

**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 June 30, 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. 001-11596

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 July 30, 2024
Common Stock, \$.001 Par Value	15,800,604 shares

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

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PART I - FINANCIAL INFORMATION
Item 1. – Financial Statements

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

(Amounts in Thousands, Except for Share and Per Share Amounts)	June 30, 2024 (Unaudited)	December 31, 2023
ASSETS		
Current assets:		
Cash	\$ 18,122	\$ 7,500
Accounts receivable, net of allowance for credit losses of \$19 and \$30, respectively	6,423	9,722
Unbilled receivables	7,076	8,432
Inventories	965	1,155
Prepaid and other assets	2,860	3,738
Current assets related to discontinued operations	5	13
Total current assets	35,451	30,560
Property and equipment:		
Buildings and land	24,319	24,311
Equipment	23,293	22,809
Vehicles	434	434
Leasehold improvements	8	8
Office furniture and equipment	1,138	1,130
Construction-in-progress	1,201	1,010
Total property and equipment	50,393	49,702
Less accumulated depreciation	(31,314)	(30,693)
Net property and equipment	19,079	19,009
Property and equipment related to discontinued operations	130	81
Operating lease right-of-use assets	2,278	1,990
Intangibles and other long term assets:		
Permits	10,391	9,905
Other intangible assets - net	436	461
Finite risk sinking fund (restricted cash)	12,372	12,074
Deferred tax assets	6,495	4,299
Other assets	339	370
Total assets	\$ 86,971	\$ 78,749

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

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

(Amounts in Thousands, Except for Share and per Share Amounts)	June 30, 2024 (Unaudited)	December 31, 2023
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 9,111	\$ 9,582
Accrued expenses	4,207	6,560
Disposal/transportation accrual	1,926	1,198
Deferred revenue	5,818	6,815
Accrued closure costs - current	20	79
Current portion of long-term debt	546	773
Current portion of operating lease liabilities	378	380
Current portion of finance lease liabilities	286	291

Current liabilities related to discontinued operations	376	269
Total current liabilities	22,668	25,947
Accrued closure costs	8,111	8,051
Long-term debt, less current portion	1,695	1,975
Long-term operating lease liabilities, less current portion	1,956	1,670
Long-term finance lease liabilities, less current portion	636	776
Long-term liabilities related to discontinued operations	940	953
Total long-term liabilities	13,338	13,425
Total liabilities	36,006	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; 15,796,028 and 13,654,201 shares issued, respectively; 15,788,386 and 13,646,559 shares outstanding, respectively	16	14
Additional paid-in capital	135,686	116,502
Accumulated deficit	(84,462)	(76,951)
Accumulated other comprehensive loss	(187)	(100)
Less Common Stock in treasury, at cost; 7,642 shares	(88)	(88)
Total stockholders' equity	50,965	39,377
Total liabilities and stockholders' equity	\$ 86,971	\$ 78,749

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

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

(Amounts in Thousands, Except for Per Share Amounts)	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Net revenues	\$ 13,986	\$ 25,032	\$ 27,603	\$ 45,139
Cost of goods sold	15,292	20,516	29,529	37,614
Gross (loss) profit	(1,306)	4,516	(1,926)	7,525
Selling, general and administrative expenses	3,455	3,551	6,999	7,036
Research and development	273	121	569	220
Loss on disposal of property and equipment	1	—	1	—
(Loss) income from operations	(5,035)	844	(9,495)	269
Other income (expense):				
Interest income	213	172	387	298
Interest expense	(109)	(47)	(225)	(100)
Interest expense-financing fees	(16)	(24)	(29)	(44)
Other	1	6	2	7
(Loss) income from continuing operations before taxes	(4,946)	951	(9,360)	430
Income tax (benefit) expense	(1,161)	432	(2,117)	228
(Loss) income from continuing operations, net of taxes	(3,785)	519	(7,243)	202
Loss from discontinued operations, net of taxes (Note 10)	(166)	(45)	(268)	(139)
Net (loss) income	\$ (3,951)	\$ 474	\$ (7,511)	\$ 63
Net (loss) income per common share - basic:				
Continuing operations	\$ (.26)	\$.04	\$ (.51)	\$.01
Discontinued operations	(.01)	—	(.02)	(.01)
Net (loss) income per common share	\$ (.27)	\$.04	\$ (.53)	\$ —
Net (loss) income per common share - diluted:				
Continuing operations	\$ (.26)	\$.03	\$ (.51)	\$.01
Discontinued operations	(.01)	—	(.02)	(.01)
Net (loss) income per common share	\$ (.27)	\$.03	\$ (.53)	\$ —
Number of common shares used in computing net (loss) income per share:				
Basic	14,593	13,474	14,134	13,417
Diluted	14,593	13,848	14,134	13,657

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

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

(Amounts in Thousands)	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Net (loss) income	\$ (3,951)	\$ 474	\$ (7,511)	\$ 63
Other comprehensive (loss) income:				
Foreign currency translation (loss) gain	(31)	46	(87)	53
Total other comprehensive (loss) income	(31)	46	(87)	53
Comprehensive (loss) income	\$ (3,982)	\$ 520	\$ (7,598)	\$ 116

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

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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					
Balance at December 31, 2023	<u>13,654,201</u>	<u>\$ 14</u>	<u>\$ 116,502</u>	<u>\$ (88)</u>	<u>\$ (100)</u>	<u>\$ (76,951)</u>	<u>\$ 39,377</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
Balance at March 31, 2024	<u>13,730,580</u>	<u>\$ 14</u>	<u>\$ 116,981</u>	<u>\$ (88)</u>	<u>\$ (156)</u>	<u>\$ (80,511)</u>	<u>\$ 36,240</u>
Net loss	—	—	—	—	—	(3,951)	(3,951)
Foreign currency translation	—	—	—	—	(31)	—	(31)
Issuance of Common Stock for services	9,965	—	120	—	—	—	120
Issuance of Common Stock upon exercise of options	4,201	—	9	—	—	—	9
Sale of Common Stock, net of offering costs (Note 14)	2,051,282	2	18,113	—	—	—	18,115
Issuance of warrants from sale of Common Stock (Note 14)	—	—	331	—	—	—	331
Stock-Based Compensation	—	—	132	—	—	—	132
Balance at June 30, 2024	<u>15,796,028</u>	<u>\$ 16</u>	<u>\$ 135,686</u>	<u>\$ (88)</u>	<u>\$ (187)</u>	<u>\$ (84,462)</u>	<u>\$ 50,965</u>
Balance at December 31, 2022	<u>13,332,398</u>	<u>\$ 13</u>	<u>\$ 115,209</u>	<u>\$ (88)</u>	<u>\$ (165)</u>	<u>\$ (77,436)</u>	<u>\$ 37,533</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
Balance at March 31, 2023	<u>13,397,436</u>	<u>\$ 13</u>	<u>\$ 115,452</u>	<u>\$ (88)</u>	<u>\$ (158)</u>	<u>\$ (77,847)</u>	<u>\$ 37,372</u>
Net income	—	—	—	—	—	474	474
Foreign currency translation	—	—	—	—	46	—	46
Issuance of Common Stock for services	10,171	—	119	—	—	—	119
Issuance of Common Stock upon exercise of options	155,136	1	93	—	—	—	94
Stock-Based Compensation	—	—	125	—	—	—	125
Balance at June 30, 2023	<u>13,562,743</u>	<u>\$ 14</u>	<u>\$ 115,789</u>	<u>\$ (88)</u>	<u>\$ (112)</u>	<u>\$ (77,373)</u>	<u>\$ 38,230</u>

