe the expectations reflected in any such forward-looking statements are reasonable, we can give no assurance such expectations will prove to be correct. Forward-looking statements should not be read as a guarantee of future performance or results and will not necessarily accurately indicate the times at which such performance or results may be achieved. Forward-looking statements are based on information available at the time those statements are made and/or management’s good faith belief as of that time with respect to future events and are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in or suggested by the forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those described in “Special Note Regarding Forward-Looking Statements” and “Risk Factors” in our annual report on Form 10-K for the fiscal year ended December 31, 2022, and in any subsequent annual report on Form 10-K, quarterly report on Form 10-Q or current report on Form 8-K incorporated by reference herein or in any accompanying prospectus supplement.

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PROSPECTUS SUMMARY

The following summary highlights selected information from this prospectus and does not contain all of the information that you need to consider in making your investment decision. You should carefully read the entire prospectus, the applicable prospectus supplement and any related free writing prospectus, including the risks of investing in our securities discussed under the heading “Risk Factors” contained in the applicable prospectus supplement and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus. You should also carefully read the information incorporated by reference into this prospectus, including our financial statements, and the exhibits to the registration statement of which this prospectus is a part.

Overview

We are an environmental and environmental technology know-how company providing nuclear, low-level radioactive, mixed, hazardous and non-hazardous waste treatment, processing, and disposal services, primarily through four treatment and storage facilities that are licensed by the Nuclear Regulatory Commission (or state equivalent agency) and permitted by the U.S. Environmental Protection Agency (“EPA”) or state-equivalent agency. We also conduct research and development (“R&D”) activities to identify, develop and implement innovative waste processing techniques for problematic waste streams, as well as provide technical services and on-site waste management services to commercial and governmental customers.

Headquartered in Atlanta, Georgia, we provide services to research institutions, commercial companies, public utilities, and governmental agencies (domestic and foreign), including the U.S. Department of Energy (“DOE”) and U.S. Department of Defense (“DOD”). The distribution channels for our services are through direct sales to customers or via intermediaries.

The principal element of our business strategy consists of upgrading our facilities within our treatment segment to increase efficiency and modernize and expand treatment capabilities to meet the changing markets associated with the waste management industry. Within our services segment, we continue to revitalize and expand our business development programs to further increase competitive procurement effectiveness and broaden the market penetration within both the commercial and government sectors. The Company remains focused on expansion into both commercial and international markets to supplement government spending in the United States, from which a significant portion of the Company’s revenue is derived. This includes new services, new customers and increased market share in our current markets.

We are a Delaware corporation incorporated in December 1990. Our principal executive offices are located at 8302 Dunwoody Place, Suite 250, Atlanta, Georgia 30350, and our telephone number is (770) 587-9898. Our website address is www.perma-fix.com. The information on our website is not incorporated by reference into this prospectus and should not be considered to be a part of this prospectus. Our internet address is included in this prospectus as an inactive textual reference only.

Our common stock is listed on the Nasdaq Capital Market under the symbol “PESI”. Prospective purchasers of our securities are urged to obtain current information as to the market prices of our common stock.

We are a “smaller reporting company” as defined in the Securities Exchange Act of 1934, as amended (the “Exchange Act”). We may take advantage of certain scaled disclosures available to smaller reporting companies and will be able to take advantage of these scaled down disclosures for so long as (i) our voting and non-voting ordinary shares held by non-affiliates is less than \$250.0 million measured as of June 30th of such fiscal year or (ii) our annual revenue is less than \$100.0 million during the most recently completed fiscal year and our voting and non-voting ordinary shares held by non-affiliates is less than \$700.0 million measured as of June 30th of such fiscal year.

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The Securities We May Offer

We may offer up to 2,500,000 shares of our common stock from time to time in one or more offerings under this prospectus, together with any applicable prospectus supplement and any related free writing prospectus, at prices and on terms to be determined by market conditions at the time of the relevant offering. This prospectus provides you with a general description of the securities we may offer. Each time we offer securities under this prospectus, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities to be offered.

The prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also add, update or change information contained in this prospectus or in documents we have incorporated by reference. However, no prospectus supplement or free writing prospectus will offer a security that is not registered and described in this prospectus at the time of the effectiveness of the registration statement of which this prospectus is a part.

