

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

Form 10-Q

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended March 31, 2024

Or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File No. 1-11596

**PERMA-FIX ENVIRONMENTAL SERVICES, INC.**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction  
of incorporation or organization)

**58-1954497**  
(IRS Employer  
Identification Number)

**8302 Dunwoody Place, Suite 250, Atlanta, GA**  
(Address of principal executive offices)

**30350**  
(Zip Code)

**(770) 587-9898**  
(Registrant's telephone number)

N/A

(Former name, former address and former fiscal year, if changed since last report)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, \$.001 Par Value	PESI	Nasdaq Capital Markets

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes  No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (\$232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit and post such files).

Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See definition of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer  Accelerated Filer  Non-accelerated Filer  Smaller reporting company  Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial standards provided pursuant to Section 13(a) of the Exchange Act

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  No

Indicate the number of shares outstanding of each of the issuer's classes of Common Stock, as of the close of the latest practical date.

Class	Outstanding at May 2, 2024
Common Stock, \$.001 Par Value	13,735,303 shares

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

INDEX

Page  
No.

Item 1. Condensed Consolidated Financial Statements (Unaudited)

<a href="#">Condensed Consolidated Balance Sheets - March 31, 2024 and December 31, 2023</a>	1
<a href="#">Condensed Consolidated Statements of Operations - Three Months Ended March 31, 2024 and 2023</a>	3
<a href="#">Condensed Consolidated Statements of Comprehensive Loss - Three Months Ended March 31, 2024 and 2023</a>	4
<a href="#">Condensed Consolidated Statements of Stockholders' Equity - Three Months Ended March 31, 2024 and 2023</a>	5
<a href="#">Condensed Consolidated Statements of Cash Flows - Three Months Ended March 31, 2024 and 2023</a>	6
<a href="#">Notes to Condensed Consolidated Financial Statements</a>	7
<b>Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations</b>	<b>20</b>
<b>Item 3. Quantitative and Qualitative Disclosures About Market Risk</b>	<b>30</b>
<b>Item 4. Controls and Procedures</b>	<b>30</b>
<b>PART II OTHER INFORMATION</b>	
<b>Item 1. Legal Proceedings</b>	<b>30</b>
<b>Item 1A. Risk Factors</b>	<b>30</b>
<b>Item 6. Exhibits</b>	<b>31</b>

**PERMA-FIX ENVIRONMENTAL SERVICES, INC.**  
**Condensed Consolidated Balance Sheets**

(Amounts in Thousands, Except for Share and Per Share Amounts)	March 31, 2024 (Unaudited)		December 31, 2023
<b>ASSETS</b>			
Current assets:			
Cash	\$ 2,374	\$ 7,500	
Accounts receivable, net of allowance for credit losses of \$ 19 and \$30, respectively	8,701	9,722	
Unbilled receivables	8,797	8,432	
Inventories	1,071	1,155	
Prepaid and other assets	3,955	3,738	
Current assets related to discontinued operations	13	13	
Total current assets	<u>24,911</u>	<u>30,560</u>	
Property and equipment:			
Buildings and land	24,319	24,311	
Equipment	22,930	22,809	
Vehicles	434	434	
Leasehold improvements	8	8	
Office furniture and equipment	1,140	1,130	
Construction-in-progress	1,158	1,010	
Total property and equipment	<u>49,989</u>	<u>49,702</u>	
Less accumulated depreciation	<u>(31,099)</u>	<u>(30,693)</u>	
Net property and equipment	<u>18,890</u>	<u>19,009</u>	
Property and equipment related to discontinued operations	81	81	
Operating lease right-of-use assets	1,885	1,990	
Intangibles and other long term assets:			
Permits	9,973	9,905	
Other intangible assets - net	442	461	
Finite risk sinking fund (restricted cash)	12,222	12,074	
Deferred tax assets	5,284	4,299	
Other assets	351	370	
Total assets	<u>\$ 74,039</u>	<u>\$ 78,749</u>	

The accompanying notes are an integral part of these condensed consolidated financial statements.

1

**PERMA-FIX ENVIRONMENTAL SERVICES, INC.**  
**Condensed Consolidated Balance Sheets, Continued**

(Amounts in Thousands, Except for Share and per Share Amounts)	March 31, 2024 (Unaudited)	December 31, 2023	
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>			
Current liabilities:			
Accounts payable	\$ 7,979	\$ 9,582	

Accrued expenses	6,238	6,560
Disposal/transportation accrual	1,515	1,198
Deferred revenue	7,295	6,815
Accrued closure costs - current	85	79
Current portion of long-term debt	673	773
Current portion of operating lease liabilities	346	380
Current portion of finance lease liabilities	287	291
Current liabilities related to discontinued operations	238	269
Total current liabilities	24,656	25,947
Accrued closure costs	8,015	8,051
Long-term debt, less current portion	1,873	1,975
Long-term operating lease liabilities, less current portion	1,594	1,670
Long-term finance lease liabilities, less current portion	706	776
Long-term liabilities related to discontinued operations	955	953
Total long-term liabilities	13,143	13,425
Total liabilities	37,799	39,372
Commitments and Contingencies (Note 9 )		
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; 13,730,580 and 13,654,201 shares issued, respectively; 13,722,938 and 13,646,559 shares outstanding, respectively	14	14
Additional paid-in capital	116,981	116,502
Accumulated deficit	(80,511)	(76,951)
Accumulated other comprehensive loss	(156)	(100)
Less Common Stock in treasury, at cost; 7,642 shares	(88)	(88)
Total stockholders' equity	36,240	39,377
Total liabilities and stockholders' equity	\$ 74,039	\$ 78,749

The accompanying notes are an integral part of these condensed consolidated financial statements.

2

**PERMA-FIX ENVIRONMENTAL SERVICES, INC.**  
**Condensed Consolidated Statements of Operations**  
**(Unaudited)**

(Amounts in Thousands, Except for Per Share Amounts)	Three Months Ended March 31,	
	2024	2023
Revenues	\$ 13,617	\$ 20,107
Cost of goods sold	14,237	17,098
Gross (loss) profit	(620)	3,009
Selling, general and administrative expenses	3,544	3,486
Research and development	296	99
Loss from operations	(4,460)	(576)
Other income (expense):		
Interest income	174	127
Interest expense	(116)	(53)
Interest expense-financing fees	(13)	(20)
Other	1	—
Loss from continuing operations before taxes	(4,414)	(522)
Income tax benefit	(956)	(204)
Loss from continuing operations, net of taxes	(3,458)	(318)
Loss from discontinued operations (net of taxes) (Note 10)	(102)	(93)
Net loss	\$ (3,560)	\$ (411)
Net loss per common share - basic and diluted:		
Continuing operations	\$ (.25)	\$ (.02)
Discontinued operations	(.01)	(.01)
Net loss per common share	\$ (.26)	\$ (.03)
Number of common shares used in computing net loss per share:		
Basic	13,676	13,358
Diluted	13,676	13,358

The accompanying notes are an integral part of these condensed consolidated financial statements.

3

**PERMA-FIX ENVIRONMENTAL SERVICES, INC.**  
**Condensed Consolidated Statements of Comprehensive Loss**  
**(Unaudited)**

(Amounts in Thousands)	Three Months Ended March 31,	
	2024	2023
Net loss	\$ (3,560)	\$ (411)
Other comprehensive (loss) income:		
Foreign currency translation (loss) gain	(56)	7
Total other comprehensive (loss) income	(56)	7
Comprehensive loss	\$ (3,616)	(404)

The accompanying notes are an integral part of these condensed consolidated financial statements.

4

**PERMA-FIX ENVIRONMENTAL SERVICES, INC.**  
**Condensed Consolidated Statement of Stockholders' Equity**  
**(Unaudited)**

(Amounts in thousands, except for share amounts)

	Common Stock	Additional Paid-In Capital	Common Stock Held In Treasury	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount				
<b>Balance at December 31, 2023</b>	<u>13,654,201</u>	<u>\$ 14</u>	<u>\$116,502</u>	<u>\$ (88)</u>	<u>\$ (100)</u>	<u>\$ (76,951)</u>
Net loss	—	—	—	—	(3,560)	(3,560)
Foreign currency translation	—	—	—	(56)	—	(56)
Issuance of Common Stock for services	14,963	—	118	—	—	118
Issuance of Common Stock upon exercise of options	31,416	—	104	—	—	104
Issuance of Common Stock upon exercise of warrant	30,000	—	105	—	—	105
Stock-Based Compensation	—	—	152	—	—	152
<b>Balance at March 31, 2024</b>	<u>13,730,580</u>	<u>\$ 14</u>	<u>\$116,981</u>	<u>\$ (88)</u>	<u>\$ (156)</u>	<u>\$ (80,511)</u>
<b>Balance at December 31, 2022</b>	<u>13,332,398</u>	<u>\$ 13</u>	<u>\$115,209</u>	<u>\$ (88)</u>	<u>\$ (165)</u>	<u>\$ (77,436)</u>
Net loss	—	—	—	—	(411)	(411)
Foreign currency translation	—	—	—	7	—	7
Issuance of Common Stock for services	33,319	—	118	—	—	118
Issuance of Common Stock upon exercise of options	31,719	—	7	—	—	7
Stock-Based Compensation	—	—	118	—	—	118
<b>Balance at March 31, 2023</b>	<u>13,397,436</u>	<u>\$ 13</u>	<u>\$115,452</u>	<u>\$ (88)</u>	<u>\$ (158)</u>	<u>\$ (77,847)</u>

The accompanying notes are an integral part of these condensed consolidated financial statements.

5

**PERMA-FIX ENVIRONMENTAL SERVICES, INC.**  
**Condensed Consolidated Statements of Cash Flows**  
**(Unaudited)**

(Amounts in Thousands)	Three Months Ended March 31,	
	2024	2023
Cash flows from operating activities:		
Net loss	\$ (3,560)	\$ (411)
Less: loss from discontinued operations, net of taxes (Note 10)	(102)	(93)
Loss from continuing operations, net of taxes	(3,458)	(318)
Adjustments to reconcile loss from continuing operations to cash (used in) provided by operating activities :		
Depreciation and amortization	431	747
Amortization of debt issuance costs	12	20
Deferred tax benefit	(956)	(204)
Recovery of credit losses on accounts receivable	(11)	(6)
Issuance of common stock for services	118	118
Stock-based compensation	152	118
Changes in operating assets and liabilities of continuing operations:		
Accounts receivable	1,032	(1,511)
Unbilled receivables	(365)	(639)
Prepaid expenses, inventories and other assets	334	1,876
Accounts payable, accrued expenses and unearned revenue	(1,721)	1,561
Cash (used in) provided by continuing operations	(4,432)	1,762
Cash used in discontinued operations	(159)	(198)
Cash (used in) provided by operating activities	(4,591)	1,564

Cash flows from investing activities:		
Purchases of property and equipment (net of financed amount)	(244)	(748)
Cash used in investing activities of continuing operations	(244)	(748)
Cash flows from financing activities:		
Repayments of revolving credit borrowings	(18,314)	(20,257)
Borrowing on revolving credit	18,314	20,257
Proceeds from issuance of Common Stock upon exercise of options/warrant	209	7
Principal repayments of finance lease liabilities	(75)	(41)
Principal repayments of long term debt	(259)	(137)
Payment of debt issuance costs	—	(33)
Cash used in financing activities	(125)	(204)
Effect of exchange rate changes on cash	(18)	—
(Decrease) increase in cash and finite risk sinking fund (restricted cash)	(4,978)	612
Cash and finite risk sinking fund (restricted cash) at beginning of period	19,574	13,436
Cash and finite risk sinking fund (restricted cash) at end of period	\$ 14,596	\$ 14,048
Supplemental disclosure:		
Interest paid	\$ 117	\$ 55
Income taxes paid	—	—
Non-cash investing and financing activities:		
Equipment purchase subject to finance lease	—	50
Equipment purchase subject to finance	44	—

The accompanying notes are an integral part of these condensed consolidated financial statements.