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

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

(Amounts in Thousands)	June 30,	
	2024	2023
Cash flows from operating activities:		
Net (loss) income	\$ (7,511)	\$ 63
Less: loss from discontinued operations, net of taxes (Note 10)	(268)	(139)
(Loss) income from continuing operations, net of taxes	(7,243)	202
Adjustments to reconcile (loss) income from continuing operations to cash (used in) provided by operating activities:		
Depreciation and amortization	862	1,439
Amortization of debt issuance costs	29	43
Deferred tax (benefit) expense	(2,117)	228
(Recovery of) provision for credit losses on accounts receivable	(12)	24
Loss on disposal of property and equipment	1	—
Issuance of common stock for services	238	237
Stock-based compensation	284	243
Changes in operating assets and liabilities of continuing operations		
Accounts receivable	3,311	(2,590)
Unbilled receivables	1,356	(1,059)
Prepaid expenses, inventories and other assets	1,168	3,160
Accounts payable, accrued expenses and unearned revenue	(3,949)	2,835
Cash (used in) provided by continuing operations	(6,072)	4,762
Cash used in discontinued operations	(245)	(336)
Cash (used in) provided by operating activities	(6,317)	4,426
Cash flows from investing activities:		
Purchases of property and equipment, net of financed amount	(841)	(1,047)
Proceeds from sale of property and equipment	1	—
Cash used in continuing operations	(840)	(1,047)
Cash used in discontinued operations	(49)	—
Cash used in investing activities	(889)	(1,047)
Cash flows from financing activities:		
Repayments of revolving credit borrowings	(56,393)	(44,130)
Borrowing on revolving credit	56,393	44,130
Proceeds from issuance of Common Stock upon exercise of options/warrant	218	101
Proceeds from sale of Common Stock, net of offering costs paid (Note 14)	18,636	—
Principal repayments of finance lease liabilities	(146)	(81)
Principal repayments of long term debt	(520)	(273)
Payment of debt issuance costs	(61)	(37)
Cash provided by (used in) financing activities of continuing operations	18,127	(290)
Effect of exchange rate changes on cash	(1)	5
Increase in cash and finite risk sinking fund (restricted cash)	10,920	3,094
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	\$ 30,494	\$ 16,530
Supplemental disclosure:		
Interest paid	\$ 227	\$ 103
Income taxes paid	50	—
Non-cash financing activities:		
Equipment purchase subject to finance	44	157

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

PERMA-FIX ENVIRONMENTAL SERVICES, INC.
Notes to Condensed Consolidated Financial Statements
June 30, 2024
(Unaudited)

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 six months ended June 30, 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.

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.

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, 2024, 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		
	June 30, 2024			June 30, 2023		
	Treatment	Services	Total	Treatment	Services	Total
Fixed price	\$ 8,343	\$ 4,755	\$ 13,098	\$ 12,834	\$ 11,161	\$ 23,995
Time and materials	—	888	888	—	1,037	1,037
Total	\$ 8,343	\$ 5,643	\$ 13,986	\$ 12,834	\$ 12,198	\$ 25,032

Revenue by Contract Type (In thousands)

	Six Months Ended			Six Months Ended		
	June 30, 2024			June 30, 2023		
	Treatment	Services	Total	Treatment	Services	Total
Fixed price	\$ 17,052	\$ 9,069	\$ 26,121	\$ 22,428	\$ 19,808	\$ 42,236
Time and materials	—	1,482	1,482	—	2,903	2,903
Total	\$ 17,052	\$ 10,551	\$ 27,603	\$ 22,428	\$ 22,711	\$ 45,139

Revenue by generator (In thousands)

	Three Months Ended			Three Months Ended		
	June 30, 2024			June 30, 2023		
	Treatment	Services	Total	Treatment	Services	Total
Domestic government	\$ 6,252	\$ 4,168	\$ 10,420	\$ 9,808	\$ 11,441	\$ 21,249
Domestic commercial	1,721	1,363	3,084	2,269	742	3,011
Foreign government	1	88	89	657	(7)	650
Foreign commercial	369	24	393	100	22	122
Total	\$ 8,343	\$ 5,643	\$ 13,986	\$ 12,834	\$ 12,198	\$ 25,032

Revenue by generator (In thousands)

	Six Months Ended			Six Months Ended		
	June 30, 2024			June 30, 2023		
	Treatment	Services	Total	Treatment	Services	Total
Domestic government	\$ 12,013	\$ 8,471	\$ 20,484	\$ 17,065	\$ 21,159	\$ 38,224
Domestic commercial	4,222	1,867	6,089	4,475	1,339	5,814
Foreign government	1	167	168	752	170	922
Foreign commercial	816	46	862	136	43	179
Total	\$ 17,052	\$ 10,551	\$ 27,603	\$ 22,428	\$ 22,711	\$ 45,139

Contract Balances

The timing of revenue recognition and billings can result in unbilled receivables (contract assets) or deferred revenue (contract liabilities). The following table represents changes in our contract asset and contract liabilities balances: The reduction in deferred revenue was primarily due to the substantial completion of a waste treatment project for a certain customer in which a prepayment was made to the Company by the customer in 2023.

(In thousands)	June 30, 2024	December 31, 2023	Change (\$)	Change (%)
Contract assets				
Unbilled receivables - current	\$ 7,076	\$ 8,432	\$ (1,356)	-16%
Contract liabilities				
Deferred revenue	\$ 5,818	\$ 6,815	\$ (997)	-14.6%

During the three and six months ended June 30, 2024, the Company recognized revenue of \$ 1,754,000 and \$4,919,000, respectively, related to untreated waste that was in the Company's control as of the beginning of each respective year. During the three and six months ended June 30, 2023, the Company recognized revenue of \$1,098,000 and \$4,593,000, 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 related to performance obligations satisfied within the respective period.

Accounts Receivable

Accounts receivable, net of credit losses, totaled \$6,423,000 as of June 30, 2024, a decrease of \$3,299,000 from the December 31, 2023, balance of \$9,722,000. The decrease was primarily due to reduced billing from decreased revenues. Our accounts receivable was also reduced by the collection in May 2024 of outstanding accounts receivable for work performed for a certain Canadian project for which a settlement agreement had previously been reached, with collection subject to meeting certain conditions/terms precedent (see "Note 11 - Perma-Fix Canada Inc. ("PF Canada")") for a discussion on the collection of the receivables).

Remaining Performance Obligations

The Company applies the practical expedient in Accounting Standards Codification ("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 (see "Note 15 – Subsequent Events" for a discussion of the purchase of this property by the Company in July 2024). Finance leases consist primarily of processing and transport equipment used by our facilities' operations.

The components of lease cost for the Company's leases for the three and six months ended June 30, 2024 and 2023 were as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Operating Leases:				
Lease cost	\$ 149	\$ 156	\$ 292	\$ 313
Finance Leases:				
Amortization of ROU assets	65	38	131	76
Interest on lease liability	21	7	43	13
	86	45	174	89
Short-term lease rent expense	2	1	2	1
Total lease cost	237	202	468	403

The weighted average remaining lease term and the weighted average discount rate for operating and finance leases at June 30, 2024, were:

	Operating Leases	Finance Leases
Weighted average remaining lease terms (years)	5.0	4.1
Weighted average discount rate	7.4%	8.9%

The weighted average remaining lease term and the weighted average discount rate for operating and finance leases at June 30, 2023, were:

	Operating Leases	Finance Leases
Weighted average remaining lease terms (years)	6.0	2.2
Weighted average discount rate	7.9%	6.0%

The following table reconciles the undiscounted cash flows for the operating and finance leases at June 30, 2024, to the operating and finance lease

liabilities recorded on the balance sheet (in thousands):

		Operating Leases	Finance Leases
	2024	\$ 266	\$ 183
	2025	595	345
	2026	594	192
	2027	567	157
	2028	436	134
	2029 and thereafter	407	102
	Total undiscounted lease payments	2,865	1,113
	Less: Imputed interest	(531)	(191)
	Present value of lease payments	\$ 2,334	\$ 922
Current portion of operating lease obligations		\$ 378	\$ —
Long-term operating lease obligations, less current portion		\$ 1,956	\$ —
Current portion of finance lease obligations		\$ —	\$ 286
Long-term finance lease obligations, less current portion		\$ —	\$ 636

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Supplemental cash flow and other information related to our leases were as follows for the three and six months ended June 30, 2024, and 2023 (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Cash paid for amounts included in the measurement of lease liabilities:				
Operating cash flow used in operating leases	\$ 149	\$ 146	\$ 296	\$ 290
Operating cash flow used in finance leases	\$ 21	\$ 7	\$ 43	\$ 13
Financing cash flow used in finance leases	\$ 71	\$ 40	\$ 146	\$ 81
ROU assets obtained in exchange for lease obligations for:				
Finance liabilities	\$ —	\$ 107	\$ —	\$ 157
Operating liabilities	\$ 497	\$ —	\$ 497	\$ —

The addition of the ROU assets obtained in exchange for operating lease liabilities in the second quarter of 2024 resulted from extensions of the terms on two of the Company's leases.