We may offer and sell our securities to or through one or more underwriters, dealers, or agents, “at-the-market” to or through a market maker or into an existing trading market, or directly to one or more purchasers, or through a combination of methods of sale, on a continuous or delayed basis. For additional information on the methods of sale, you should refer to the section entitled “Plan of Distribution” in this prospectus. We, our underwriters, dealers, or agents, reserve the right to accept or reject all or part of any proposed purchase of securities. If we do offer securities through underwriters, dealers, or agents, we will include in the applicable prospectus supplement:

- the names of those underwriters or agents;
- applicable fees and commissions to be paid to them;
- details regarding over-allotment options, if any; and
- the estimated net proceeds to us.

This prospectus may not be used to consummate a sale of securities unless it is accompanied by a prospectus supplement.

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RISK FACTORS

Investment in any securities offered pursuant to this prospectus involves substantial risks. You should carefully consider the risk factors incorporated by reference to our Annual Report on Form 10-K for the year ended December 31, 2022, the risk factors incorporated by reference to any subsequent Annual Report on Form 10-K, Quarterly Report on Form 10-Q or Current Report on Form 8-K incorporated by reference herein or in any accompanying prospectus supplement, the risk factors described under the caption “Risk Factors” in any applicable prospectus supplement and any risk factors set forth in our other filings with the SEC, before making an investment decision. Each of the risks described in these documents could materially and adversely affect our business, financial condition, results of operations and prospects, and could result in a partial or

complete loss of your investment. Although we have tried to discuss key factors, please be aware that these are not the only risks we face and there may be additional risks that we do not presently know of or that we currently consider not likely to have a significant impact. New risks may emerge at any time and we cannot predict such risks or estimate the extent to which they may affect our business or our financial performance. Please also refer to the section entitled “Special Note Regarding Forward-Looking Statements” in this prospectus.

USE OF PROCEEDS

We maintain broad discretion over the use of proceeds from the sale of securities pursuant to this prospectus. Unless we specify otherwise in an accompanying prospectus supplement, we intend to use the net proceeds from the sale of securities by us for general corporate purposes, which may include, but is not limited to, working capital, repayment of indebtedness, capital expenditures, research and development expenditures and acquisitions of new technologies or businesses, subject in all respects to the consent of our secured creditor. The precise amount, use and timing of the application of such proceeds will depend upon our funding requirements and the availability and cost of other capital. Any allocation of the net proceeds of an offering of securities to a specific purpose will be determined at the time of such offering and will be described in the accompanying supplement to this prospectus.

DESCRIPTION OF COMMON STOCK

Our certificate of incorporation authorizes us to issue up to 30,000,000 shares of common stock, \$0.001 par value. As of May 15, 2023, there were 13,419,165 shares of our common stock outstanding.

The holders of shares of our common stock are entitled to one vote per share on all matters to be voted on by stockholders. Common stockholders are entitled to receive dividends declared by the board of directors out of funds legally available for the payment of dividends, subject to the rights, if any, of preferred stockholders. However, we have never paid a dividend and we do not anticipate paying a dividend in the foreseeable future. Our current secured credit facility prohibits us from paying cash dividends on our common stock. Upon any liquidation, dissolution or winding up of our business, the holders of common stock are entitled to share equally in all assets available for distribution after payment of all liabilities and provision for liquidation preference of shares of preferred stock then outstanding. The holders of common stock have no preemptive rights and no rights to convert their common stock into any other securities. There are no redemption or sinking fund provisions applicable to our common stock. All outstanding shares of common stock are fully paid and nonassessable.

Options and Other Equity Awards

Our certificate of incorporation authorizes us to issue shares of common stock and options, rights, and warrants relating to the common stock for the consideration and on the terms and conditions established by our board of directors in its sole discretion, whether in connection with acquisitions or otherwise. As of December 31, 2022, we had (i) options to purchase 1,018,400 shares of common stock outstanding under various incentive stock option plans of the Company, and (ii) an additional 60,000 shares available for issuance pursuant to an outstanding warrant.

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Antitakeover Effects of Delaware Law and Our Certificate of Incorporation and Bylaws

We are a Delaware corporation governed by the General Corporation Law of Delaware, or the DGCL, including the provisions of Section 203 of the DGCL, an anti-takeover law. In general, Section 203 prohibits a Delaware public corporation from engaging in a “business combination” with an “interested stockholder” for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner. As a result of Section 203, potential acquirers may be discouraged from attempting to effect acquisition transactions with us, thereby possibly depriving our security holders of certain opportunities to sell, or otherwise dispose of, such securities at above-market prices pursuant to such transactions. Further, certain of our option plans provide for the immediate acceleration of, and removal of restrictions from, options and other awards under such plans upon a “change of control” (as defined in the respective plans). Such provisions may also have the result of discouraging acquisition of us.