**PERMA-FIX ENVIRONMENTAL SERVICES, INC.**  
**Notes to Condensed Consolidated Financial Statements**

**March 31, 2024**  
**(Unaudited)**

Reference is made herein to the notes to consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2023.

**1. Basis of Presentation**

The condensed consolidated financial statements included herein have been prepared by the Company (which may be referred to as we, us or our), without an audit, pursuant to the rules and regulations of the Securities and Exchange Commission (the "Commission"). Certain information and note disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") have been condensed or omitted pursuant to such rules and regulations, although the Company believes the disclosures which are made are adequate to make the information presented not misleading. Further, the condensed consolidated financial statements reflect, in the opinion of management, all adjustments (which include only normal recurring adjustments) necessary to present fairly the financial position and results of operations as of and for the periods indicated. The results of operations for the three months ended March 31, 2024 are not necessarily indicative of results to be expected for the fiscal year ending December 31, 2024.

These condensed consolidated financial statements should be read in conjunction with the consolidated financial statements and the notes thereto included in the Company's Annual Report on Form 10-K as of and for the year ended December 31, 2023.

The condensed consolidated financial statements include the accounts of our wholly-owned subsidiaries.

**Financial Position and Liquidity**

The Company's results of operations in the first quarter of 2024 were impacted by accelerated investments and several events, which included the following:

- Accelerated investments in research and development ("R&D") on our new technology to treat Per- and Polyfluorinated Substances ("PFAS");
- Reduced activities by our customers due to poor weather conditions, which resulted in the closure of two of our facilities for a week, including delays in shipments to support backlog;
- Continuing Resolution impacts due to the inability of Congress to pass a Federal Budget through late March 2024, which contributed to delays in procurements, project starts and waste shipment, due to uncertain budget projections by our government clients;
- Completion of two large projects in the Services Segment that were not replaced by new project starts due to delays in mobilization activities until late April; and
- All three primary treatment facilities realized outages in March which impacted revenue as the Company utilized the aforementioned slowdowns for equipment replacement and repairs, program enhancements, and testing to support permit expansion and broader market penetration.

The Company believes that most of these accelerated investments and unanticipated impacts should have limited duration effects to its financial performance. The Company expects that the second quarter will not include material continued impact from these activities. With the passage of the Federal Budget in late March 2024 and improved weather conditions, the Company has begun to see steady improvements in waste receipts, project starts that were delayed and increased procurement activities. The Company's waste treatment backlog stands at approximately \$10,580,000 as of March 31, 2024, an increase of approximately \$1,878,000 from the December 31, 2023, balance of \$8,702,000.

The Company's cash flow requirements for the next twelve months will consist primarily of general working capital needs, scheduled principal payments on its debt obligations, remediation projects, and planned capital expenditures which include its PFAS technology. The Company plans to fund these requirements from its operations, credit facility availability, cash on hand (which will include, when received, cash from outstanding receivables due to our Perma-Fix Canada, Inc. subsidiary from a certain customer - See "Note 9 – Commitments and Contingencies - Perma-Fix Canada, Inc. ("PF Canada")" for a discussion of this outstanding receivables) and possible other methods. The Company's ability to utilize its credit facility from its lender is subject to meeting our quarterly financial covenant requirements, among other things. The Company continues to explore all sources of increasing its capital and/or liquidity and to improve its revenue and working capital, including, but not limited to entering into equity transactions. There are no assurances that the Company will be successful in increasing its liquidity through its efforts. The Company is continually reviewing operating costs and reviewing the

possibility of further reducing operating costs and non-essential expenditures to bring them in line with revenue levels, when necessary. The Company believes that its cash flows from operations, its available liquidity from its credit facility, and its cash on hand (which will include, when received, cash from the outstanding Canadian receivables noted above) should be sufficient to fund our operations for the next twelve months.

## 2. Summary of Significant Accounting Policies

Our accounting policies are as set forth in the notes to the December 31, 2023, consolidated financial statements referred to above.

### Recently Issued Accounting Standards – Not Yet Adopted

In August 2023, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2023-05, "Business Combinations—Joint Venture Formations (Subtopic 805-60): Recognition and Initial Measurement." ASU 2023-05 applies to the formation of a "joint venture" or a "corporate joint venture" and requires a joint venture to initially measure all contributions received upon its formation at fair value. The guidance does not impact accounting by the venturers. The new guidance is applicable to joint venture entities with a formation date on or after January 1, 2025 on a prospective basis. The Company is currently evaluating the impact of this ASU on its consolidated financial statements.

7

In November 2023, the FASB issued ASU 2023-07, "Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures," which expands reportable segment disclosure requirements by requiring disclosures of significant reportable segment expenses that are regularly provided to the chief operating decision maker ("CODM") and included within each reported measure of a segment's profit or loss. The ASU also requires disclosure of the title and position of the individual identified as the CODM and an explanation of how the CODM uses the reported measures of a segment's profit or loss in assessing segment performance and deciding how to allocate resources. Additionally, ASU 2023-07 requires all segment profit or loss and assets disclosures to be provided on an annual and interim basis. The amendments in this ASU are required to be adopted for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024 with early adoption permitted, and should be applied on a retrospective basis. ASU 2023-07 will be effective for the Company's financial statements for the year ended December 31, 2024. This ASU will not have impact on the Company's consolidated financial condition or results of operations. The Company is evaluating the impact to the related segment reporting disclosures.

In December 2023, the FASB issued ASU No. 2023-09, "Income Taxes (Topic 740): Improvements to Income Tax Disclosures," which modifies the rules on income tax disclosures to require entities to disclose (1) specific categories in the rate reconciliation, (2) the income or loss from continuing operations before income tax expense or benefit (separated between domestic and foreign) and (3) income tax expense or benefit from continuing operations (separated by federal, state and foreign). ASU 2023-09 also requires entities to disclose their income tax payments to international, federal, state and local jurisdictions, among other changes. The guidance is effective for annual periods beginning after December 15, 2024. ASU 2023-09 should be applied on a prospective basis, but retrospective application is permitted. This ASU will not have impact on the Company's consolidated financial condition or results of operations. The Company is evaluating the impact to its income taxes reporting disclosures.

## 3. Revenue

### Disaggregation of Revenue

In general, the Company's business segmentation is aligned according to the nature and economic characteristics of our services and provides meaningful disaggregation of each business segment's results of operations. The nature of the Company's performance obligations within our Treatment and Services Segments results in the recognition of our revenue primarily over time. The following tables present further disaggregation of our revenues by different categories for our Services and Treatment Segments:

#### Revenue by Contract Type (In thousands)

	Three Months Ended			Three Months Ended		
	March 31, 2024			March 31, 2023		
	Treatment	Services	Total	Treatment	Services	Total
Fixed price	\$ 8,709	\$ 4,314	\$ 13,023	\$ 9,594	\$ 8,647	\$ 18,241
Time and materials	—	594	594	—	1,866	1,866
<b>Total</b>	<b>\$ 8,709</b>	<b>\$ 4,908</b>	<b>\$ 13,617</b>	<b>\$ 9,594</b>	<b>\$ 10,513</b>	<b>\$ 20,107</b>

#### Revenue by generator (In thousands)

	Three Months Ended			Three Months Ended		
	March 31, 2024			March 31, 2023		
	Treatment	Services	Total	Treatment	Services	Total
Domestic government	\$ 5,761	\$ 4,303	\$ 10,064	\$ 7,257	\$ 9,718	\$ 16,975
Domestic commercial	2,501	504	3,005	2,206	597	2,803
Foreign government	—	79	79	95	177	272
Foreign commercial	447	22	469	36	21	57
<b>Total</b>	<b>\$ 8,709</b>	<b>\$ 4,908</b>	<b>\$ 13,617</b>	<b>\$ 9,594</b>	<b>\$ 10,513</b>	<b>\$ 20,107</b>

### Contract Balances

The timing of revenue recognition and billings results in unbilled receivables (contract assets). The Company's contract liabilities consist of deferred revenues which represent advance payment from customers in advance of the completion of our performance obligation. The following table represents changes in our contract asset and contract liabilities balances:

(In thousands)	March 31, 2024	December 31, 2023	Year-to-date	Year-to-date
			Change (\$)	Change (%)
<b>Contract assets</b>				
Unbilled receivables - current	\$ 8,797	\$ 8,432	\$ 365	4.3%
<b>Contract liabilities</b>				
Deferred revenue	\$ 7,295	\$ 6,815	\$ 480	7.0%

8

During the three months ended March 31, 2024, and 2023, the Company recognized revenue of \$ 3,165,000 and \$3,494,000, respectively, related to

untreated waste that was in the Company's control as of the beginning of each respective year. Revenue recognized in each period relates to performance obligations satisfied within the respective period.

#### Remaining Performance Obligations

The Company applies the practical expedient in ASC 606-10-50-14 and does not disclose information about remaining performance obligations that have original expected durations of one year or less.

Within our Services Segment, there are service contracts which provide that the Company has a right to consideration from a customer in an amount that corresponds directly with the value to the customer of our performance completed to date. For those contracts, the Company has utilized the practical expedient in ASC 606-10-55-18, which allows the Company to recognize revenue in the amount for which we have the right to invoice; accordingly, the Company does not disclose the value of remaining performance obligations for those contracts.

The Company's contracts and subcontracts relating to activities at governmental sites generally allow for termination for convenience at any time at the government's option without payment of a substantial penalty. The Company does not disclose remaining performance obligations on these contracts.

#### 4. Leases

At the inception of an arrangement, the Company determines if an arrangement is, or contains, a lease based on facts and circumstances present in that arrangement. Lease classifications, recognition, and measurement are then determined at the lease commencement date.

The Company's operating lease right-of-use ("ROU") assets and operating lease liabilities include primarily leases for office and warehouse spaces used to conduct our business. The Company's operating leases also include a building with land utilized for our waste treatment operations which includes a purchase option. Finance leases consist primarily of processing and transport equipment used by our facilities' operations.

The components of lease cost for the Company's leases were as follows (in thousands):

	Three Months Ended	
	March 31,	
	2024	2023
Operating Lease:		
Lease cost	\$ 143	\$ 156
Finance Leases:		
Amortization of ROU assets	65	38
Interest on lease liability	22	6
	87	44
Total lease cost	\$ 230	\$ 200

The weighted average remaining lease term and the weighted average discount rate for operating and finance leases at March 31, 2024 were:

	Operating Leases	Finance Leases
Weighted average remaining lease terms (years)	5.4	4.3
Weighted average discount rate	7.6%	8.8%

9

The weighted average remaining lease term and the weighted average discount rate for operating and finance leases at March 31, 2023 were:

	Operating Leases	Finance Leases
Weighted average remaining lease terms (years)	6.1	3.0
Weighted average discount rate	7.8%	5.5%

The following table reconciles the undiscounted cash flows for the operating and finance leases at March 31, 2024, to the operating and finance lease liabilities recorded on the balance sheet (in thousands):

	Operating Leases	Finance Leases
2024	\$ 372	\$ 275
2025	433	345
2026	416	192
2027	406	157
2028	383	134
2029 and thereafter	366	102
Total undiscounted lease payments	2,376	1,205
Less: Imputed interest	(436)	(212)
Present value of lease payments	\$ 1,940	\$ 993
Current portion of operating lease obligations	\$ 346	\$ —
Long-term operating lease obligations, less current portion	\$ 1,594	\$ —
Current portion of finance lease obligations	\$ —	\$ 287
Long-term finance lease obligations, less current portion	\$ —	\$ 706

Supplemental cash flow and other information related to our leases were as follows (in thousands):

	Three Months Ended	
	March 31,	
	2024	2023
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flow from operating leases	\$ 147	\$ 144

Operating cash flow from finance leases	\$ 22	\$ 6
Financing cash flow from finance leases	\$ 75	\$ 41
ROU assets obtained in exchange for lease obligations for:		
Finance liabilities	\$ —	\$ 50

## 5. Intangible Assets

The following table summarizes information relating to the Company's definite-lived intangible assets:

	Weighted Average Amortization Period (Years)	March 31, 2024			December 31, 2023		
		Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
<b>Other Intangibles (amount in thousands)</b>							
Patents	8.3	\$ 710	\$ (390)	\$ 320	\$ 710	\$ (387)	\$ 323
Software	3	673	(551)	122	667	(529)	138
<b>Total</b>		<b>\$ 1,383</b>	<b>\$ (941)</b>	<b>\$ 442</b>	<b>\$ 1,377</b>	<b>\$ (916)</b>	<b>\$ 461</b>

The intangible assets noted above are amortized on a straight-line basis over their useful lives.