5. Intangible Assets

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

	Weighted Average Amortization Period (Years)	June 30, 2024			December 31, 2023		
		Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Other Intangibles (amount in thousands)							
Patents	8.3	\$ 726	\$ (393)	\$ 333	\$ 710	\$ (387)	\$ 323
Software	3	673	(570)	103	667	(529)	138
Total		\$ 1,399	\$ (963)	\$ 436	\$ 1,377	\$ (916)	\$ 461

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

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

Year	Amount (In thousands)
2024 (Remaining)	\$ 35
2025	45
2026	40
2027	22
2028	13
Total	\$ 155

Amortization expenses relating to the definite-lived intangible assets as discussed above were \$ 23,000 and \$47,000 for the three and six months ended June 30, 2024, respectively, and \$55,000 and \$110,000 for the three and six months ended June 30, 2023, respectively.

6. Capital Stock, Stock Plans 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.

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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 and six months ended June 30, 2024, and 2023 for our employee and director stock options.

Stock Options	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Employee Stock Options	\$ 72,000	\$ 93,000	\$ 163,000	\$ 179,000
Director Stock Options	60,000	32,000	121,000	64,000
Total	\$ 132,000	\$ 125,000	\$ 284,000	\$ 243,000

At June 30, 2024, the Company had approximately \$ 1,595,000 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 3.0 years.

The summary of the Company's total Stock Option Plans as of June 30, 2024, and June 30, 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 (4)
Options outstanding January 1, 2024	994,500	\$ 5.57		
Granted	45,000	\$ 7.75		
Exercised	(49,900)	\$ 5.63		\$ 245,982
Forfeited	(44,000)	\$ 6.05		
Options outstanding end of period (1)	945,600	\$ 5.65	4.6	\$ 4,232,804
Options exercisable at June 30, 2024(2)	343,900	\$ 5.05	3.5	\$ 1,747,136

	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value (4)
Options outstanding January 1, 2023	1,018,400	\$ 5.02		
Granted	295,000	\$ 3.95		
Exercised	(265,600)	\$ 3.70		\$ 2,002,502
Forfeited/expired/cancelled	(64,500)	\$ 3.67		
Options outstanding end of period (3)	983,300	\$ 5.15	4.9	\$ 5,734,647
Options exercisable at June 30, 2023(3)	278,300	\$ 4.75	3.4	\$ 1,732,347

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

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

(3) Options with exercise price 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 six months ended June 30, 2024, the Company issued a total of 24,928 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 \$242,000 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 six months ended June 30, 2024, the Company issued an aggregate 14,717 shares of its Common Stock from cashless exercises of options for the purchase of 29,000 shares of the Company's Common Stock ranging from \$ 3.15 per share to \$7.005 per share. Additionally, the Company issued 20,900 shares of its Common Stock from the cash exercises of options for the purchase of 20,900 shares of the Company's Common Stock, at exercise prices ranging from \$3.70 per share to \$7.005 per share, resulting in proceeds of approximately \$ 113,000.

During the first quarter of 2024, a remaining warrant issued in connection with a \$ 2,500,000 loan that the Company received on April 1, 2019 (which was paid in full in December 2020 by the Company) for the purchase of up to 30,000 shares of the Company's Common Stock at an exercise price of \$ 3.51 per share, was exercised by the optionee, resulting in proceeds received by the Company of approximately \$105,000.

7. (Loss) Income Per Share

Basic (loss) income per share is calculated based on the weighted-average number of outstanding common shares during the applicable period. Diluted (loss) income 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 earnings per share. The following table reconciles the (loss) income and average share amounts used to compute both basic and diluted (loss) income per share:

(Amounts in Thousands, Except for Per Share Amounts)	Three Months Ended June 30, (Unaudited)		Six Months Ended June 30, (Unaudited)	
	2024	2023	2024	2023
<u>(Loss) income per common share from continuing operations</u>				
(Loss) income from continuing operations, net of taxes	\$ (3,785)	\$ 519	\$ (7,243)	\$ 202
Basic (loss) income per share	\$ (.26)	\$.04	\$ (.51)	\$.01
Diluted (loss) income per share	\$ (.26)	\$.03	\$ (.51)	\$.01
<u>Loss per common share from discontinued operations, net of taxes</u>				
Loss from discontinued operations, net of taxes	\$ (166)	\$ (45)	\$ (268)	\$ (139)

Basic loss per share	\$ (01)	\$ —	\$ (02)	\$ (01)
Diluted loss per share	\$ (01)	\$ —	\$ (02)	\$ (01)
Net (loss) income per common share				
Net (loss) income	\$ (3,951)	\$ 474	\$ (7,511)	\$ 63
Basic (loss) income per share	\$ (.27)	\$.04	\$ (.53)	\$ —
Diluted (loss) income per share	\$ (.27)	\$.03	\$ (.53)	\$ —
Weighted average shares outstanding:				
Basic weighted average shares outstanding	14,593	13,474	14,134	13,417
Add: dilutive effect of stock options	—	334	—	205
Add: dilutive effect of warrants	—	40	—	35
Diluted weighted average shares outstanding	14,593	13,848	14,134	13,657
Potential shares excluded from above weighted average share calculations due to their anti-dilutive effect include:				
Warrant	62	—	62	—
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8. Long Term Debt

Long-term debt consists of the following as of June 30, 2024, and December 31, 2023:

(Amounts in Thousands)	June 30, 2024	December 31, 2023
Revolving Credit 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 six months of 2024 was 10.5% ⁽¹⁾	\$ —	\$ —
Term Loan 1 dated May 8, 2020, payable in equal monthly installments of principal, balance due on May 15, 2027. Effective interest rate for the first six months of 2024 was 9.5% ⁽¹⁾	—	213
Term Loan 2 dated July 31, 2023, payable in equal monthly installments of principal, balance due on May 15, 2027. Effective interest rate for first six months of 2024 was 9.4% ⁽¹⁾	2,083	2,333
Capital Line dated May 4, 2021, payable in equal monthly installments of principal, balance due on May 15, 2027. Effective interest rate for first six months of 2024 was 8.8% ⁽¹⁾	306	358
Debt Issuance Costs	(202) ⁽²⁾	(170) ⁽²⁾
Notes Payable up to 2030, annual interest rate of 10.7% and 9.1%.	54	14
Total debt	2,241	2,748
Less current portion of long-term debt	546	773
Long-term debt	\$ 1,695	\$ 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, which has since been amended from time to time, with PNC National Association ("PNC" and "lender"), acting as agent and lender (the "Loan Agreement"). The Loan Agreement provides the Company with a credit facility with a maturity date of May 15, 2027 (the "Credit Facility") as follows: (a) up to \$12,500,000 revolving credit ("revolving credit"), which borrowing capacity is subject to eligible receivables (as defined) and reduced by outstanding standby letters of credit (\$3,950,000 as of June 30, 2024) and borrowing reductions that the Company's lender may impose from time to time (\$ 750,000 as of June 30, 2024); (b) a term loan ("Term Loan 1") of approximately \$1,742,000, requiring monthly installments of \$35,547 (Term Loan 1 was paid off by the Company in June 2024); (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, payments of annual interest rates are as follows: (i) interest due on the revolving credit is at prime (8.50% at June 30, 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 was/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 in the event the Company pays off its obligations to its lender on or before July 31, 2024, and 0.5% of the total financing if the Company pays off its obligations to its lender 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 after July 31, 2025.

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

- removes the quarterly fixed charge coverage ratio ("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 of \$2,250,000 in Liquidity (defined as borrowing availability under the revolving credit plus cash in the money market deposit account ("MMDA") maintained with the Company's lender) under its Credit Facility through June 29, 2024, (which was met by the Company) and a minimum of daily \$3,000,000 in liquidity 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 (which the Company was not able to achieve as of June 30, 2024), the maintenance of a daily minimum Liquidity 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, the Company paid its lender a fee of \$ 25,000 which is being amortized over the remaining term of the Loan Agreement as interest expense-financing fees.

At June 30, 2024, the Company had no outstanding borrowing under its revolving credit and its Liquidity under the Credit Facility was approximately \$19,466,000.

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 FCCR requirement for the first and second quarters of 2024 pursuant to the amendment dated May 8, 2024, to the Company's Loan Agreement as discussed above. The Company met all of its other financial covenant requirements in the first and second quarters 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.

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 \$23,379,000 at June 30, 2024. As of June 30, 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 \$12,372,000 and \$12,074,000, respectively, which included interest earned of \$2,901,000 and \$2,603,000 on the finite risk sinking funds as of June 30, 2024, and December 31, 2023, respectively. Interest income for the three and six months ended June 30, 2024, was approximately \$150,000 and \$298,000, respectively. Interest income for the three and six months ended June 30, 2023, was approximately \$143,000 and \$210,000, respectively. If we so elect, 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 the Company 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 June 30, 2024, the total amount of standby letters of credit outstanding was approximately \$3,950,000 and the total amount of bonds outstanding was approximately \$21,976,000.