As of December 31, 2022, out of 30,000,000 shares of common stock authorized, we had 13,324,756 shares of common stock outstanding and 7,642 shares of treasury stock. In addition, at December 31, 2022, we had outstanding options to purchase 1,018,400 shares of our common stock at exercise prices ranging from \$2.79 to \$7.50 per share, and an outstanding warrant to purchase 60,000 shares of our common stock at an exercise price of \$3.51 per share. Assuming the issuance of the common stock underlying such options and warrant, as of December 31, 2022, we had available for future issuance 15,589,202 shares of authorized and unissued common stock, and 2,000,000 shares of our preferred stock. Future sales of authorized and unissued shares could be used by our management to make it more difficult for, and thereby discourage, an attempt to acquire control of us.

Undesignated Preferred Stock

The authorization of undesignated preferred stock in our certificate of incorporation will make it possible for our board of directors to issue preferred stock with super voting, special approval, dividend or other rights or preferences on a discriminatory basis that could impede the success of any attempt to acquire us. These and other provisions may have the effect of deferring, delaying or discouraging hostile takeovers, or changes in control or management of our company.

Requirements for Advance Notification of Stockholder Meetings, Nominations and Proposals

Our certificate of incorporation provides that special meetings of the stockholders may be called only by either the Chairman of the Board, if one has been elected, or the Chief Executive Officer, and shall be called by either such officer or the Secretary at the request in writing of a majority of the Board of Directors, but such special meetings may not be called by any other person or persons. In addition, any stockholder who wishes to bring business before an annual meeting or nominate directors must comply with the requirements set forth in our bylaws. These provisions may have the effect of deferring, delaying or discouraging hostile takeovers or changes in control or management of our company.

No Cumulative Voting

The DGCL provides that stockholders are not entitled to the right to cumulate votes in the election of directors unless our amended and restated certificate of incorporation provides otherwise. Our certificate of incorporation does not provide for cumulative voting.

Transfer Agent and Registrar

The transfer agent and registrar for the common stock is Continental Stock Transfer & Trust Company, 1 State Street, 30th Floor, New York, New York 10004-1561.

Exchange Listing

Our common stock is listed on the Nasdaq Capital Market under the symbol “PESI.”

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PLAN OF DISTRIBUTION

We may sell the securities being offered by us in this prospectus pursuant to underwritten public offerings, negotiated transactions, block trades or any combination of such methods. We may sell the securities being offered pursuant to this prospectus to or through underwriters, through dealers, through agents, or directly to one or more purchasers or through a combination of these methods. The applicable prospectus supplement will describe the terms of the offering of the securities, including:

- the name or names of any underwriters, if, and if required, any dealers or agents;
- the purchase price of the securities and the proceeds we will receive from the sale;
- any underwriting discounts and other items constituting underwriters' compensation;
- any discounts or concessions allowed or re-allowed or paid to dealers; and
- any securities exchange or market on which the securities may be listed or traded.

We, and our agents, dealers, and underwriters, as applicable, may distribute the securities from time to time in one or more transactions at:

- a fixed price or prices, which may be changed;
- market prices prevailing at the time of sale;
- prices related to such prevailing market prices; or
- negotiated prices.

We may determine the price or other terms of the securities offered under this prospectus by use of an electronic auction. We will describe how any auction will determine the price or any other terms, how potential investors may participate in the auction and the nature of the underwriters' obligations, in the applicable prospectus supplement or amendment.

We may solicit direct offers to purchase securities. We may also designate agents from time to time to solicit offers to purchase securities. Any agent that we designate, who may be deemed to be an underwriter as such term is defined in the Securities Act, may then resell such securities to the public at varying prices to be determined by such agent at the time of resale.