10

The following table summarizes the expected amortization over the next five years for our definite-lived intangible assets:

Year	Amount (In thousands)
2024 (Remaining)	\$ 58
2025	45
2026	40
2027	22
2028	13

Amortization expenses relating to the definite-lived intangible assets as discussed above were \$ 25,000 and \$55,000 for the three months ended March 31, 2024, and 2023, respectively.

## 6. Capital Stock, Stock Plans, Warrants and Stock Based Compensation

The Company has certain stock option plans under which it may award incentive stock options ("ISOs") and/or non-qualified stock options ("NQSOs") to employees, officers, outside directors, and outside consultants.

On January 18, 2024, the Company granted ISOs to certain employees under the 2017 Stock Option Plan ("2017 Plan"), for the purchase of up to an aggregate of 45,000 shares of the Company's common stock, par value \$ .001 (the "Common Stock"). Each ISO granted is for a contractual term of six years with one-fifth vesting annually over a five-year period. The exercise price of the ISO is \$7.75 per share, which was equal to the fair market value of the Company's Common Stock on the date of grant.

The following table summarizes stock-based compensation recognized for the three months ended March 31, 2024, and 2023 for our employee and director stock options.

Stock Options	Three Months Ended	
	2024	2023
Employee Stock Options	\$ 91,000	\$ 86,000
Director Stock Options	61,000	32,000
<b>Total</b>	<b>\$ 152,000</b>	<b>\$ 118,000</b>

At March 31, 2024, the Company had approximately \$ 1,823,000 of total unrecognized compensation costs related to unvested options for employee and directors. The weighted average period over which the unrecognized compensation costs are expected to be recognized is approximately 3.2 years.

The summary of the Company's total Stock Option Plans as of March 31, 2024 and March 31, 2023, and changes during the periods then ended, are presented below. The Company's Plans consist of the 2017 Plan and the 2003 Outside Directors Stock Plan (the "2003 Plan"):

	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value <sup>(4)</sup>
Options outstanding January 1, 2024	994,500	\$ 5.57		
Granted	45,000	7.75		
Exercised	(43,500)	5.61		\$ 212,410
Forfeited	(11,000)	7.01		
Options outstanding end of period <sup>(1)</sup>	<b>985,000</b>	<b>\$ 5.66</b>	<b>4.8</b>	<b>\$ 6,139,346</b>
Options exercisable at March 31, 2024 <sup>(2)</sup>	<b>350,300</b>	<b>\$ 5.06</b>	<b>3.8</b>	<b>\$ 2,391,576</b>

11

	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value <sup>(4)</sup>

Options outstanding January 1, 2023	1,018,400	\$ 5.02		
Granted	295,000	\$ 3.95		
Exercised	(44,400)	\$ 3.56		\$ 370,196
Forfeited/expired	(4,500)	\$ 3.90		
Options outstanding end of period <sup>(3)</sup>	<u>1,264,500</u>	\$ 4.83	4.2	\$ 8,791,279
Options exercisable at March 31, 2023 <sup>(3)</sup>	<u>499,500</u>	\$ 4.30	2.3	\$ 6,047,029

(1) Options with exercise prices ranging from \$3.15 to \$9.81

(2) Options with exercise prices ranging from \$3.15 to \$7.50

(3) Options with exercise prices ranging from \$2.79 to \$7.50

(4) The intrinsic value of a stock option is the amount by which the market value of the underlying stock exceeds the exercise price of the option.

During the three months ended March 31, 2024, the Company issued a total of 14,963 shares of its Common Stock under the 2003 Plan to its outside directors as compensation for serving on our Board of Directors (the "Board"). The Company recorded approximately \$118,000 in compensation expenses (included in selling, general and administration ("SG&A") expenses) in connection with the issuance of shares of its Common Stock to outside directors.

During the three months ended March 31, 2024, the Company issued an aggregate 12,916 shares of its Common Stock from cashless exercises of options for the purchase of 25,000 shares of the Company's Common Stock ranging from \$3.15 per share to \$7.005 per share. Additionally, the Company issued 18,500 shares of its Common Stock from the cash exercises of options for the purchase of 18,500 shares of the Company's Common Stock, at exercise prices ranging from \$3.95 per share to \$7.005 per share, resulting in proceeds of approximately \$ 104,000.

In connection with a \$2,500,000 loan that the Company received from Mr. Robert Ferguson (the "Ferguson Loan") on April 1, 2019, the Company issued a warrant to Mr. Ferguson (the "Ferguson Warrant") for the purchase of up to 60,000 shares of our Common Stock at an exercise price of \$ 3.51 per share. The Ferguson Loan was paid in full in December 2020. Upon Mr. Ferguson's death, the Ferguson Warrant was transferred equally to Mr. Ferguson's two heirs with each holding a Warrant for the purchase of up to 30,000 shares of the Company's Common Stock, as permitted under the Ferguson Warrant. One of the Warrants was exercised by Mr. Ferguson's heir in 2023. On March, 22, 2024, the remaining Warrant was exercised by Mr. Ferguson's heir for the purchase of 30,000 shares of the Company's Common Stock, resulting in proceeds received by the Company of approximately \$ 105,000.

## 12

### 7. Loss Per Share

Basic loss per share is calculated based on the weighted-average number of outstanding common shares during the applicable period. Diluted loss per share is based on the weighted-average number of outstanding common shares plus the weighted-average number of potential outstanding common shares. In periods where they are anti-dilutive, such amounts are excluded from the calculations of dilutive loss earnings per shares. The following table reconciles the loss and average share amounts used to compute both basic and diluted loss per share:

	Three Months Ended (Unaudited)	
	March 31, 2024	2023
(Amounts in Thousands, Except for Per Share Amounts)		
<u>Loss per common share from continuing operations</u>		
Loss from continuing operations, net of taxes	\$ (3,458)	\$ (318)
Basic and diluted loss per share	\$ (.25)	\$ (.02)
<u>Loss per common share from discontinued operations, net of taxes</u>		
Loss from discontinued operations, net of taxes	\$ (102)	\$ (93)
Basic and diluted loss per share	\$ (.01)	\$ (.01)
<u>Net loss per common share</u>		
Net loss	\$ (3,560)	\$ (411)
Basic and diluted loss per share	\$ (.26)	\$ (.03)
Weighted average shares outstanding:		
Basic weighted average shares outstanding	13,676	13,358
Add: dilutive effect of stock options	—	—
Diluted weighted average shares outstanding	13,676	13,358
Potential shares excluded from above weighted average share calculations due to their anti-dilutive effect include:		
Stock options	75	335

### 8. Long Term Debt

Long-term debt consists of the following as of March 31, 2024, and December 31, 2023:

(Amounts in Thousands)	March 31, 2024	December 31, 2023
<b>Revolving Credit</b> facility dated May 8, 2020, borrowings based upon eligible accounts receivable, subject to monthly borrowing base calculation, balance due on May 15, 2027. Effective interest rate for the first quarter of 2024 was 10.5% <sup>(1)</sup>	\$ —	\$ —
<b>Term Loan 1</b> dated May 8, 2020, payable in equal monthly installments of principal, balance due on May 15, 2027. Effective interest rate for the first quarter of 2024 was 10.2% <sup>(1)</sup>	107	213
<b>Term Loan 2</b> dated July 31, 2023, payable in equal monthly installments of principal, balance due on May 15, 2027. Effective interest rate for first quarter of 2024 was 9.5% <sup>(1)</sup>	2,208	2,333
<b>Capital Line</b> dated May 4, 2021, payable in equal monthly installments of principal, balance due on May 15, 2027. Effective interest rate for first quarter of 2024 was 9.0% <sup>(1)</sup>	332	358
<b>Debt Issuance Costs</b>	(158) <sup>(2)</sup>	(170) <sup>(2)</sup>
<b>Notes Payable</b> up to 2030, annual interest rate of 10.7% and 9.1%.	57	14

Total debt	2,546	2,748
Less current portion of long-term debt	673	773
Long-term debt	\$ 1,873	\$ 1,975

(1) Our revolving credit facility is collateralized by our accounts receivable, and our term loans and capital line are collateralized by our property, plant, and equipment.  
 (2) Aggregate unamortized debt issuance costs in connection with the Company's credit facility, which consists of the revolving credit, Term loan 1, Term loan 2 and Capital Line, as applicable.

### **Revolving Credit and Term Loan Agreement**

The Company entered into a Second Amended and Restated Revolving Credit, Term Loan and Security Agreement, dated May 8, 2020 ("Loan Agreement"), with PNC National Association ("PNC" and "lender"), acting as agent and lender. The Loan Agreement, as amended from time to time, provides the Company with the following credit facility with a maturity date of May 15, 2027: (a) up to \$12,500,000 revolving credit ("revolving credit"), with the maximum that the Company can borrow under the revolving credit based on a percentage of eligible receivables (as defined) at any one time reduced by outstanding standby letters of credit and borrowing reductions that the Company's lender may impose from time to time; (b) a term loan ("Term Loan 1") of approximately \$1,742,000, requiring monthly installments of \$35,547; (c) a term loan ("Term Loan 2") of \$2,500,000, requiring monthly installments of \$41,667; and (d) a capital expenditure line ("Capital Line") of up to \$ 1,000,000 with advances on the line, subject to certain limitations, permitted for up to twelve months starting May 4, 2021 (the "Borrowing Period"). Amounts advanced under the Capital Line at the end of the Borrowing Period totaled approximately \$524,000, requiring monthly installments of principal of approximately \$ 8,700 plus interest, commencing June 1, 2022.

Pursuant to the Loan Agreement, as amended, payments of annual interest rates are as follows: (i) interest due on the revolving credit is at prime (8.50% at March 31, 2024) plus 2% or Secured Overnight Finance Rate ("SOFR") (as defined in the Loan Agreement, as amended) plus 3.00% plus an SOFR Adjustment applicable for an interest period selected by the Company; (ii) interest due on each Term Loan 1 and the Capital Line is at prime plus 2.50% or SOFR plus 3.50% plus an SOFR Adjustment applicable for an interest period selected by the Company; and (iii) interest due on Term Loan 2 is at prime plus 3% or SOFR plus 4.00% plus an SOFR Adjustment applicable for an interest period selected by the Company. SOFR Adjustment rates of 0.10% and 0.15% are applicable for a one-month interest period and three-month period, respectively, that may be selected by the Company.

The Company agreed to pay PNC 1.0% of the total financing under the Loan Agreement, as amended, in the event the Company pays off its obligations on or before July 31, 2024, and 0.5% of the total financing if the Company pays off its obligations after July 31, 2024, to and including July 31, 2025. No early termination fee shall apply if the Company pays off its obligations under Loan Agreement, as amended, after July 31, 2025.

At March 31, 2024, the borrowing availability under the Company's credit facility was approximately \$ 2,379,000 which included our cash (deposited with the Company's lender) and was based on our eligible receivables and is net of approximately \$3,950,000 in outstanding standby letters of credit and net of a \$750,000 indefinite reduction in borrowing availability imposed by the Company's lender.

The Company's credit facility under its Loan Agreement, as amended, with PNC contains certain financial covenants, along with customary representations and warranties. A breach of any of these financial covenants, unless waived by PNC, could result in a default under our credit facility allowing our lender to immediately require the repayment of all outstanding debt under our credit facility and terminate all commitments to extend further credit. The Company was not required to perform testing of its fixed charge coverage ratio ("FCCR") requirement for the first quarter of 2024 pursuant to an amendment dated May 8, 2024, to the Company's Loan Agreement, as amended (see "Note 15 – Subsequent Events – Credit Facility" for this amendment which removed the testing requirement of the FCCR for the first quarter of 2024, among other things). The Company met all of its other financial covenant requirements in the first quarter of 2024.