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 \$ 166,000 (net of tax benefit of \$51,000) and \$45,000 (net of tax benefit of \$89,000) for the three months ended June 30, 2024, and 2023, respectively and net losses of \$268,000 (net of tax benefit of \$79,000) and \$139,000 (net of tax benefit of \$119,000) for the six months ended June 30, 2024, and 2023, respectively. 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 June 30, 2024, and December 31, 2023. No assets and liabilities were held for sale at each of the periods noted.

(Amounts in Thousands)	June 30, 2024	December 31, 2023
Current assets		
Other assets	\$ 5	\$ 13
Total current assets	5	13
Long-term assets		
Property, plant and equipment, net ⁽¹⁾	130	81
Total long-term assets	130	81
Total assets	<u>\$ 135</u>	<u>\$ 94</u>
Current liabilities		
Accounts payable	\$ 219	\$ 80
Accrued expenses and other liabilities	151	128
Environmental liabilities	6	61
Total current liabilities	376	269
Long-term liabilities		
Closure liabilities	174	169
Environmental liabilities	766	784
Total long-term liabilities	940	953
Total liabilities	<u>\$ 1,316</u>	<u>\$ 1,222</u>

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

On June 1, 2024, our Perma-Fix South Georgia, Inc. ("PFSG") subsidiary entered into a lease agreement with a tenant leasing a portion of the PFSG property. The lease is for a two-years term and requires monthly payment by the lessee of approximately \$8,500 for the first year and approximately \$8,755 for the second year. The lessee is responsible for all expenses relating to the permitted usage of the property, including all utilities, a portion of the annual real estate taxes and is responsible for maintaining insurance coverage, among other things.

11. 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. The Company received a partial payment from CNL of the outstanding receivables during the first quarter of 2024. In May 2024, PF Canada received the remaining approximately \$1,612,000 in outstanding receivables from CNL. No outstanding receivables remain under the TOA from CNL as of June 30, 2024.

12. 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
- Research and Development ("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.

The table below presents certain financial information of our operating segments for the three and six months ended June 30, 2024, and 2023 (in thousands):

Segment Reporting for the Quarter Ended June 30, 2024

	Treatment	Services	Segments Total	Corporate ⁽¹⁾	Consolidated Total
Revenue from external customers	\$ 8,343	\$ 5,643	\$ 13,986	\$ —	\$ 13,986
Intercompany revenues	9	13	22	—	—
Gross loss	(1,197)	(109)	(1,306)	—	(1,306)
Research and development	186	24	210	63	273
Interest income	—	—	—	213	213
Interest expense	(33)	(2)	(35)	(74)	(109)
Interest expense-financing fees	—	—	—	(16)	(16)
Depreciation and amortization	367	44	411	19	430
Segment loss	(1,668)	(462)	(2,130)	(1,655)	(3,785)
Expenditures for segment assets	457	140	597	—	597 ⁽²⁾

Segment Reporting for the Six Months Ended June 30, 2024

	Treatment	Services	Segments Total	Corporate ⁽¹⁾	Consolidated Total
Revenue from external customers	\$ 17,052	\$ 10,551	\$ 27,603	\$ —	\$ 27,603
Intercompany revenues	54	29	83	—	—
Gross loss	(1,249)	(677)	(1,926)	—	(1,926)
Research and development	404	52	456	113	569
Interest income	—	—	—	387	387
Interest expense	(69)	(2)	(71)	(154)	(225)
Interest expense-financing fees	—	—	—	(29)	(29)
Depreciation and amortization	733	89	822	40	862
Segment loss	(2,514)	(1,419)	(3,933)	(3,310)	(7,243)
Expenditures for segment assets	617	224	841	—	841 ⁽²⁾

Segment Reporting for the Quarter Ended June 30, 2023

	Treatment	Services	Segments Total	Corporate ⁽¹⁾	Consolidated Total
Revenue from external customers	\$ 12,834	\$ 12,198	\$ 25,032	\$ —	\$ 25,032
Intercompany revenues	26	17	43	—	—
Gross profit	2,491	2,025	4,516	—	4,516
Research and development	91	7	98	23	121
Interest income	—	—	—	172	172
Interest expense	(23)	—	(23)	(24)	(47)
Interest expense-financing fees	—	—	—	(24)	(24)
Depreciation and amortization	589	89	678	14	692
Segment income (loss)	1,273	840	2,113	(1,594)	519
Expenditures for segment assets	293	5	298	—	298 ⁽³⁾

Segment Reporting for the Six Months Ended June 30, 2023

	Treatment	Services	Segments Total	Corporate ⁽¹⁾	Consolidated Total
Revenue from external customers	\$ 22,428	\$ 22,711	\$ 45,139	\$ —	\$ 45,139
Intercompany revenues	230	36	266	—	—
Gross profit	3,743	3,782	7,525	—	7,525
Research and development	158	10	168	52	220
Interest income	—	—	—	298	298
Interest expense	(45)	(1)	(46)	(54)	(100)
Interest expense-financing fees	—	—	—	(44)	(44)
Depreciation and amortization	1,162	249	1,411	28	1,439
Segment income (loss)	1,605	1,813	3,418	(3,216)	202
Expenditures for segment assets	1,043	4	1,047	—	1,047 ⁽³⁾

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

(2) Net of financed amount of \$0 and \$44,000 for the three and six months ended June 30, 2024, respectively.

(3) Net of financed amount of \$107,000 and \$157,000 for the three and six months ended June 30, 2023, respectively.

13. 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 an income tax benefit of \$1,161,000 and income tax expense of \$432,000 for continuing operations for the three months ended June 30, 2024, and the corresponding period of 2023, respectively, and income tax benefit of \$2,117,000 and income tax expense of \$228,000 for continuing operations for the six months ended June 30, 2024, and the corresponding period of 2023, respectively. The Company's effective tax rates were approximately 23.5% and 45.4% for the three months ended June 30, 2024, and the corresponding period of 2023, respectively, and 22.6% and 53.0% for the six months ended June 30, 2024, and the corresponding period of 2023, respectively. The Company's effective tax rates for the three and six months periods ended June 30, 2024, and the corresponding periods of 2023 were impacted by non-deductible expenses and state taxes.

14. Sale of Common Stock

On May 21, 2024, the Company entered into a Securities Purchase Agreement (the "Securities Purchase Agreement") with certain institutional and retail investors (the "Purchasers"), pursuant to which the Company sold and issued, in a registered direct offering, an aggregate of 2,051,282 shares of the Company's Common Stock, at a negotiated purchase price per share of \$9.75 (the "Shares"), for aggregate gross proceeds to the Company of approximately \$20,000,000, before deducting fees payable to the placement agents and other estimated offering expenses payable by the Company (the "Offering"). The net proceeds from the Offering is to fund (i) continued R&D and business development relating to the Company's patent-pending process for the destruction of PFAS (Per- and polyfluoroalkyl substances), as well as the cost of installing at least one commercial treatment unit; (ii) ongoing facility capital expenditures and maintenance costs; and (iii) general corporate and working capital purposes.

The Shares were offered and sold by the Company pursuant to the Company's "shelf" registration statement on Form S-3 and prospectus supplement relating thereto.

Craig-Hallum Capital Group LLC ("Craig-Hallum") and Wellington Shields & Co. LLC ("Wellington Shields") (Wellington Shields and Craig-Hallum together are known as the "Placement Agents") served as the exclusive placement agents in connection with the Offering. The Company paid the Placement Agents a total cash fee of 6.00% of the aggregate gross proceeds in the Offering, which totaled approximately \$1,200,000. The Company also reimbursed the Placement Agents certain expenses in connection with the Offering in an aggregate amount of approximately \$90,000. As additional compensation to the Placement Agents in connection with the Offering, the Company also issued to the Placement Agents and two (2) of their members designees, warrants (the "Placement Agents' Warrants") to purchase an aggregate of 61,538 shares of Common Stock (the "Warrant Shares"), with the aggregate number of Warrant Shares that may be acquired under the Placement Agents' Warrants equal to 3.0% of the number of Shares sold in the registered direct offering, at an exercise price per share equal to \$12.19, which is equal to approximately 125% of the price per share of the Shares sold in the Offering. Neither the Placement Agents' Warrants nor the Warrant Shares have been registered under the Registration Statement or otherwise. The Placement Agents' Warrants have a term of five years, are exercisable at any time and from time to time, in whole or in part, during the four and one-half (4 ½) year period commencing 180 days from the last date of closing of the Offering which was May 24, 2024, and are exercisable via "cashless exercise" in certain circumstances. The aggregate fair value of the "Placement Agents' Warrants" was determined to be approximately \$331,000 using the Black-Scholes pricing model with the following assumptions: 58.78% volatility, risk free interest rate of 4.53%, an expected life of five years and no dividend. The aggregate fair market value of the Placement Agent's Warrants was recorded as an offset to gross proceeds of the Offering and an increase to additional-paid-in capital.