We may engage in "at the market" offerings of our securities as defined in Rule 415(a)(4) under the Securities Act. An "at the market" offering is an offering of our common stock at other than a fixed price, at prices prevailing at the time of sale or at prices related to such prevailing market prices, including sales made directly on a national securities exchange or sales made through a market maker other than on an exchange or other similar offerings through sales agents. We shall name any underwriter or agent that the Company engages for an at the market offering in a post-effective amendment to the registration statement containing this prospectus. In the related prospectus supplement, we shall also describe any additional details of the Company's arrangement with such underwriter or agent, including commissions or fees paid or discounts offered by the Company, and whether such underwriter is acting as principal or agent.

If underwriters are used in an offering, we will execute an underwriting agreement with such underwriters and will specify the name of each underwriter and the terms of the transaction (including any underwriting discounts and other terms constituting compensation of the underwriters and any dealers) in a prospectus supplement. Only underwriters named in a prospectus supplement are underwriters of the securities offered by that prospectus supplement. The securities may be offered to the public either through underwriting syndicates represented by managing underwriters or directly by one or more investment banking firms or others, as designated. If an underwriting syndicate is used, the managing underwriter(s) will be specified on the cover of the prospectus supplement. If underwriters are used in the sale, the offered securities will be acquired by the underwriters for their own accounts and may be resold from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. Any public offering price and any discounts or concessions allowed or re-allowed or paid to dealers may be changed from time to time. Unless otherwise set forth in the prospectus supplement, the obligations of the underwriters to purchase the offered securities will be subject to conditions precedent, and the underwriters will be obligated to purchase all of the offered securities, if any are purchased.

We may grant to the underwriters options to purchase additional securities to cover over-allotments, if any, at the public offering price, with additional underwriting commissions or discounts, as may be set forth in a related prospectus supplement. The terms of any over-allotment option will be set forth in the prospectus supplement for those securities.

If we use a dealer in the sale of the securities being offered pursuant to this prospectus or any prospectus supplement, we will sell the securities to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale. The names of the dealers and the terms of the transaction will be specified in a prospectus supplement.

We may sell the securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of securities and we will describe any commissions we will pay the agent in the prospectus supplement.

We may authorize agents or underwriters to solicit offers by institutional investors to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the commissions we must pay for solicitation of these contracts in the prospectus supplement.

In connection with the sale of the securities, underwriters, dealers or agents may receive compensation from us or from purchasers of the securities for whom they act as agents, in the form of discounts, concessions or commissions. Underwriters may sell the securities to or through dealers, and those dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters or commissions from the purchasers for whom they may act as agents. Underwriters, dealers and agents that participate in the distribution of the securities, and any institutional investors or others that purchase securities directly for the purpose of resale or distribution, may be deemed to be underwriters, and any discounts or commissions received by them from us and any profit on the resale of the common stock by them may be deemed to be underwriting discounts and commissions under the Securities Act. No FINRA member firm may receive compensation in excess of that allowable under FINRA rules, including Rule 5110, in connection with the offering of the securities.

We may provide agents, underwriters and other purchasers with indemnification against particular civil liabilities, including liabilities under the Securities Act, or contribution with respect to payments that the agents, underwriters or other purchasers may make with respect to such liabilities. Agents and underwriters may engage in transactions with, or perform services for, us in the ordinary course of business.

To facilitate the public offering of a series of securities, persons participating in the offering may engage in transactions that stabilize, maintain, or otherwise affect the market price of the securities. This may include over-allotments or short sales of the securities, which involves the sale by persons participating in the offering of more securities than have been sold to them by us. In exercising the over-allotment option granted to those persons. In addition, those persons may stabilize or maintain the price of the securities by bidding for or purchasing securities in the open market or by imposing penalty bids, whereby selling concessions allowed to underwriters or dealers participating in any such offering may be reclaimed if securities sold by them are repurchased in connection with stabilization transactions. The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. Such transactions, if commenced, may be discontinued at any time. We make no representation or prediction as to the direction or magnitude of any effect that the transactions described above, if implemented, may have on the price of our securities.

Unless otherwise specified in the applicable prospectus supplement, any common stock sold pursuant to a prospectus supplement will be eligible for trading as quoted on the Nasdaq Capital Market. Any underwriters to whom securities are sold by us for public offering and sale may make a market in the securities, but such underwriters will not be obligated to do so and may discontinue any market making at any time without notice.

In order to comply with the securities laws of some states, if applicable, the securities offered pursuant to this prospectus will be sold in those states only through registered or licensed brokers or dealers. In addition, in some states securities may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and complied with.