### **9. Commitments and Contingencies**

#### **Hazardous Waste**

In connection with our waste management services, the Company processes hazardous, non-hazardous, low-level radioactive and mixed (containing both hazardous and low-level radioactive) waste, which the Company transports to its own, or other, facilities for destruction or disposal. As a result of disposing of hazardous substances, in the event any cleanup is required at the disposal site, the Company could be a potentially responsible party for the costs of the cleanup notwithstanding any absence of fault on our part.

#### **Legal Matters**

In the normal course of conducting our business, the Company may be involved in various litigation. The Company is not a party to any litigation or governmental proceeding which our management believes could result in any judgments or fines against us that would have a material adverse effect on our financial position, liquidity or results of future operations.

#### **Tetra Tech EC, Inc. ("Tetra Tech")**

During July 2020, Tetra Tech EC, Inc. ("Tetra Tech") filed a complaint in the U.S. District Court for the Northern District of California (the "Court") against CH2M Hill, Inc. ("CH2M") and four subcontractors of CH2M, including the Company ("Defendants"). The complaint alleges various claims, including a claim for negligence, negligent misrepresentation, equitable indemnification and related business claims against all Defendants related to alleged damages suffered by Tetra Tech in respect of certain draft reports prepared by Defendants at the request of the U.S. Navy as part of an investigation and review of certain whistleblower complaints about Tetra Tech's environmental restoration at the Hunter's Point Naval Shipyard in San Francisco.

CH2M was hired by the Navy in 2016 to review Tetra Tech's work. CH2M subcontracted with environmental consulting and cleanup firms Battelle Memorial Institute, Cabrera Services, Inc., SC&A, Inc. and the Company to assist with the review, according to the complaint.

The Company's insurance carrier is providing a defense on our behalf in connection with this lawsuit, subject to a \$ 100,000 self-insured retention and the terms and limitations contained in the insurance policy.

The majority of Tetra Tech's claims have been dismissed by the Court. Remaining claims include: (1) intentional interference with contractual relations; and (2) inducing a breach of contract. The Company continues to believe it has no liability exposure to Tetra Tech.

#### **Perma-Fix Canada Inc. ("PF Canada")**

During the fourth quarter of 2021, PF Canada received a Notice of Termination ("NOT") from Canadian Nuclear Laboratories, LTD. ("CNL") on a Task

Order Agreement ("TOA") that PF Canada entered into with CNL in May 2019 for remediation work within Ontario, Canada ("Agreement"). The NOT was received after work under the TOA was substantially completed and work under the TOA has since been completed. CNL may terminate the TOA at any time for convenience. At year-end 2023, PF Canada had approximately \$2,389,000 in outstanding receivables due from CNL as a result of work performed under the TOA. A settlement agreement was reached between PF Canada and CNL on the payment of the aforementioned amount by CNL, subject to certain conditions/terms precedents being met, including release of certain liens. The Company received a partial payment from CNL of the outstanding receivables during the first quarter of 2024. As of March 31, 2024, approximately \$1,612,000 in outstanding receivables remain payable by CNL to PF Canada upon completion of the settlement conditions/terms, which the Company believes should occur by the end of 2024.

#### Insurance

The Company has a 25-year finite risk insurance policy entered into in June 2003 ("2003 Closure Policy") with AIG Specialty Insurance Company ("AIG"), which provides financial assurance to the applicable states for our permitted facilities in the event of unforeseen closure. The 2003 Closure Policy, as amended, provides for a maximum allowable coverage of \$28,177,000 which includes available capacity to allow for annual inflation and other performance and surety bond requirements. Total coverage under the 2003 Closure Policy, as amended, was \$23,376,000 at March 31, 2024. As of March 31, 2024 and December 31, 2023, finite risk sinking funds contributed by the Company related to the 2003 Closure Policy which is included in other long term assets on the accompanying Condensed Consolidated Balance Sheets totaled \$12,222,000 and \$12,074,000, respectively, which included interest earned of \$2,751,000 and \$2,603,000 on the finite risk sinking funds as of March 31, 2024 and December 31, 2023, respectively. Interest income for the three months ended March 31, 2024, and 2023, was approximately \$148,000 and \$67,000, respectively. If the Company so elects, AIG is obligated to pay the Company an amount equal to 100% of the finite risk sinking fund account balance in return for complete release of liability from both us and any applicable regulatory agency using this policy as an instrument to comply with financial assurance requirements.

#### Letter of Credits and Bonding Requirements

From time to time, the Company is required to post standby letters of credit and various bonds to support contractual obligations to customers and other obligations, including facility closures. At March 31, 2024, the total amount of standby letters of credit outstanding was approximately \$3,950,000 and the total amount of bonds outstanding was approximately \$26,747,000.

#### 10. Discontinued Operations

The Company's discontinued operations consist of all our subsidiaries included in our previous Industrial Segment which encompasses subsidiaries divested in 2011 and prior and three previously closed locations.

The Company's discontinued operations had net losses of \$ 102,000 (net of tax benefit of \$29,000) and \$93,000 (net of tax benefit of \$30,000) for the three months ended March 31, 2024, and 2023. The losses were primarily due to costs incurred in the administration and continued monitoring of our discontinued operations. The Company's discontinued operations had no revenues for each of the periods noted above.

The following table presents the major class of assets of discontinued operations as of March 31, 2024, and December 31, 2023. No assets and liabilities were held for sale at each of the periods noted.

(Amounts in Thousands)	March 31, 2024	December 31, 2023
<b>Current assets</b>		
Other assets	\$ 13	\$ 13
Total current assets	13	13
<b>Long-term assets</b>		
Property, plant and equipment, net <sup>(1)</sup>	81	81
Total long-term assets	81	81
<b>Total assets</b>	<u>\$ 94</u>	<u>\$ 94</u>
<b>Current liabilities</b>		
Accounts payable	\$ 94	\$ 80
Accrued expenses and other liabilities	128	128
Environmental liabilities	16	61
Total current liabilities	238	269
<b>Long-term liabilities</b>		
Closure liabilities	171	169
Environmental liabilities	784	784
Total long-term liabilities	955	953
<b>Total liabilities</b>	<u>\$ 1,193</u>	<u>\$ 1,222</u>

(1) net of accumulated depreciation of \$ 10,000 for each period presented.

#### 11. Operating Segments

In accordance with ASC 280, "Segment Reporting", the Company defines an operating segment as a business activity: (1) from which we may earn revenue and incur expenses; (2) whose operating results are regularly reviewed by the CODM to make decisions about resources to be allocated to the segment and assess its performance; and (3) for which discrete financial information is available.

Our reporting segments are defined below:

TREATMENT SEGMENT, which includes:

- nuclear, low-level radioactive, mixed waste (containing both hazardous and low-level radioactive constituents), hazardous and non-hazardous waste treatment, processing and disposal services primarily through four uniquely licensed and permitted treatment and storage facilities; and

- R&D activities to identify, develop and implement innovative waste processing techniques for problematic waste streams.

SERVICES SEGMENT, which includes:

- Technical services, which include:
  - o professional radiological measurement and site survey of large government and commercial installations using advanced methods, technology and engineering;
  - o integrated Occupational Safety and Health services including industrial hygiene ("IH") assessments; hazardous materials surveys, e.g., exposure monitoring; lead and asbestos management/abatement oversight; indoor air quality evaluations; health risk and exposure assessments; health & safety plan/program development, compliance auditing and training services; and Occupational Safety and Health Administration ("OSHA") citation assistance;
  - o global technical services providing consulting, engineering, project management, waste management, environmental, and decontamination and decommissioning field, technical, and management personnel and services to commercial and government customers; and
  - o on-site waste management services to commercial and governmental customers.
- Nuclear services, which include:
  - o technology-based services including engineering, decontamination and decommissioning ("D&D"), specialty services and construction, logistics, transportation, processing and disposal;
  - o remediation of nuclear licensed and federal facilities and the remediation cleanup of nuclear legacy sites. Such services capability includes: project investigation; radiological engineering; partial and total plant D&D; facility decontamination, dismantling, demolition, and planning; site restoration; logistics; transportation; and emergency response; and
- A company owned equipment calibration and maintenance laboratory that services, maintains, calibrates, and sources (i.e., rental) health physics, IH and customized nuclear, environmental, and occupational safety and health ("NEOSH") instrumentation.

Our reporting segments exclude our corporate headquarters and our discontinued operations (see "Note 10 – Discontinued Operations") which do not generate revenues.

17

The table below presents certain financial information of our operating segments for the three months ended March 31, 2024, and 2023 (in thousands):

**Segment Reporting for the Quarter Ended March 31, 2024**

	Treatment	Services	Segments Total	Corporate <sup>(1)</sup>	Consolidated Total
Revenue from external customers	\$ 8,709	\$ 4,908	\$ 13,617	\$ —	\$ 13,617
Intercompany revenues	45	16	61	—	—
Gross loss	(52)	(568)	(620)	—	(620)
Research and development	218	28	246	50	296
Interest income	—	—	—	174	174
Interest expense	(36)	—	(36)	(80)	(116)
Interest expense-financing fees	—	—	—	(13)	(13)
Depreciation and amortization	366	44	410	21	431
Segment loss before income taxes	(1,371)	(1,388)	(2,759)	(1,655)	(4,414)
Income tax benefit	(525)	(431)	(956)	—	(956)
Segment loss	(846)	(957)	(1,803)	(1,655)	(3,458)
Expenditures for segment assets	160	84	244	—	244 <sup>(2)</sup>

**Segment Reporting for the Quarter Ended March 31, 2023**

	Treatment	Services	Segments Total	Corporate <sup>(1)</sup>	Consolidated Total
Revenue from external customers	\$ 9,594	\$ 10,513	\$ 20,107	\$ —	\$ 20,107
Intercompany revenues	204	19	223	—	—
Gross profit	1,252	1,757	3,009	—	3,009
Research and development	67	3	70	29	99
Interest income	—	—	—	127	127
Interest expense	(22)	(1)	(23)	(30)	(53)
Interest expense-financing fees	—	—	—	(20)	(20)
Depreciation and amortization	573	160	733	14	747
Segment income (loss) before income taxes	157	943	1,100	(1,622)	(522)
Income tax benefit	(174)	(30)	(204)	—	(204)
Segment income (loss)	331	973	1,304	(1,622)	(318)
Expenditures for segment assets	748	—	748	—	748 <sup>(2)</sup>

(1) Amounts reflect the activity for corporate headquarters not included in the segment information.

(2) Net of financed amount of \$44,000 and \$50,000 for the three months ended March 31, 2024, and 2023, respectively.

**12. Income Taxes**

The Company uses an estimated annual effective tax rate, which is based on expected annual income, statutory tax rates and tax planning opportunities available in the various jurisdictions in which the Company operates, to determine its quarterly provision for income taxes.

The Company had income tax benefits of approximately \$ 956,000 and \$204,000 for continuing operations for the three months ended March 31, 2024, and 2023, respectively. The Company's effective tax rate was approximately 21.7% and 39.1% for the three months ended March 31, 2024, and the corresponding period of 2023, respectively. The Company's tax rates for the three months ended March 31, 2024, and 2023 were impacted by non-deductible expenses and state taxes.

The Organization for Economic Co-operation and Development ("OECD") introduced Base Erosion and Profit Shifting ("BEPS") Pillar 2 rules that impose a global minimum tax rate of 15% for multinational enterprises with annual global revenues exceeding €750 million. Numerous countries, including European Union member states, have enacted or are expected to enact legislation to be effective as early as January 1, 2024, with general

implementation of a global minimum tax rate by January 1, 2025. The Company has evaluated the impact of these rules and currently believes they will not have any material impact on its financial results in 2024.