After deducting costs incurred of approximately \$1,554,000 (exclusive of the aggregate fair market value of the Placement Agents' Warrants as discussed above) which were recorded as a deduction to equity in connection with the Offering, net cash proceeds to the Company totaled approximately \$18,446,000. The Company has paid approximately \$1,364,000 of the \$1,554,000 costs in connection with the Offering.

15. Subsequent Events

Management evaluated events occurring subsequent to June 30, 2024 through August 8, 2024, the date these condensed consolidated financial statements were available for issuance, and other than as noted below determined that no material recognizable subsequent events occurred.

On July 24, 2024, the Company purchased the property which its Oak Ridge Environmental Waste Operations ("EWOC") facility operates on pursuant to a Purchase and Sales Agreement dated April 30, 2024, for a purchase price of \$425,000. The Company paid \$63,750 in cash and entered into a promissory note dated July 24, 2024, in an amount of \$361,250 with a bank (the "lender") for the remaining balance of the purchase price, with a maturity date in twenty years or July 24, 2044 (the "Note"). For the first five years starting August 24, 2024, monthly payments under the Note will consist of approximately \$3,100 which include an annual fixed interest rate of 8.10%. Monthly payments under the Note will then be adjusted at the end of years five, ten and fifteen, with interest calculated based on the weekly average 5 year US Treasury Securities Rate plus 3.0%. Under no circumstances will the variable interest rates on the Note be less than 4.0% per annum or more than (except in the case of default) the lesser of 20.5% per annum or the maximum rate allowed by applicable law. The Company agreed to pay the lender 3.0% of the total outstanding principal balance under the Note in the event the Company pays off its obligations during the first year of the Note. The prepayment penalty rate will be reduced by 1.0% at each subsequent annual anniversary of the Note. No prepayment penalty will apply in the event the Company pays off the Note on the fourth anniversary of the Note or thereafter. The property was previously accounted for under the Company's operating leases.

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;
- base business is well positioned for improvements the second half of 2024;
- equipment to be back in service by the first half of August and accelerate waste processing to address backlog accumulated;

- advancement of initiatives to have positive impact in second half of 2024 and more fully realized in 2025;
- reducing operating costs and non-essential expenditures;
- ability to meet loan agreement quarterly financial covenant requirements;
- cash flow requirements;
- 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, and financing;
- our PFAS method is highly scalable process with minimal capital expenditures;
- our PFAS technology process will exceed current treatment options available;
- 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;
- 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.

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;
- 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;

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- 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 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") for the first quarter of 2024 and this second quarter 2024 10-Q.

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Overview

We were disappointed with our second quarter financial results within both of our segments which experienced continued delays in procurements, project starts and waste shipments due, in part from the unexpected residual impact of the Continuing Resolution ("CR") that continued into the better part of the second quarter. As previously disclosed, revenue in both segments for the first quarter of 2024 were negatively impacted by the CR as Congress did not pass a Federal Budget until late March. Our Treatment Segment also experienced temporary failure of a certain waste processing equipment at one of its facilities in late June which also negatively impacted revenue production. We expect this equipment to be back in service by the first half of August. Once back in service, we intend to accelerate waste processing to address backlog accumulated due to the equipment failure. We continue to accelerate investments in research and development ("R&D") on our new technology PFAS (see "Known Trends and Uncertainties – New Processing Technology" within this MD&A for a discussion of this technology).

Our overall revenue decreased by \$11,046,000 or 44.1% to \$13,986,000 for the three months ended June 30, 2024, from \$25,032,000 for the corresponding period of 2023. We saw decreases in both segments where Treatment Segment revenue decreased by \$4,491,000 to \$8,343,000 or 35.0% from \$12,834,000 and Services Segment revenue decreased by \$6,555,000 or 53.7% to \$5,643,000 from \$12,198,000. The decrease in revenue in the Treatment Segment was attributed primarily to overall lower waste volume due to continued delays in waste shipments by certain customers from the residual impact of the CR and the temporary failure of a certain waste processing equipment at one of our Treatment Segment facilities in late June as discussed above. Overall lower averaged price from waste mix within the Treatment Segment also contributed to the revenue decrease. The

decrease in revenue in the Services Segment was attributed to slower project mobilizations and delays in certain projects from the residual impact of the CR. The decrease in revenue in the Services Segment was also due, in part to the completion of two large projects in late 2023 which were not replaced by new projects of similar value. Together, these two large projects had generated a significant amount of revenues in the second quarter of 2023 as they were in full operational status. We incurred a gross loss in the second quarter of 2024 of approximately \$1,306,000 as compared to a gross profit of \$4,516,000 in the corresponding period of 2023, reflecting a decrease in gross profit of approximately \$5,822,000 or 128.9%, primarily due to decreased revenue in both segments. Selling, General and Administrative ("SG&A") expenses decreased by \$96,000 or 2.7% for the three months ended June 30, 2024, as compared to the corresponding period of 2023.

Revenue decreased by \$17,536,000 or 38.8% to \$27,603,000 for the six months ended June 30, 2024, from \$45,139,000 for the corresponding period of 2023. Treatment Segment revenue decreased by \$5,376,000 to \$17,052,000 or 24.0% from \$22,428,000. The decrease in revenue within the Treatment Segment was attributed to factors as discussed above for our second quarter results and factors previously disclosed for our first quarter results which included delays in waste shipments by certain customers due to poor weather conditions and CR impacts, temporary outages in March at our three primary facilities for equipment replacement and repairs, program enhancement and testing to support permit expansion and broader market penetration, and accelerated investment in R&D on our new technology to treat PFAS. Services Segment revenue decreased by \$12,160,000 or 53.5% to \$10,551,000 from \$22,711,000. The decrease in revenue in the Services Segment was attributed to slower project mobilizations and delays in certain projects from the impact of the CR. The decrease in revenue in the Services Segment was also due, in part to the completion of two large projects in late 2023 which were not replaced by new projects of similar value. Together, these two large projects had generated a significant amount of revenues in the first half of 2023 as they were in full operational status. We incurred a gross loss in the six months ended June 30, 2024, of approximately \$1,926,000 as compared to a gross profit of \$7,525,000 in the corresponding period of 2023, reflecting a decrease in gross profit of approximately \$9,451,000 or 125.6%, primarily due to decreased revenue in both segments. SG&A expenses decreased \$37,000 or 0.5% for the six months ended June 30, 2024, as compared to the corresponding period of 2023.

We believe our base business is well positioned for improvements in the second half of 2024 and, as previously reported, we continue to advance a variety of additional initiatives that we expect will have a positive impact on both revenue and earnings in the second half of the year that are expected to be more fully realized in 2025. These initiatives include, among other things, positioning ourself 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 (including PFAS), and continued expansion of our waste treatment offerings within the international and commercial markets.

On May 21, 2024, we entered into a Securities Purchase Agreement with certain institutional and retail investors, pursuant to which we sold and issued, in a registered direct offering, an aggregate of 2,051,282 shares of our Common Stock, at a negotiated purchase price per share of \$9.75 for aggregate gross proceeds to us of approximately \$20,000,000 (see "Financing Activities" within this MD&A for a discussion of this transaction).