LEGAL MATTERS

Conner & Winters, LLP, Oklahoma City, Oklahoma will opine as to the validity of the issuance of the securities offered by this prospectus.

EXPERTS

The audited financial statements incorporated by reference in this prospectus and elsewhere in the registration statement have been so incorporated by reference in reliance upon the report of Grant Thornton LLP, independent registered public accountants, upon the authority of said firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the securities offered by this prospectus. This prospectus, which is part of the registration statement, omits certain information, exhibits, schedules and undertakings set forth in the registration statement. For further information pertaining to us and our securities, reference is made to our other filings with the SEC and the registration statement and the exhibits and schedules to the registration statement. Statements contained in this prospectus as to the contents or provisions of any documents referred to in this prospectus are not necessarily complete, and in each instance where a copy of the document has been filed as an exhibit to the registration statement, reference is made to the exhibit for a more complete description of the matters involved.

In addition, registration statements and certain other filings made with the SEC electronically are publicly available through the Commission's web site at <http://www.sec.gov>. The registration statement, including all exhibits and amendments to the registration statement, has been filed electronically with the SEC.

We are subject to the information and periodic reporting requirements of the Exchange Act, and, in accordance with such requirements, we file periodic reports, proxy statements, and other information with the SEC. These periodic reports, proxy statements, and other information will be available for inspection and copying at the web site of the SEC referred to above. We also maintain a website at <http://www.perma-fix.com>, at which you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the Commission. The information contained in, or that can be accessed through, our website is not part of, and is not incorporated into, this prospectus. We have included our website address in this prospectus solely as an inactive textual reference.

Our common stock is listed on the Nasdaq and all material filed by us with the Nasdaq can be inspected at the offices of the Nasdaq at 151 W. 42nd Street, New York, NY 10036.

You should rely only on the information in this prospectus and the additional information described above and under the heading "Incorporation of Certain Information by Reference" below. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely upon it. We are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information in this prospectus was accurate on the date of the front cover of this prospectus only. Our business, financial condition, results of operations and prospects may have changed since that date.

INCORPORATION BY REFERENCE

The SEC allows us to "incorporate by reference" the information contained in documents that we file separately with the SEC, which means that we can disclose important information to you by referring you to those other documents. The information incorporated by reference is considered to be a part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. Therefore, before you decide to invest in a particular offering under this shelf-registration, you should always check for reports we may have filed with the SEC after the date of this prospectus.

We incorporate by reference the documents listed below:

- Annual Report on [Form 10-K](#) for the fiscal year ended December 31, 2022, filed with the SEC on March 23, 2023;
- Quarterly Report on [Form 10-Q](#) for the quarter ended March 31, 2023, filed with the SEC on May 10, 2023;
- Current Report on [Form 8-K](#) filed with the SEC on April 26, 2023;
- Current Report on [Form 8-K](#) filed with the SEC on March 23, 2023;
- The description of our common stock that is contained in the Registration Statement on Form 8-A filed pursuant to Section 12 of the Exchange Act, that became effective on October 30, 1992, including any amendments or reports filed for the purpose of updating such description.

All documents subsequently filed by the Registrant with the SEC pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act (other than documents or portions of documents deemed to be furnished pursuant to the Exchange Act), prior to the filing of a post-effective amendment which indicates that all securities offered have been sold, or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference herein and to be a part hereof from the date of filing of such documents.

Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein, or in any other subsequently filed document which also is incorporated or deemed to be incorporated by reference herein, modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

You may obtain copies of any of these filings by contacting us as described below, or by contacting the SEC or accessing its website as described above under the heading "Where You Can Find More Information." We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, without charge upon written or oral request, a copy of any or all of the documents that are incorporated by reference into this prospectus but not delivered with the prospectus, including exhibits that are specifically incorporated by reference into such documents. You may request a copy of these filings by writing us at:

Perma-Fix Environmental Services, Inc.
8302 Dunwoody Place, #250
Atlanta, Georgia 30350
(770) 587-9898
Website: <http://www.perma-fix.com>

THE INFORMATION CONTAINED ON, OR ACCESSIBLE THROUGH, OUR WEBSITE IS NOT INCORPORATED INTO AND DOES NOT CONSTITUTE A PART OF THIS PROSPECTUS.

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2,051,282 Shares of Common Stock



PROSPECTUS SUPPLEMENT

CRAIG-HALLUM

WELLINGTON SHIELDS

May 21, 2024