### **13. Variable Interest Entity ("VIE")**

On December 18, 2023, the joint venture ("JV") where the Company and Campoverde Srl ("JV partner") each owns 50% of the partnership, was awarded a multi-year contract valued up to approximately EUR 50 million by the European Commission (the "Contracting Authority") for the treatment of radioactive waste from the Joint Research Center in Ispra, Italy. Work under this JV started in the first quarter of 2024 and has generated limited revenue in the first quarter of 2024. The scope of work under the initial phases of this contract will be performed predominately by our JV partner. Revenue generated by the Company under the initial phases is limited to project management support through 2025. The Company expects to generate an increase in revenue under this contract starting in 2026 when the waste treatment phases begin.

The Company determines whether joint ventures in which it has invested are VIEs at the start of each new venture and when a reconsideration event has occurred. A VIE is a legal entity that satisfies any of the following characteristics: (a) the legal entity does not have sufficient equity investment at risk; (b) the equity investors at risk as a group, lack the characteristics of a controlling financial interest; or (c) the legal entity is structured with disproportionate voting rights.

The Company consolidates a VIE if it is determined to be the primary beneficiary of the VIE. The primary beneficiary has both the power to direct the activities of the VIE that most significantly impact the entity's economic performance and the obligation to absorb losses or the right to receive benefits from the VIE that could potentially be significant to the VIE.

Based on the Company's evaluation of this JV and the contractual terms of this arrangement, the Company determined that this JV is a VIE but the Company is not the primary beneficiary. Accordingly, no consolidation of this JV is required by the Company. No capital contributions have been or are expected to be made by either the Company or the JV partner under this JV.

### **14. Management Incentive Plans ("MIPs")**

On January 18, 2024, the Board (with Mr. Mark Duff and Dr. Louis Centofanti abstaining) and the Compensation and Stock Option Committee (the "Compensation Committee") approved individual MIP for the calendar year 2024 for each of the Company's executive officers. Each MIP is effective January 1, 2024 and applicable for year 2024. Each MIP provides guidelines for the calculation of annual cash incentive-based compensation, subject to Compensation Committee oversight and modification. The performance compensation under each of the MIPs is based upon meeting certain of the Company's separate target objectives during 2024. The total potential target performance compensation payable ranges from 25% to 150% of the 2024 base salary for the Chief Executive Officer (\$104,287 to \$625,733), 29% to 100% of the 2024 base salary for the Chief Financial Officer (\$ 95,681 to \$32,811), 25% to 100% of the 2024 base salary for the Executive Vice President ("EVP") of Strategic Initiatives (\$ 69,337 to \$277,346), and 25% to 100% (\$71,317 to \$285,267) of the 2024 base salary for the EVP of Waste Treatment Operations.

### **15. Subsequent Events**

The Company evaluated subsequent events and transactions that occurred after the balance sheet date through May 9, 2024, the date that these consolidated financial statements were available to be issued. Based upon this review, the Company did not identify any subsequent events that would have required adjustment or disclosure in the consolidated financial statements other than the below.

#### ***Credit Facility***

On May 8, 2024, the Company entered into an amendment to its Loan Agreement, as amended, with its lender which provided the following, among other things:

- removes the quarterly FCCR testing requirement for the first and second quarters of 2024;
- reinstates the quarterly FCCR testing requirement starting in the third quarter of 2024 and revises the methodology to be used in calculating the FCCR as follows (with no change to the minimum 1.15:1 ratio requirement): FCCR for the third quarter is to be determined based on financial results for the three-months period ending September 30, 2024; FCCR for the fourth quarter is to be determined based on financial results for the six-months period ending December 31, 2024; FCCR for the first quarter of 2025 is to be determined based on financial results for the nine-months period ending March 31, 2025; and FCCR for the second quarter of 2025 and each fiscal quarter thereafter is to be determined based on financial results for a trailing twelve-months period ending basis;
- requires maintenance of a daily minimum \$2,250,000 in borrowing availability under the revolving credit through June 29, 2024, and a minimum of \$3,000,000 in borrowing availability starting June 30, 2024, through June 29, 2025; and
- in the event the Company is able to achieve its minimum quarterly FCCR requirement utilizing its financial results based on a trailing twelve-months period starting with the quarter ending June 30, 2024, the maintenance of a daily minimum borrowing availability requirement of \$3,000,000 as discussed above will be removed. Any subsequent fiscal quarter testing of the FCCR will revert back to a trailing twelve-months period method.

In connection with the amendment, we paid our lender a fee of \$ 25,000.

### **Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations**

#### **Forward-looking Statements**

Certain statements contained within this report may be deemed "forward-looking statements" within the meaning of the "Private Securities Litigation Reform Act of 1995". All statements in this report other than a statement of historical fact are forward-looking statements that are subject to known and unknown risks, uncertainties and other factors, which could cause actual results and performance of the Company to differ materially from such statements. The words "believe," "expect," "anticipate," "intend," "will," and similar expressions identify forward-looking statements. Forward-looking statements contained herein relate to, among other things,

- demand for our services;
- reductions in the level of government funding in future years;
- accelerated investments and unanticipated impact on an ongoing basis;
- base business is well positioned for the second half of 2024;
- advancement of initiatives to have positive impact beginning in second half of 2024 and more fully realized in 2025;
- reducing operating costs and non-essential expenditures;

- ability to meet loan agreement quarterly covenant requirements;
- cash flow requirements;
- receipt of remaining Canadian receivable upon completion of conditions/terms of the settlement agreement in 2024;
- sufficient liquidity to fund operations for the next twelve months;
- revenue under the Italian project;
- manner in which the applicable government will be required to spend funding to remediate various sites;
- successful on international bids;
- funding of operating and capital expenditures from cash from operations, cash on hand, borrowing availability under our credit facility, financing, and collection of Canadian receivables, when received;
- our PFAS method is highly scalable process with minimal capital expenditures;
- our PFAS technology process will exceed current treatment options;
- installation of operational unit and accepting commercial waste for destruction by the end of the year;
- funding of remediation expenditures for sites from funds generated internally;
- compliance with environmental regulations;
- value of Italian contract;
- positioning for procurements from DOE and other government agencies;
- potential effect of being a PRP; and
- potential violations of environmental laws and attendant remediation at our facilities.

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20

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 described in this report, including, but not limited to:

- general economic conditions;
- contract bids, including international markets;
- material reduction in revenues;
- inability to meet PNC covenant requirements;
- inability to collect in a timely manner a material amount of receivables;
- inability to collect Canadian 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, or in interpretation of such;
- inability of the federal government to adopt a budget in a timely manner;
- requirements to obtain permits for treatment, storage and disposal (TSD) activities or licensing requirements to handle low level radioactive materials are limited or lessened;
- 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;
- 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 joint venture partner to perform its requirements in connection with the Italian project;
- changes in the scope of work relating to existing contracts;
- occurrence of an event similar to COVID-19 having adverse effects on the U.S. and world economics;
- renegotiation of contracts involving government agencies;
- 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 technology;
- new governmental regulations; and
- risk factors and other factors set forth in "Special Note Regarding Forward-Looking Statements" contained in the Company's 2023 Form 10-K and the "Forward-Looking Statements" contained in the Management's Discussion and Analysis of Financial Condition and Results of Operations" ("MD&A") of this first quarter 2024 10-Q.

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21

## Overview

As previously disclosed, our results of operations in the first quarter of 2024 were impacted by accelerated investments and several events, which included the following:

- Accelerated investments in research and development ("R&D") on our new technology to treat Per- and Polyfluorinated Substances ("PFAS") (see "Known Trends and Uncertainties – New Processing Technology" within this MD&A for a discussion of this technology);
- Reduced activities by our customers due to poor weather conditions, which resulted in the closure of two of our facilities for a week, including delays in shipments to support backlog;
- Continuing Resolution impacts due to the inability of Congress to pass a Federal Budget through late March 2024, which contributed to delays in procurements, project starts and waste shipment, due to uncertain budget projections by our government clients;
- Completion of two large projects in the Services Segment that were not replaced by new project starts due to delays in mobilization activities until late April; and
- All three primary treatment facilities realized outages in March which impacted revenue as the Company utilized the aforementioned slowdowns for equipment replacement and repairs, program enhancements, and testing to support permit expansion and broader market penetration.

We believe that most of these accelerated investments and unanticipated impacts should have limited duration effects to our financial performance. We expect that the second quarter will not include material continued impact from these activities. With the passage of the Federal Budget in late March 2024 and improved weather conditions, we have begun to see steady improvements in waste receipts, project starts that were delayed and increased procurement activities. Our waste treatment backlog stands at approximately \$10,580,000 as of March 31, 2024, an increase of approximately \$1,878,000 from the December 31, 2023, balance of \$8,702,000.

We believe our base business is well positioned for the second half of 2024 and, as previously reported, we continue to advance a variety of additional initiatives that we expect will have a further positive impact on both revenue and earnings beginning the second half of the year that are expected to be more fully realized in 2025. These initiatives include, among other things, positioning ourselves for large and mid-size procurements within the U.S. Department of Energy ("DOE") and U.S. Navy and waste treatment in support of DOE's Hanford closure strategy, continued investments in our facilities and capabilities to allow for broader waste treatment, and continued expansion of our waste treatment offerings within the international and commercial markets. As previously disclosed, in December 2023, the JV where we and Campoverde Srl ("JV partner") each owns 50% of the partnership, was awarded a multi-year contract valued up to approximately EUR 50 million by the European Commission (the "Contracting Authority") for the treatment of radioactive waste from the Joint Research Center in Ispra, Italy. Work under this JV started in the first quarter of 2024. We generated limited revenue under this JV contract in the first quarter of 2024. The scope of work in the initial phases of this contract will be performed predominately by our JV partner. Revenue generated by us under the initial phases will be limited to project management support through 2025. We expect to generate an increase in revenue under this contract starting in 2026 when the waste treatment phases begin.

As a result of the aforementioned events which negatively impacted our results of operations for the first quarter of 2024, we incurred an overall decrease in revenue of approximately \$6,490,000 or 32.3% to \$13,617,000 for the three months ended March 31, 2024 from \$20,107,000 for the corresponding period of 2023. Revenue decreased in both segments where Services Segment revenue decreased by \$5,605,000 or 53.3% to \$4,908,000 from \$10,513,000 and Treatment Segment revenue decreased by \$885,000 to \$8,709,000 or 9.2% from \$9,594,000. We incurred a gross loss in the first quarter of 2024 of approximately \$620,000 as compared to a gross profit of \$3,009,000 in the corresponding period of 2023, reflecting a decrease in gross profit of approximately \$3,629,000 or 120.6%, primarily due to decreased revenue in both segments. Selling, General, and Administrative ("SG&A") expenses increased by \$58,000 or 1.7% for the three months ended March 31, 2024 as compared to the corresponding period of 2023 (see below "Results of Operations" for further discussions of our financial results).

## Business Environment

Our Treatment and Services Segments' business continues to be heavily dependent on services that we provide to governmental clients, primarily as subcontractors for others who are prime contractors to government entities or directly as the prime contractor. We believe demand for our services will continue to be subject to fluctuations due to a variety of factors beyond our control, including, without limitation, the economic conditions, the manner in which the applicable government will be required to spend funding to remediate various sites and potential future federal budget issues. In addition, our governmental contracts and subcontracts relating to activities at governmental sites in the United States are generally subject to termination for convenience at any time at the government's option. Our Italian contract under our JV as discussed above may be terminated by the Contracting Authority under certain conditions as set forth in the contract. Significant reductions in the level of governmental funding or specifically mandated levels for different programs that are important to our business could have a material adverse impact on our business, financial position, results of operations, and cash flows.

We are reviewing methods to raise additional capital to supplement our liquidity requirements (see "Liquidity and Capital Resources" below for a discussion of our liquidity). We continue to aggressively bid on various contracts, including potential contracts within the international markets.

## Results of Operations

The reporting of financial results and pertinent discussions are tailored to our two reportable segments: The Treatment and Services.