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 partnership 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 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 and Six Months Ended June 30, 2024 and 2023

Consolidated (amounts in thousands)	Three Months Ended June 30,				Six Months Ended June 30,			
	2024	%	2023	%	2024	%	2023	%
Net revenues	\$ 13,986	100.0	\$ 25,032	100.0	\$ 27,603	100.0	\$ 45,139	100.0
Cost of goods sold	15,292	109.3	20,516	82.0	29,529	107.0	37,614	83.3
Gross (loss) profit	(1,306)	(9.3)	4,516	18.0	(1,926)	(7.0)	7,525	16.7
Selling, general and administrative	3,455	24.7	3,551	14.2	6,999	25.4	7,036	15.6
Research and development	273	2.0	121	.4	569	2.0	220	.5
Loss on disposal of property and equipment	1	—	—	—	1	—	—	—
(Loss) income from operations	(5,035)	(36.0)	844	3.4	(9,495)	(34.4)	269	.6
Interest income	213	1.5	172	.7	387	1.4	298	.7
Interest expense	(109)	(.8)	(47)	(.2)	(225)	(.8)	(100)	(.2)
Interest expense-financing fees	(16)	(.1)	(24)	(.1)	(29)	(.1)	(44)	(.1)
Other	1	—	6	—	2	—	7	—
(Loss) income from continuing operations before taxes	(4,946)	(35.4)	951	3.8	(9,360)	(33.9)	430	1.0
Income tax (benefit) expense	(1,161)	(8.3)	432	1.7	(2,117)	(7.7)	228	.5
(Loss) income from continuing operations	\$ (3,785)	(27.1)	\$ 519	2.1	\$ (7,243)	(26.2)	\$ 202	.5

Revenues

Consolidated revenues decreased \$11,046,000 for the three months ended June 30, 2024, compared to the three months ended June 30, 2023, as follows:

(In thousands)	2024	% Revenue	2023	% Revenue	Change	% Change
Treatment						
Government waste	\$ 5,645	40.4	\$ 9,702	38.8	\$ (4,057)	(41.8)
Hazardous/non-hazardous ⁽¹⁾	1,293	9.2	1,622	6.5	(329)	(20.3)
Other nuclear waste	1,405	10.1	1,510	6.1	(105)	(7.0)
Total	8,343	59.7	12,834	51.3	(4,491)	(35.0)
Services						
Nuclear services	4,426	31.6	11,840	47.3	(7,414)	(62.6)
Technical services	1,217	8.7	358	1.4	859	239.9
Total	5,643	40.3	12,198	48.7	(6,555)	(53.7)
Total	\$ 13,986	100.0	\$ 25,032	100.0	\$ (11,046)	(44.1)

⁽¹⁾ Includes wastes generated by government clients of \$608,000 and \$763,000 for the three months ended June 30, 2024, and the corresponding period of 2023, respectively.

Treatment Segment revenue decreased by \$4,491,000 or 35.0% for the three months ended June 30, 2024, over the same period in 2023. The overall decrease in revenue in the Treatment Segment was primarily due to lower waste volume as discussed in the "Overview" above. Overall lower averaged price from waste mix within the Treatment Segment also contributed to the revenue decrease. Services Segment revenue decreased by approximately \$6,555,000 or 53.7%. The decrease in revenue in the Services Segment was due to reasons as discussed in the "Overview" above. 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 residual impact of the CR.

Consolidated revenues decreased \$17,536,000 for the six months ended June 30, 2024, as compared to the six months ended June 30, 2023, as follows:

(In thousands)	2024	% Revenue	2023	% Revenue	Change	% Change
Treatment						
Government waste	\$ 10,778	39.1	\$ 16,344	36.2	\$ (5,566)	(34.1)
Hazardous/non-hazardous ⁽¹⁾	2,630	9.5	3,133	7.0	(503)	(16.1)
Other nuclear waste	3,644	13.2	2,951	6.5	693	23.5
Total	17,052	61.8	22,428	49.7	(5,376)	(24.0)
Services						
Nuclear services	8,995	32.6	21,922	48.6	(12,927)	(59.0)
Technical services	1,556	5.6	789	1.7	767	97.2
Total	10,551	38.2	22,711	50.3	(12,160)	(53.5)
Total	\$ 27,603	100.0	\$ 45,139	100.0	\$ (17,536)	(38.8)

⁽¹⁾ Includes wastes generated by government clients of \$1,236,000 and \$1,473,000 for the six months ended June 30, 2024, and the corresponding period of 2023, respectively.

Treatment Segment revenue decreased by \$5,376,000 or 24.0% for the six months ended June 30, 2024, over the same period in 2023. The overall decrease in revenue was primarily due to lower waste volume attributed from the factors as discussed in the "Overview" section above. The increase in other nuclear waste revenue was primarily due to higher waste volume. Overall lower averaged price from waste mix within the Treatment Segment also contributed to the revenue decrease. Services Segment revenue decreased by approximately \$12,160,000 or 53.5%. The decrease in revenue in the Services Segment was due to the reasons as discussed in the "Overview" above. 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 the CR.

Cost of Goods Sold

Cost of goods sold decreased \$5,224,000 for the quarter ended June 30, 2024, as compared to the quarter ended June 30, 2023, as follows:

(In thousands)	2024	% Revenue	2023	% Revenue	Change
Treatment	\$ 9,540	114.3	\$ 10,343	80.6	\$ (803)
Services	5,752	101.9	10,173	83.4	(4,421)
Total	\$ 15,292	109.3	\$ 20,516	82.0	\$ (5,224)

Cost of goods sold for the Treatment Segment decreased by approximately \$803,000 or 7.7%. Treatment Segment's variable costs decreased by approximately \$667,000 primarily due to lower disposal, transportation, material and supplies and outside services costs. Treatment Segment's overall fixed costs were lower by approximately \$136,000 resulting from the following: depreciation expenses were lower by approximately \$222,000 due to fully depreciated asset retirement obligations ("AROs") that occurred in the third quarter of 2023 in connection with our EWOC facility; regulatory expenses were lower by approximately \$87,000; maintenance expenses were lower by approximately \$173,000; general expenses were higher by \$146,000 in various categories; salaries and payroll related expenses were higher by \$193,000 due to higher headcount; and travel expenses were slightly higher by approximately \$7,000. Services Segment cost of goods sold decreased \$4,421,000 or 43.5% primarily due to lower revenue. The decrease in cost of goods sold was primarily due to overall lower salaries/payroll related, outside services, and travel costs totaling approximately \$4,424,000; lower depreciation expense totaling approximately \$46,000; lower regulatory costs of \$15,000; and higher lab expenses of approximately \$64,000. Included within cost of goods sold is depreciation and amortization expense of \$405,000 and \$672,000 for the three months ended June 30, 2024, and 2023, respectively.

Cost of goods sold decreased \$8,085,000 for the six months ended June 30, 2024, as compared to the six months ended June 30, 2023, as follows:

(In thousands)	2024	Revenue	2023	Revenue	Change
Treatment	\$ 18,301	107.3	\$ 18,685	83.3	\$ (384)
Services	11,228	106.4	18,929	83.3	(7,701)
Total	\$ 29,529	107.0	\$ 37,614	83.3	\$ (8,085)

Cost of goods sold for the Treatment Segment decreased by approximately \$384,000 or 2.1%. Treatment Segment's variable costs decreased by approximately \$161,000 primarily due to lower material and supplies, transportation and lab costs totaling approximately \$627,000 which was offset by higher disposal costs of approximately \$466,000. Treatment Segment's overall fixed costs were lower by approximately \$223,000 resulting from the following: depreciation expenses were lower by approximately \$428,000 due to fully depreciated AROs that occurred in the third quarter of 2023 in connection with our EWOC facility; regulatory expenses were lower by approximately \$34,000; maintenance expenses were lower by approximately \$216,000; general expenses were lower by \$92,000 in various categories; salaries and payroll related expenses were higher by \$529,000 due to higher headcount; and travel expenses were higher by approximately \$18,000. Services Segment cost of goods sold decreased \$7,701,000 or 40.7% primarily due to lower revenue. The decrease in cost of goods sold was primarily due to overall lower salaries/payroll related, outside services, and travel costs totaling approximately \$7,294,000; lower depreciation expense totaling approximately \$160,000; lower regulatory costs of \$13,000; overall lower material and supplies and disposal costs of approximately \$269,000; and higher general expenses of approximately \$35,000 in various categories. Included within cost of goods sold is depreciation and amortization expense of \$810,000 and \$1,398,000 for the six months ended June 30, 2024, and 2023, respectively.

Gross (Loss) Profit

Gross profit for the quarter ended June 30, 2024, decreased \$5,822,000 over the same period in 2023, as follows:

(In thousands)	2024	% Revenue	2023	% Revenue	Change
Treatment	\$ (1,197)	(14.3)	\$ 2,491	19.4	\$ (3,688)
Services	(109)	(1.9)	2,025	16.6	(2,134)
Total	\$ (1,306)	(9.3)	\$ 4,516	18.0	\$ (5,822)

Treatment Segment gross profit decreased by \$3,688,000 or approximately 148.1% and gross margin decreased to (14.3)% from 19.4% 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 \$2,134,000 or 105.4% primarily due to decreased revenue as discussed in the "Overview" above. The decrease in gross margin in the Services Segment from 16.6% to (1.9)% was attributed to overall lower margin projects as the two large projects completed in late 2023 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.