### Summary – Three Months Ended March 31, 2024 and 2023

Consolidated (amounts in thousands)	2024		2023	
		%		%
Revenues	\$ 13,617	100.0	\$ 20,107	100.0
Cost of good sold	14,237	104.6	17,098	85.0
Gross (loss) profit	(620)	(4.6)	3,009	15.0
Selling, general and administrative	3,544	26.0	3,486	17.3
Research and development	296	2.2	99	.5
Loss from operations	\$ (4,460)	(32.8)	\$ (576)	(2.8)
Interest income	174	1.3	127	.6
Interest expense	(116)	(.8)	(53)	(.3)
Interest expense-financing fees	(13)	(.1)	(20)	(.1)
Other	1	—	—	—
Loss from continuing operations before taxes	(4,414)	(32.4)	(522)	(2.6)
Income tax benefit	(956)	(7.0)	(204)	(1.0)
Loss from continuing operations	\$ (3,458)	(25.4)	\$ (318)	(1.6)

## Revenues

Consolidated revenues decreased \$6,490,000 for the three months ended March 31, 2024, compared to the three months ended March 31, 2023, as follows:

(In thousands)	2024	% Revenue	2023	% Revenue	Change	% Change
<b>Treatment</b>						
Government waste	\$ 5,133	37.7	\$ 6,642	33.0	\$ (1,509)	(22.7)
Hazardous/non-hazardous (1)	1,337	9.8	1,511	7.5	(174)	(11.5)
Other nuclear waste	2,239	16.5	1,441	7.2	798	55.4
<b>Total</b>	<b>8,709</b>	<b>64.0</b>	<b>9,594</b>	<b>47.7</b>	<b>(885)</b>	<b>(9.2)</b>

## Services

Nuclear services	4,569	33.5	10,082	50.1	(5,513)	(54.7)
Technical services	339	2.5	431	2.1	(92)	(21.3)
Total	<u>4,908</u>	<u>36.0</u>	<u>10,513</u>	<u>52.3</u>	<u>(5,605)</u>	<u>(53.3)</u>
Total	<u><u>\$ 13,617</u></u>	<u><u>100.0</u></u>	<u><u>\$ 20,107</u></u>	<u><u>100.0</u></u>	<u><u>\$ (6,490)</u></u>	<u><u>(32.3)</u></u>

(1) Includes wastes generated by government clients of \$628,000 and \$710,000 for the three months ended March 31, 2024 and the corresponding period of 2023, respectively.

Treatment Segment revenue decreased by \$885,000 or 9.2% for the three months ended March 31, 2024, over the same period in 2023. The decrease in revenue generated from government clients was primarily due to lower waste volume attributed from the events as discussed in the "Overview" section above which included delays in waste shipments due to poor weather conditions and from Continuing Resolution impact due to the inability of Congress to timely pass the Federal Budget. The increase in other nuclear waste revenue was primarily due to higher waste volume which included increased revenue generated from commercial and international clients. The overall revenue within our Treatment Segment was also negatively impacted by delays in waste treatment production and waste receipts due to temporary outages of our facilities as previously discussed. Overall lower averaged price from waste mix within the Treatment Segment also contributed to the revenue decrease. Services Segment revenue decreased by approximately \$5,605,000 or 53.3%. The decrease in revenue in the Services Segment was due in part, to the completion of two large projects which were not replaced by new project starts due to delays in mobilization activities until late April 2024 from the impact of the Continuing Resolution as previously discussed. Additionally, our Services Segment revenues are project based; as such, the scope, duration, and completion of each project vary. Revenues from both segments were also negatively impacted from delays in procurements resulting from the impact of Continuing Resolutions.

## Cost of Goods Sold

Cost of goods sold decreased \$2,861,000 for the quarter ended March 31, 2024, compared to the quarter ended March 31, 2023, as follows:

(In thousands)	2024	% Revenue	2023	% Revenue	Change
Treatment	\$ 8,761	100.6	\$ 8,342	87.0	\$ 419
Services	5,476	111.6	8,756	83.3	(3,280)
Total	<u>\$ 14,237</u>	<u>104.6</u>	<u>\$ 17,098</u>	<u>85.0</u>	<u>\$ (2,861)</u>

Cost of goods sold for the Treatment Segment increased by approximately \$419,000 or 5.0%. Treatment Segment's variable costs increased by approximately \$506,000 primarily due to higher disposal costs. Treatment Segment's overall fixed costs were lower by approximately \$87,000 resulting from the following: general expenses were lower by \$238,000 primarily due to lower utility costs; depreciation expenses were lower by approximately \$206,000 due to fully depreciated asset retirement obligations that occurred in the third quarter of 2023 in connection with our EWOC facility; maintenance expenses were lower by approximately \$42,000; regulatory expenses were higher by approximately \$53,000; salaries and payroll related expenses were higher by \$335,000 due to higher headcount; and travel expenses were higher by approximately \$11,000. Services Segment cost of goods sold decreased \$3,280,000 or 37.5% primarily due to lower revenue. The decrease in cost of goods sold was primarily due to lower salaries/payroll related, outside services, and travel costs totaling approximately \$2,870,000; lower material and supplies, lab and regulatory expenses totaling approximately \$316,000; lower depreciation expense totaling approximately \$115,000; and slightly higher general expenses by approximately \$21,000 in various categories. Included within cost of goods sold is depreciation and amortization expense of \$404,000 and \$726,000 for the three months ended March 31, 2024, and 2023, respectively.

## Gross (loss) profit

Gross profit decreased 3,629,000 for the quarter ended March 31, 2024, compared to the quarter ended March 31, 2023, as follows:

(In thousands)	2024	% Revenue	2023	% Revenue	Change
Treatment	\$ (52)	(0.6)	\$ 1,252	13.0	\$ (1,304)
Services	(568)	(11.6)	1,757	16.7	(2,325)
Total	<u>\$ (620)</u>	<u>(4.6)</u>	<u>\$ 3,009</u>	<u>15.0</u>	<u>\$ (3,629)</u>

Treatment Segment gross profit decreased by \$1,304,000 or approximately 104.2% and gross margin decreased to (0.6)% from 13.0% primarily due to lower revenue from lower waste volume, overall lower averaged price from waste mix and the impact of our fixed costs structure. Services Segment gross profit decreased by \$2,325,000 or 132.3% primarily due to decreased revenue resulting from the completion of the two large projects as previously disclosed. The decrease in gross margin from 16.7% to (11.6)% was attributed to overall lower margin projects as the two large completed projects were higher margin projects. Our overall Services Segment gross margin is impacted by our current projects which are competitively bid on and will therefore, have varying margin structures.

## SG&A

SG&A expenses increased \$58,000 for the three months ended March 31, 2024, as compared to the corresponding period for 2023, as follows:

(In thousands)	2024	% Revenue	2023	% Revenue	Change
Administrative	\$ 1,687	—	\$ 1,670	—	\$ 17
Treatment	1,065	12.2	1,006	10.5	59
Services	792	16.1	810	7.7	(18)
Total	<u>\$ 3,544</u>	<u>26.0</u>	<u>\$ 3,486</u>	<u>17.3</u>	<u>\$ 58</u>

Administrative SG&A expenses were higher primarily due to higher travel, outside services and general expenses totaling approximately \$29,000 which was offset by lower salaries and payroll related expenses totaling approximately \$12,000. Treatment Segment SG&A expenses were higher primarily due to overall higher salaries and payroll related expenses by approximately \$91,000 which was offset by lower general expenses in various categories. The decrease in Services Segment SG&A was primarily due to lower outside services expenses resulting from fewer consulting and legal matters. Included in SG&A expenses is depreciation and amortization expense of \$27,000 and \$21,000 for the three months ended March 31, 2024 and 2023, respectively.

## R&D

R&D expenses increased by approximately \$197,000 in the first quarter of 2024 as compared to the corresponding period of 2023 primarily due to

expenses incurred for our PFAS technology (see "Known Trends and Uncertainties – New Processing Technology" within this MD&A for a discussion of this technology).

#### *Interest Income*

Interest income increased by approximately \$47,000 in the first quarter of 2024 as compared to the corresponding period of 2023 primarily due to higher interest earned from our finite risk sinking fund and interest income earned from our money market deposit account that we maintained with our lender starting in late 2023. The overall increase in interest income from the above was reduced by interest income received in March of 2023 of approximately \$60,000 in connection with the Employee Retention Credit refund that we received.

#### *Interest Expense*

Interest expense increased by approximately \$63,000 in the first quarter of 2024 as compared to the corresponding period of 2023 primarily due to interest incurred on the \$2,500,000 term loan dated July 31, 2023, under our credit facility.

#### *Income Taxes*

We had income tax benefits of approximately \$956,000 and \$204,000 for continuing operations for the three months ended March 31, 2024, and 2023, respectively. Our effective tax rate was approximately 21.7% and 39.1% for the three months ended March 31, 2024, and the corresponding period of 2023, respectively. Our tax rates for the three months ended March 31, 2024, and 2023 were impacted by non-deductible expenses and state taxes.

#### **Liquidity and Capital Resources**

Our cash flow requirements during the three months ended March 31, 2024, were primarily financed by our operations, cash on hand, and credit facility availability. Our cash flow requirements for the next twelve months will consist primarily of general working capital needs, scheduled principal payments on our debt obligations, remediation projects, and planned capital expenditures which include our PFAS technology (see "Known Trends and Uncertainties – New Processing Technology" within this MD&A for a discussion of this technology). We plan to fund these requirements from our operations, credit facility availability, cash on hand (which will include, when received, cash from outstanding receivables due to our Perma-Fix Canada, Inc. subsidiary from a certain customer - See "Known Trends and Uncertainties – Perma-Fix Canada, Inc. ("PF Canada")" for a discussion of this outstanding receivables) and possible other methods. Our ability to utilize our credit facility from our lender is subject to meeting our quarterly financial covenant requirements, among other things. We continue to explore all sources of increasing our capital and/or liquidity and to improve our revenue and working capital, including, but not limited to entering into equity transactions. There are no assurances that we will be successful in increasing our liquidity through our efforts. We are continually reviewing operating costs and reviewing the possibility of further reducing operating costs and non-essential expenditures to bring them in line with revenue levels, when necessary. As of March 31, 2024, our borrowing availability under our revolving part of our credit facility was approximately \$2,379,000, which included our cash (deposited with our lender) and was based on our eligible receivables and was net of approximately \$3,950,000 in outstanding standby letters of credit and a \$750,000 indefinite reduction in borrowing availability that our lender imposed. We believe that our cash flows from operations, our available liquidity from our credit facility, and our cash on hand (which will include, when received, cash from the outstanding Canadian receivables noted above) should be sufficient to fund our operations for the next twelve months.

The following table reflects the cash flow activities during the first three months of 2024:

(In thousands)		
Cash used in operating activities of continuing operations	\$	(4,432)
Cash used in operating activities of discontinued operations		(159)
Cash used in investing activities of continuing operations		(244)
Cash used in financing activities of continuing operations		(125)
Effect of exchange rate on cash		(18)
Decrease in cash and finite risk sinking fund (restricted cash)	\$	(4,978)

As of March 31, 2024, we were in a positive cash position with no revolving credit balance. As of March 31, 2024, we had cash on hand of approximately \$2,374,000, which included account balances of our foreign subsidiaries totaling approximately \$837,000.

#### *Operating Activities*

Accounts receivable, net of credit losses, totaled \$8,701,000 as of March 31, 2024, a decrease of \$1,021,000 from the December 31, 2023, balance of \$9,722,000. The decrease was primarily due to reduced billing from decreased revenues which were negatively impacted by a number of events as previously discussed (See "Overview" within this MD&A). Our accounts receivable at March 31, 2024, included invoices for work performed for a certain Canadian project that remained outstanding for which a settlement agreement has been reached, with collection subject to meeting certain conditions/terms precedent (See discussion under "Known Trends and Uncertainties - Perma-Fix Canada Inc. ("PF Canada")" below for a discussion of the accounts receivable that remains payable by our customer to PF Canada).

Accounts payable totaled \$7,979,000 as of March 31, 2024, a decrease of \$1,603,000 from the December 31, 2023, balance of \$9,582,000. The decrease in accounts payable was attributed to our overall reduced operations as discussed previously. Additionally, or accounts payable are impacted by the timing of payments as we are continually managing payment terms with our vendors to maximize our cash position throughout our segments.

We had working capital of \$255,000 (which included working capital of our discontinued operations) as of March 31, 2024, as compared to working capital of \$4,613,000 as of December 31, 2023. The decrease in our working capital was primarily due to the reduction in our cash which was significantly impacted by the revenue decreases in both segments as previously discussed.

#### *Investing Activities*

For the three months ended March 31, 2024, our purchases of capital equipment totaled approximately \$288,000, of which \$44,000 was subject to financing, with the remaining funded from cash from operations and our credit facility. We have budgeted approximately \$2,000,000 for 2024 capital expenditures primarily for our Treatment and Services Segments to maintain operations and regulatory compliance requirements and support revenue growth. Certain of these budgeted projects may either be delayed until later years or deferred altogether. We plan to fund our capital expenditures from cash from operations, borrowing availability under our credit facility and/or financing. The initiation and timing of projects are also determined by financing alternatives or funds available for such capital projects.

#### *Financing Activities*

We entered into a Second Amended and Restated Revolving Credit, Term Loan and Security Agreement, dated May 8, 2020 ("Loan Agreement"), with PNC National Association ("PNC" and "lender"), acting as agent and lender. The Loan Agreement, as amended from time to time, provides us with the following credit facility with a maturity date of May 15, 2027: (a) up to \$12,500,000 revolving credit ("revolving credit"), with the maximum that we can borrow under the revolving credit based on a percentage of eligible receivables (as defined) at any one time reduced by outstanding standby letters of credit and borrowing reductions that our lender may impose from time to time; (b) a term loan ("Term Loan 1") of approximately \$1,742,000, requiring monthly installments of \$35,547; (c) a term loan ("Term Loan 2") of \$2,500,000, requiring monthly installments of \$41,667; and (d) a capital expenditure line ("Capital Line") of up to \$1,000,000 with advances on the line, subject to certain limitations, permitted for up to twelve months starting May 4, 2021 (the "Borrowing Period"). Amounts advanced under the Capital Line at the end of the Borrowing Period totaled approximately \$524,000, requiring monthly installments of principal of approximately \$8,700 plus interest, commencing June 1, 2022.

On May 8, 2024, we entered into an amendment to our Loan Agreement, as amended, with our lender which provided the following, among other things:

- removes the quarterly FCCR testing requirement for the first and second quarters of 2024;

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27

- reinstates the quarterly FCCR testing requirement starting in the third quarter of 2024 and revises the methodology to be used in calculating the FCCR as follows (with no change to the minimum 1.15:1 ratio requirement): FCCR for the third quarter is to be determined based on financial results for the three-months period ending September 30, 2024; FCCR for the fourth quarter is to be determined based on financial results for the six-months period ending December 31, 2024; FCCR for the first quarter of 2025 is to be determined based on financial results for the nine-months period ending March 31, 2025; and FCCR for the second quarter of 2025 and each fiscal quarter thereafter is to be determined based on financial results for a trailing twelve-months period ending basis;
- requires maintenance of a daily minimum \$2,250,000 in borrowing availability under the revolving credit through June 29, 2024, and a minimum of \$3,000,000 in borrowing availability starting June 30, 2024, through June 29, 2025; and
- in the event we are able to achieve the minimum quarterly FCCR requirement utilizing our financial results based on a trailing twelve-months period starting with the quarter ending June 30, 2024, the maintenance of a daily minimum borrowing availability requirement of \$3,000,000 as discussed above will be removed. Any subsequent fiscal quarter testing of the FCCR will revert back to a trailing twelve-months period method.

In connection with the amendment, we paid our lender a fee of \$25,000.

Pursuant to our Loan Agreement, as amended, payments of annual interest rates are as follows: (i) interest due on the revolving credit is at prime (8.50% at March 31, 2024) plus 2% or SOFR (as defined in the Loan Agreement, as amended) plus 3.00% plus an SOFR Adjustment applicable for an interest period selected by us; (ii) interest due on each Term Loan 1 and the Capital Line is at prime plus 2.50% or SOFR plus 3.50% plus an SOFR Adjustment applicable for an interest period selected by us; and (iii) interest due on Term Loan 2 is at prime plus 3% or SOFR plus 4.00% plus an SOFR Adjustment applicable for an interest period selected by us. SOFR Adjustment rates of 0.10% and 0.15% are applicable for a one-month interest period and three-month period, respectively, that may be selected by us.

We agreed to pay PNC 1.0% of the total financing under the Loan Agreement, as amended, in the event we pay off our obligations on or before July 31, 2024, and 0.5% of the total financing if we pay off our obligations after July 31, 2024, to and including July 31, 2025. No early termination fee shall apply if we pay off our obligations under Loan Agreement, as amended, after July 31, 2025.

Our credit facility under our Loan Agreement, as amended, with PNC contains certain financial covenants, along with customary representations and warranties. A breach of any of these financial covenants, unless waived by PNC, could result in a default under our credit facility allowing our lender to immediately require the repayment of all outstanding debt under our credit facility and terminate all commitments to extend further credit. We were not required to perform testing of our FCCR requirement for the first quarter of 2024 pursuant to the amendment dated May 8, 2024, to our Loan Agreement, as amended, as discussed above. We met all of our other financial covenant requirements in the first quarter of 2024. We expect to meet our quarterly financial covenant requirements for the next twelve months under our Loan Agreement, as amended, pursuant to the terms of the amendment dated May 8, 2024, as discussed above.

#### **Off Balance Sheet Arrangements**

From time to time, we are required to post standby letters of credit and various bonds to support contractual obligations to customers and other obligations, including facility closures. At March 31, 2024, the total amount of standby letters of credit outstanding totaled approximately \$3,950,000 and the total amount of bonds outstanding totaled approximately \$26,747,000. We also provide closure and post-closure requirements through a financial assurance policy for certain of our Treatment Segment facilities through AIG. At March 31, 2024, the closure and post-closure requirements for these facilities were approximately \$23,376,000.

#### **Critical Accounting Policies and Estimates**

There were no significant changes in our accounting policies or critical accounting estimates that are discussed in our Annual Report on Form 10-K for the year ended December 31, 2023.

---

28

#### **Recent Accounting Pronouncements**

See "Note 2 – Summary of Significant Accounting Policies" in the "Notes to Condensed Consolidated Financial Statements" for the recent accounting pronouncements that will be adopted in future periods.

#### **Known Trends and Uncertainties**

**Significant Customers.** The contracts that we are a party to with others as subcontractors to the U.S federal government or directly with the U.S federal government generally provide that the government may terminate the contract at any time for convenience at the government's option. Our Italian contract under the JV may be terminated by the Contracting Authority under certain conditions as set forth in the contract. Our inability to continue under existing contracts that we have with government authorities (directly or indirectly as a subcontractor) or significant reductions in the level of governmental funding in any given year could have a material adverse impact on our operations and financial condition. We performed services relating to waste generated by government clients, either indirectly as a subcontractor or directly as a prime contractor to government entities, representing approximately \$10,143,000 or 74.5% of our total revenue during the three months ended March 31, 2024, as compared to \$17,247,000 or 85.8% of our total revenue during the corresponding period of 2023.

**PF Canada.** During the fourth quarter of 2021, PF Canada received a Notice of Termination ("NOT") from CNL on a Task Order Agreement ("TOA") that PF Canada entered into with CNL in May 2019 for remediation work within Ontario, Canada ("Agreement"). The NOT was received after work under the

TOA was substantially completed and work under the TOA has since been completed. CNL may terminate the TOA at any time for convenience. At year-end 2023, PF Canada had approximately \$2,389,000 in outstanding receivables due from CNL as a result of work performed under the TOA. A settlement agreement was reached between PF Canada and CNL on the payment of the aforementioned amount by CNL, subject to certain conditions/terms precedents being met, including release of certain liens. We received a partial payment from CNL of the outstanding receivables during the first quarter of 2024. As of March 31, 2024, approximately \$1,612,000 in outstanding receivables remain payable by CNL to PF Canada upon completion of the settlement conditions/terms, which the Company believes should occur by the end of 2024.

**New Processing Technology.** We have successfully completed pilot plant testing on our new, patent-pending process for the destruction of PFAS, commonly known as "forever chemicals." PFAS compounds do not degrade over time through any natural process or environmental conditions, bioaccumulate, and are harmful to humans and the environment. Our tests were designed to demonstrate the destruction of commercial quantities of PFAS-contaminated liquids and better define the parameters needed to construct the first commercial unit. There are limited current treatment options for these materials and we expect that our process will exceed any of these methods. Some of the sizable markets for PFAS include AFFF (aqueous film-forming foam) firefighting foams, both expired concentrate and flushing liquids, contaminated liquids from PFAS systems, and other water-based separation products from a variety of industrial systems. 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, accepting commercial waste for 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.

#### **Environmental Contingencies**

We are engaged in the waste management services segment of the pollution control industry. As a participant in the on-site treatment, storage and disposal market and the off-site treatment and services market, we are subject to rigorous federal, state and local regulations. These regulations mandate strict compliance and therefore are a cost and concern to us. Because of their integral role in providing quality environmental services, we make every reasonable attempt to maintain complete compliance with these regulations; however, even with a diligent commitment, we, along with many of our competitors, may be required to pay fines for violations or investigate and potentially remediate our waste management facilities.

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29

We routinely use third party disposal companies, who ultimately destroy, or secure landfill residual materials generated at our facilities or at a client's site. In the past, numerous third-party disposal sites have improperly managed waste and consequently require remedial action; consequently, any party utilizing these sites may be liable for some or all of the remedial costs. Despite our aggressive compliance and auditing procedures for disposal of wastes, we could further be notified, in the future, that we are a potentially responsible party ("PRP") at a remedial action site, which could have a material adverse effect.

We have three environmental remediation projects, all within our discontinued operations, which principally entail the removal/remediation of contaminated soil, and, in most cases, the remediation of surrounding ground water. We expect to fund the expenses to remediate these sites from funds generated from operations. As of March 31, 2024, we had total accrued environmental remediation liabilities of \$800,000, a decreased of approximately \$45,000 from the December 31, 2023 balance of \$845,000. The decrease represents payments for remediation projects. At March 31, 2024, \$16,000 of the total accrued environmental liabilities was recorded as current.

#### **Item 3. Quantitative and Qualitative Disclosures about Market Risks**

Not required for smaller reporting companies.

#### **Item 4. Controls and Procedures**

(a) *Evaluation of disclosure controls, and procedures.*

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our periodic reports filed with the Securities and Exchange Commission is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the Securities and Exchange Commission and that such information is accumulated and communicated to our management. As of the end of the period covered by this report, we carried out an evaluation with the participation of our Principal Executive Officer and Principal Financial Officer. Based on this recent assessment, our Principal Executive Officer and Principal Financial Officer have concluded that our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended) were effective as of March 31, 2024.

(b) *Changes in internal control over financial reporting*

There was no other change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during our most recently completed fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

## **PART II – OTHER INFORMATION**

#### **Item 1. Legal Proceedings**

There are no material legal proceedings pending against us and/or our subsidiaries not previously reported by us in Item 3 of our Form 10-K for the year ended December 31, 2023. Additionally, there has been no other material change in legal proceedings previously disclosed by us in our Form 10-K for the year ended December 31, 2023.

#### **Item 1A. Risk Factors**

There has been no other material change from the risk factors previously disclosed in our Form 10-K for the year ended December 31, 2023, except for the following under "Risks Relating to our Financial Performance and Position and Need for Financing."

**Breach of any of the covenants, including the fixed charge coverage ratio under our Loan Agreement, as amended, could result in a default, triggering repayment of outstanding debt under the credit facility and the termination of our credit facility.**

From time to time, the Company has failed to meet its minimum quarterly fixed charge coverage ratio requirement under its Loan Agreement, as amended, as in the first quarter of 2024. In these instances, the Company's lender has either waived the non-compliance or removed the testing requirement for the quarter. The Company's lender has removed the testing requirement for the fixed charge coverage ratio for the first and second quarters of 2024. If we fail to meet any of our financial covenants going forward, including the minimum quarterly FCCR requirement, and our lender does not waive the non-compliance or remove the testing requirement, our lender could accelerate the payment of our borrowings under our credit facility and terminate our credit facility. In such event, we may not have sufficient liquidity to repay our debt under our credit facility and other indebtedness and/or operate our business.