Gross profit for the six months ended June 30, 2024, decreased \$9,451,000 over 2023, as follows:

(In thousands)	2024	% Revenue	2023	% Revenue	Change
Treatment	\$ (1,249)	(7.3)	\$ 3,743	16.7	\$ (4,992)
Services	(677)	(6.4)	3,782	16.7	(4,459)
Total	\$ (1,926)	(7.0)	\$ 7,525	16.7	\$ (9,451)

Treatment Segment gross profit decreased by \$4,992,000 or approximately 133.4% and gross margin decreased to (7.3)% from 16.7% 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 \$4,459,000 or 117.9% primarily due to decreased revenue as discussed in the "Overview" above. The decrease in gross margin from 16.7% to (6.4)% was attributed to overall lower margin projects as the two large projects completed in late 2023 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 decreased \$96,000 for the three months ended June 30, 2024, as compared to the corresponding period for 2023, as follows:

(In thousands)	2024	% Revenue	2023	% Revenue	Change
Administrative	\$ 1,714	—	\$ 1,695	—	\$ 19
Treatment	1,075	12.9	1,027	8.0	48
Services	666	11.8	829	6.8	(163)
Total	\$ 3,455	24.7	\$ 3,551	14.2	\$ (96)

Administrative SG&A expenses were slightly higher primarily due to overall higher general, salaries and payroll related and travel expenses totaling approximately \$44,000 which was offset by lower outside services expenses totaling approximately \$25,000. Treatment Segment SG&A expenses were higher primarily due to higher salaries and payroll related expenses by approximately \$102,000 which was offset by overall lower travel, outside services and general expenses totaling approximately \$54,000. The decrease in Services Segment SG&A was primarily due to lower outside services expenses by approximately \$22,000 and lower salaries and payroll related expenses of approximately \$148,000. The overall decrease was offset by higher travel expenses of \$7,000. Included in SG&A expenses is depreciation and amortization expense of \$25,000 and \$20,000 for the three months ended June 30, 2024, and 2023, respectively.

SG&A expenses decreased \$37,000 for the six months ended June 30, 2024, as compared to the corresponding period for 2023, as follows:

(In thousands)	2024	% Revenue	2023	% Revenue	Change
Administrative	\$ 3,401	—	\$ 3,365	—	\$ 36
Treatment	2,140	12.5	2,033	9.1	107
Services	1,458	13.8	1,638	7.2	(180)

Total	\$ 6,999	25.4	\$ 7,036	15.6	\$ (37)
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Administrative SG&A expenses were slightly higher primarily due to overall higher general, salaries and payroll related and travel expenses totaling approximately \$55,000 which was offset by lower outside services expenses totaling approximately \$19,000. Treatment Segment SG&A expenses were higher primarily due to higher salaries and payroll related expenses by approximately \$193,000 which was offset by overall lower travel, outside services and general expenses totaling approximately \$86,000. The decrease in Services Segment SG&A was primarily due to lower outside services expenses of approximately \$46,000 and lower salaries and payroll related expenses of approximately \$138,000. The overall decrease was offset by slightly higher travel expenses of \$4,000. Included in SG&A expenses is depreciation and amortization expense of \$52,000 and \$41,000 for the six months ended June 30, 2024, and 2023, respectively.

R&D

R&D expenses increased by \$152,000 and \$349,000 for the three and six months ended June 30, 2024, respectively, as compared to the corresponding period of 2023 primarily due to expenses incurred in connection with our new PFAS technology.

Interest Income

Interest income increased by approximately \$41,000 and \$89,000 for the three and six months ended June 30, 2024, respectively, as compared to the corresponding period of 2023 primarily due to higher interest income earned from our finite risk sinking fund from higher interest rates that took effect starting in April 2023. Additionally, the increase in interest income resulted from interest income earned from our money market deposit account ("MMDA") 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 \$62,000 and \$125,000 for the three and six months ended June 30, 2024, respectively, 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 an income tax benefit of \$1,161,000 and income tax expense of \$432,000 for continuing operations for the three months ended June 30, 2024, and the corresponding period of 2023, respectively, and income tax benefit of \$2,117,000 and income tax expense of \$228,000 for continuing operations for the six months ended June 30, 2024, and the corresponding period of 2023, respectively. Our effective tax rates were approximately 23.5% and 45.4% for the three months ended June 30, 2024, and the corresponding period of 2023, respectively, and 22.6% and 53.0% for the six months ended June 30, 2024, and the corresponding period of 2023, respectively. Our effective tax rates for the three and six months periods ended June 30, 2024, and the corresponding periods of 2023 were impacted by non-deductible expenses and state taxes.

Liquidity and Capital Resources

Our cash flow requirements during the six months ended June 30, 2024, were primarily financed by our operations and Liquidity (defined as borrowing availability under the revolving credit plus cash in our MMDA maintained with our lender) under our Credit Facility. Our cash included net proceeds received from the sale of 2,051,282 shares of our Common Stock to certain institutional and retail investors in May 2024 (see "Financing Activities" below for a discussion of this direct offering, including the planned usage of the proceeds). 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 and Liquidity under our Credit Facility. 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. At June 30, 2024, we had no outstanding borrowing under our revolving credit and our Liquidity under our Credit Facility was approximately \$19,466,000. We believe that our cash flows from operations and our Liquidity under our Credit Facility should be sufficient to fund our operations for the next twelve months.

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

(In thousands)	
Cash used in operating activities of continuing operations	\$ (6,072)
Cash used in operating activities of discontinued operations	(245)
Cash used in investing activities of continuing operations	(840)
Cash used in investing activities of discontinued operations	(49)
Cash provided by financing activities of continuing operations	18,127
Effect of exchange rate changes in cash	(1)
Increase in cash and finite risk sinking fund (restricted cash)	\$ 10,920

As of June 30, 2024, we were in a positive cash position with no revolving credit balance. As of June 30, 2024, we had cash on hand of approximately \$18,122,000, which included net proceeds received from the sale of our Common Stock in May 2024 as discussed above.

Operating Activities

Accounts receivable, net of credit losses, totaled \$6,423,000 as of June 30, 2024, a decrease of \$3,299,000 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 was also reduced by the collection in May 2024 of outstanding accounts receivable for work performed for a certain Canadian project for which a settlement agreement had previously been reached, with collection subject to meeting certain conditions/terms precedent (see "Perma-Fix Canada Inc. ("PF Canada")" below for a discussion on the collection of the receivables).

Accounts payable totaled \$9,111,000 as of June 30, 2024, a decrease of \$471,000 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, our 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.

Accrued expenses totaled \$4,207,000 as of June 30, 2024, a decrease of \$2,353,000 from the December 31, 2023, balance of \$6,560,000. The decrease was attributed to payments of bonus and incentives earned by our employees for fiscal year 2023 which included payments made under our 2023 Management Incentive Plans totaling approximately \$750,000. The decrease was also due to monthly premium payments on our general insurance policies.

We had working capital of \$12,783,000 (which included working capital of our discontinued operations) as of June 30, 2024, as compared to working capital of \$4,613,000 as of December 31, 2023. The increase in our working capital was primarily due to the increase in our cash from the sale of our Common Stock (see "Financing Activities" below for a discussion of this direct offering, including the planned usage of the proceeds).

Investing Activities

For the six months ended June 30, 2024, our purchases of capital equipment totaled approximately \$885,000, 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, proceeds from the equity raise completed in May 2024, 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.

On July 24, 2024, the Company purchased the property which its EWOC facility operates on pursuant to a Purchase and Sales Agreement for a purchase price of \$425,000. In connection with this transaction, we paid \$63,750 in cash and financed the remaining \$361,250 of the purchase price with a bank ("see Financing Activities" below for a discussion of the Note and its terms).

Financing Activities

We entered into a Second Amended and Restated Revolving Credit, Term Loan and Security Agreement, dated May 8, 2020, which has since been amended from time to time, with PNC National Association ("PNC" and "lender"), acting as agent and lender (the "Loan Agreement"). The Loan Agreement provides us with the following credit facility with a maturity date of May 15, 2027 (the "Credit Facility"): (a) up to \$12,500,000 revolving credit ("revolving credit"), which borrowing capacity is subject to eligible receivables (as defined) and reduced by outstanding standby letters of credit (\$3,950,000 as of June 30, 2024) and borrowing reductions that our lender may impose from time to time (\$750,000 as of June 30, 2024); (b) a term loan ("Term Loan 1") of approximately \$1,742,000, requiring monthly installments of \$35,547 (Term Loan 1 was paid off by us in June 2024); (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 with our 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 of \$2,250,000 in Liquidity under our Credit Facility through June 29, 2024, (which was met by us) and a minimum of daily \$3,000,000 in liquidity 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 (which we were not able to achieve as of June 30, 2024), the maintenance of a daily minimum Liquidity 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 which is being amortized over the remaining term of the Loan Agreement as interest expense-financing fees.