**Item 6. Exhibits****(a) Exhibits**

4.1 [Eight Amendment to Second Amended and Restated Revolving Credit, Term Loan and Security Agreement dated May 8, 2024, between Perma-Fix Environmental Services, Inc. and PNC Bank, National Association.](#)

10.1 [2024 Incentive Compensation Plan for Chief Executive Officer, effective January 1, 2024, as incorporated by reference from Exhibit 99.1 to the Company's Form 8-K filed on January 23, 2024. CERTAIN INFORMATION WITHIN THIS EXHIBIT HAS BEEN EXCLUDED BECAUSE IT IS NOT MATERIAL AND WOULD LIKELY CAUSE COMPETITIVE HARM TO THE COMPANY IF PUBLICLY DISCLOSED.](#)

10.2 [2024 Incentive Compensation Plan for Chief Financial Officer, effective January 1, 2024, as incorporated by reference from Exhibit 99.2 to the Company's Form 8-K filed on January 23, 2024. CERTAIN INFORMATION WITHIN THIS EXHIBIT HAS BEEN EXCLUDED BECAUSE IT IS NOT MATERIAL AND WOULD LIKELY CAUSE COMPETITIVE HARM TO THE COMPANY IF PUBLICLY DISCLOSED.](#)

10.3 [2024 Incentive Compensation Plan for EVP of Strategic Initiatives, effective January 1, 2024, as incorporated by reference from Exhibit 99.3 to the Company's Form 8-K filed on January 23, 2024. CERTAIN INFORMATION WITHIN THIS EXHIBIT HAS BEEN EXCLUDED BECAUSE IT IS NOT MATERIAL AND WOULD LIKELY CAUSE COMPETITIVE HARM TO THE COMPANY IF PUBLICLY DISCLOSED.](#)

10.4 [2024 Incentive Compensation Plan for EVP of Waste Treatment Operations, effective January 1, 2024, as incorporated by reference from Exhibit 99.4 to the Company's Form 8-K filed on January 23, 2024. CERTAIN INFORMATION WITHIN THIS EXHIBIT HAS BEEN EXCLUDED BECAUSE IT IS NOT MATERIAL AND WOULD LIKELY CAUSE COMPETITIVE HARM TO THE COMPANY IF PUBLICLY DISCLOSED.](#)

31.1 [Certification by Mark Duff, Chief Executive Officer of the Company pursuant to Rule 13a-14\(a\) or 15d-14\(a\).](#)

31.2 [Certification by Ben Naccarato, Chief Financial Officer of the Company pursuant to Rule 13a-14\(a\) or 15d-14\(a\).](#)

32.1 [Certification by Mark Duff, Chief Executive Officer of the Company furnished pursuant to 18 U.S.C. Section 1350.](#)

32.2 [Certification by Ben Naccarato, Chief Financial Officer of the Company furnished pursuant to 18 U.S.C. Section 1350.](#)

101.INS XBRL Instance Document\*

101.SCHXBRL Taxonomy Extension Schema Document\*

101.CAL XBRL Taxonomy Extension Calculation Linkbase Document\*

101.DEF XBRL Taxonomy Extension Definition Linkbase Document\*

101.LAB XBRL Taxonomy Extension Labels Linkbase Document\*

101.PREXBRL Taxonomy Extension Presentation Linkbase Document\*

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\* Pursuant to Rule 406T of Regulation S-T, the Interactive Data File in Exhibit 101 hereto are deemed not filed or part of a registration statement or prospectus for purposes of Section 11 or 12 of the Securities Act of 1933, as amended, are deemed not filed for purpose of Section 18 of the Securities Exchange Act of 1934, as amended, and otherwise are not subject to liability under those sections.

**SIGNATURES**

Pursuant to the requirements of the Securities and Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, hereunto duly authorized.

**PERMA-FIX ENVIRONMENTAL SERVICES**

Date: May 9, 2024

By: /s/ Mark Duff  
Mark Duff  
President and Chief (Principal) Executive Officer

Date: May 9, 2024

By: /s/ Ben Naccarato  
Ben Naccarato  
Chief (Principal) Financial Officer

## EXECUTION VERSION

## EIGHTH AMENDMENT TO SECOND AMENDED AND RESTATED REVOLVING CREDIT, TERM LOAN AND SECURITY AGREEMENT

THIS EIGHTH AMENDMENT TO SECOND AMENDED AND RESTATED REVOLVING CREDIT, TERM LOAN AND SECURITY AGREEMENT, dated as of May 8, 2024 (this "Amendment"), relating to the Credit Agreement referenced below, is by and among PERMA-FIX ENVIRONMENTAL SERVICES, INC., a Delaware corporation (the "Borrower"), and PNC Bank, National Association, a national banking association, as agent (in such capacity, the "Agent") and the lender (in such capacity, the "Lender"). Terms used herein but not otherwise defined herein shall have the meanings provided to such terms in the Credit Agreement.

## WITNESSETH

WHEREAS, a credit facility has been extended to the Borrower pursuant to the terms of that certain Second Amended and Restated Revolving Credit, Term Loan and Security Agreement dated as of May 8, 2020 (as amended and modified from time to time, the "Credit Agreement") among the Borrower, the Lender identified therein, and PNC Bank, National Association, as agent and Lender;

WHEREAS, the Borrower has requested certain modifications to the Credit Agreement; and

WHEREAS, the Lender has agreed to the requested modifications on the terms and conditions set forth herein;

NOW, THEREFORE, IN CONSIDERATION of the premises and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. Amendments. The Credit Agreement is amended as set forth below.

(a) The following new definitions are hereby added to Section 1.2 in the appropriate alphabetical order to read as follows:

"Eighth Amendment Effective Date" shall mean May 8, 2024."

"Liquidity" at a particular date shall mean (i) Undrawn Availability as of such date plus (ii) cash of Borrower maintained in a 'money market' account with Agent as of such date."

"Trigger Date" means the first to occur of (a) the date, if any, on which the Borrower delivers to Agent evidence that Borrower and its Subsidiaries have maintained a Fixed Charge Coverage Ratio of not less than 1.15 to 1.00 for trailing twelve-month period most recently ended, which evidence shall be in form and substance satisfactory to the Agent in its sole discretion and (b) June 30, 2025."

(b) Section 6.5(a) is amended to read as follows:

"(a) Liquidity.

Maintain Liquidity in an amount not less than (i) at all times on and after the Eighth Amendment Effective Date to (but excluding) June 30, 2024, \$2,250,000 and (ii) at all times on and after June 30, 2024 to (but excluding) the Trigger Date, \$3,000,000; provided, that, each such determination of Liquidity pursuant to the foregoing clauses (i) and (ii) shall include at least \$500,000 of Undrawn Availability."

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(c) Section 6.5(b) is amended to read as follows:

"(b) Fixed Charge Coverage Ratio.

Beginning with the fiscal quarter ending September 30, 2024, cause to be maintained a Fixed Charge Coverage Ratio of not less than 1.15 to 1.00 for (i) the one quarter period ending as of September 30, 2024, (ii) the two quarter period ending as of December 31, 2024, (iii) the three quarter period ending as of March 31, 2025, and (iv) the four quarter period ending as of June 30, 2025 and for each fiscal quarter thereafter; provided, that, in the event the Trigger Date occurs at any time prior June 30, 2025, the Fixed Charge Coverage Ratio shall be tested as of the end of each quarter after the Trigger Date for the four quarter period then-ended."

(d) Section 15.6(g) is hereby amended by amending the "with an additional copy to" notice information in subclause (A) to read as follows:

"with an additional copy to: Parker, Hudson, Rainer & Dobbs LLP  
303 Peachtree Street NE, Suite 3600  
Atlanta, GA 30308  
Attention: Elizabeth Garner, Esq.  
Telephone: (404)420-4696  
Email: [lgarner@phrd.com](mailto:lgarner@phrd.com)"

2. Conditions Precedent. This Amendment shall be effective as of the date hereof upon satisfaction of the following conditions:

(a) the execution of this Amendment by the Borrower and PNC Bank, National Association as the Agent and Lender; and

(b) receipt by the Agent of an amendment fee of \$25,000.

3. Representations and Warranties. The Borrower hereby represents and warrants in connection herewith that as of the date hereof (after giving effect hereto) (i) the representations and warranties set forth in Article V of the Credit Agreement are true and correct in all material respects (except those which expressly relate to an earlier date), and (ii) no Default or Event of Default has occurred and is continuing under the Credit Agreement.

4. Acknowledgments, Affirmations and Agreements. The Borrower (i) acknowledges and consents to all of the terms and conditions of this Amendment and (ii) affirms all of its obligations under the Credit Agreement and the Other Documents.

5. Credit Agreement. Except as expressly modified hereby, all of the terms and provisions of the Credit Agreement remain in full force and effect.

6. Expenses. The Borrower agrees to pay all reasonable costs and expenses in connection with the preparation, execution and delivery of this Amendment, including the reasonable fees and expenses of the Agent's legal counsel.

7. Counterparts. This Amendment may be executed in any number of counterparts, each of which when so executed and delivered shall be deemed an original. It shall not be necessary in making proof of this Amendment to produce or account for more than one such counterpart.

8. Governing Law. This Amendment shall be deemed to be a contract under, and shall for all purposes be construed in accordance with, the laws of the State of New York.

*[Remainder of page intentionally blank; signature page follows.]*

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2

IN WITNESS WHEREOF, each of the parties hereto has caused a counterpart of this Amendment to be duly executed and delivered as of the date first above written.

BORROWER:

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

By: /s/ Ben Naccarato  
Name: Ben Naccarato  
Title: CFO

AGENT AND LENDER:

PNC BANK, NATIONAL ASSOCIATION,  
in its capacity as Agent and as Lender

By: /s/ Scott Goldstein  
Name: Scott Goldstein  
Title: Senior Vice President

Eighth Amendment to Second Amended and Restated Revolving Credit,  
Term Loan and Security Agreement (Perma-Fix Environmental Services, Inc.)

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**CERTIFICATIONS**

I, Mark Duff, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Perma-Fix Environmental Services, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of the internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
  - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 9, 2024

*/s/ Mark Duff*

Mark Duff  
Chief Executive Officer, President  
and Principal Executive Officer

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**CERTIFICATIONS**

I, Ben Naccarato, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Perma-Fix Environmental Services, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of the internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
  - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 9, 2024

*/s/ Ben Naccarato*

Ben Naccarato  
Executive Vice President and Chief Financial Officer and  
Principal Financial Officer

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**CERTIFICATION PURSUANT TO  
18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO SECTION 906  
OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of Perma-Fix Environmental Services, Inc. ("PESI") on Form 10-Q for the quarter ended March 31, 2024, as filed with the Securities and Exchange Commission on the date hereof (the "Form 10-Q"), I, Mark Duff, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Form 10-Q fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. §78m or §78o(d)); and

(2) The information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: May 9, 2024

*/s/ Mark Duff*

Mark Duff  
Chief Executive Officer, President  
and Principal Executive Officer

This certification is furnished to the Securities and Exchange Commission solely for purpose of 18 U.S.C. §1350 subject to the knowledge standard contained therein, and not for any other purpose.

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**CERTIFICATION PURSUANT TO  
18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO SECTION 906  
OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of Perma-Fix Environmental Services, Inc. ("PESI") on Form 10-Q for the quarter ended March 31, 2024, as filed with the Securities and Exchange Commission on the date hereof (the "Form 10-Q"), I, Ben Naccarato, Executive Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Form 10-Q fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. §78m or §78o(d)); and
- (2) The information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: May 9, 2024

*/s/ Ben Naccarato*

Ben Naccarato  
Executive Vice President and Chief Financial  
Officer and Principal Financial Officer

This certification is furnished to the Securities and Exchange Commission solely for purpose of 18 U.S.C. §1350 subject to the knowledge standard contained therein, and not for any other purpose.

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