Pursuant to our Loan Agreement, payments of annual interest rates are as follows: (i) interest due on the revolving credit is at prime (8.50% at June 30, 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 was/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 in the event we pay off our obligations to our lender on or before July 31, 2024, and 0.5% of the total financing if we pay off our obligations to our lender 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 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 and second quarters of 2024 pursuant to the amendment dated May 8, 2024, to our Loan Agreement as discussed above. We met all of our other financial covenant requirements in the first and second quarters of 2024. We expect to meet our quarterly financial covenant requirements for the next twelve months.

On May 21, 2024, we entered into a Securities Purchase Agreement (the "Securities Purchase Agreement") with certain institutional and retail investors (the "Purchasers"), pursuant to which we sold and issued, in a registered direct offering, an aggregate of 2,051,282 shares of the Company's Common Stock, at a negotiated purchase price per share of \$9.75 (the "Shares"), for aggregate gross proceeds to us of approximately \$20,000,000, before deducting fees payable to the placement agents and other estimated offering expenses payable by the Company (the "Offering"). The net proceeds from the Offering is to fund (i) continued R&D and business development relating to the Company's patent-pending process for the destruction of PFAS, as well as the cost of installing at least one commercial treatment unit; (ii) ongoing facility capital expenditures and maintenance costs; and (iii) general corporate and working capital purposes.

The Shares were offered and sold by us pursuant to the our "shelf" registration statement on Form S-3 and prospectus supplement relating thereto.

Craig-Hallum Capital Group LLC ("Craig-Hallum") and Wellington Shields & Co. LLC ("Wellington Shields") (Wellington Shields and Craig-Hallum together are known as the "Placement Agents") served as the exclusive placement agents in connection with the Offering. We paid the Placement Agents a total

cash fee of 6.00% of the aggregate gross proceeds in the Offering, which totaled approximately \$1,200,000. We also reimbursed the Placement Agents certain expenses in connection with the Offering in an aggregate amount of approximately \$90,000. As additional compensation to the Placement Agents in connection with the Offering, we also issued to the Placement Agents and two (2) of their members designees, warrants (the "Placement Agents' Warrants") to purchase an aggregate of 61,538 shares of Common Stock (the "Warrant Shares"), with the aggregate number of Warrant Shares that may be acquired under the Placement Agents' Warrants equal to 3.0% of the number of Shares sold in the registered direct offering, at an exercise price per share equal to \$12.19, which is equal to approximately 125% of the price per share of the Shares sold in the Offering. Neither the Placement Agents' Warrants nor the Warrant Shares have been registered under the Registration Statement or otherwise. The Placement Agents' Warrants have a term of five years, are exercisable at any time and from time to time, in whole or in part, during the four and one-half (4 ½) year period commencing 180 days from the last date of closing of the Offering which was May 24, 2024, and are exercisable via "cashless exercise" in certain circumstances. The aggregate fair value of the "Placement Agents' Warrants" was determined to be approximately \$331,000 using the Black-Scholes pricing model with the following assumptions: 58.78% volatility, risk free interest rate of 4.53%, an expected life of five years and no dividend. The aggregate fair market value of the Placement Agent's Warrants was recorded as an offset to gross proceeds of the Offering and an increase to additional-paid-in capital.

After deducting costs incurred of approximately \$1,554,000 (exclusive of the aggregate fair market value of the Placement Agents' Warrants as discussed above) which were recorded as a deduction to equity in connection with the Offering, net cash proceeds to us totaled approximately \$18,446,000. We have paid approximately \$1,364,000 of the \$1,554,000 costs in connection with the Offering.

On July 24, 2024, We purchased the property which our EWOC facility operates on pursuant to a Purchase and Sales Agreement dated April 30, 2024, for a purchase price of \$425,000. The Company paid \$63,750 in cash and entered into a promissory note dated July 24, 2024, in an amount of \$361,250 with a bank (the "lender") for the remaining balance of the purchase price, with a maturity date in twenty years or July 24, 2044 (the "Note"). For the first five years starting August 24, 2024, monthly payments under the Note will consists of approximately \$3,100 which include an annual fixed interest rate of 8.10%. Monthly payments under the Note will then be adjusted at the end of years five, ten and fifteen, with interest calculated based on the weekly average 5 year US Treasury Securities Rate plus 3.0%. Under no circumstances will the variable interest rate on the Note be less than 4.0% per annum or more than (except in the case of default) the lesser of 20.5% per annum or the maximum rate allowed by applicable law. We agreed to pay the lender 3.0% of the total outstanding principal balance under the Note in the event we pays off our obligations during the first year of the Note. The prepayment penalty rate will be reduced by 1.0% at each subsequent annual anniversary of the Note. No prepayment penalty will apply in the event we pay off the Note on the fourth anniversary of the Note or thereafter. The property was previously accounted for under our operating leases.

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. PF Canada received a partial payment from CNL of the outstanding receivables during the first quarter of 2024. In May 2024, PF Canada received the remaining approximately \$1,612,000 in outstanding receivables from CNL. No outstanding receivables remain under the TOA from CNL as of June 30, 2024.

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 June 30, 2024, the total amount of standby letters of credit outstanding totaled approximately \$3,950,000 and the total amount of bonds outstanding totaled approximately \$21,976,000. We also provide closure and post-closure requirements through a financial assurance policy for certain of our Treatment Segment facilities through AIG. At June 30, 2024, the closure and post-closure requirements for these facilities were approximately \$23,379,000.

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.

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 partnership 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 directly as a prime contractor or indirectly for others as a subcontractor to government entities, representing approximately \$10,509,000 or 75.1% and \$20,652,000 or 74.8% of our total revenues generated during the three and six months ended June 30, 2024, respectively, as compared to 21,899,000 or 87.5% and \$39,146,000 or 86.7% of our total revenues generated during the three and six months ended June 30, 2023.

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 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.

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 June 30, 2024, we had total accrued environmental remediation liabilities of \$772,000, a decrease of approximately \$73,000 from the December 31, 2023 balance of \$845,000. The decrease represents payments for remediation projects. At June 30, 2024, \$6,000 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 June 30, 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, and our Form 10-Q for the quarter ended March 31, 2024.

Item 6. Exhibits

(a) Exhibits

- 4.1 [Eighth 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, as incorporated by reference from Exhibit 4.1 to the Company Form 10-Q for the first quarter 2024, filed on May 9, 2024.](#)
- 10.1 [Form of Securities Purchase Agreement, dated May 21, 2024, by and between the Company and the purchasers party thereto, as incorporated by reference from Exhibit 10.1 to the Company's Form 8-K filed on May 24, 2024](#)
- 10.2 [Placement Agency Agreement, dated as of May 21, 2024, by and between the Company and Craig-Hallum Capital Group LLC and Wellington Shields & Co., LLC, as incorporated by reference from Exhibit 10.2 to the Company's Form 8-K filed on May 24, 2024.](#)
- 10.3 [Form of Placement Agents' Warrants, as incorporated by reference from Exhibit 10.3 to the Company's Form 8-K filed on May 24, 2024.](#)
- 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 Inline XBRL Instance Document*
- 101.SCH Inline XBRL Taxonomy Extension Schema Document*
- 101.CAL Inline XBRL Taxonomy Extension Calculation Linkbase Document*
- 101.DEF Inline XBRL Taxonomy Extension Definition Linkbase Document*
- 101.LAB Inline XBRL Taxonomy Extension Labels Linkbase Document*
- 101.PRE Inline XBRL Taxonomy Extension Presentation Linkbase Document*
- 104 Cover Page Interactive Data File (formatted as an Inline XBRL document and included in Exhibit 101).

* 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.

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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: August 8, 2024

By: /s/ Mark Duff

Mark Duff
President and Chief (Principal) Executive Officer

Date: August 8, 2024

By: /s/ Ben Naccarato

Ben Naccarato
Chief (Principal) Financial Officer

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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: August 8, 2024

/s/ Mark Duff

Mark Duff
Chief Executive Officer, President
and Principal Executive Officer

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: August 8, 2024

/s/ Ben Naccarato

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

**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 June 30, 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: August 8, 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.

**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 June 30, 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: August 8, 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.
