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

Form 10-Q

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

For the quarterly period ended **March 31, 2023**

Or

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

For the transition period from _____ **to** _____

Commission File No. 1-11596

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

(Exact name of registrant as specified in its charter)

Delaware	**58-1954497**
(State or other jurisdiction of incorporation or organization)	*(IRS Employer Identification Number)*
8302 Dunwoody Place, Suite 250, Atlanta, GA	**30350**
(Address of principal executive offices)	*(Zip Code)*

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

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

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

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

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.
Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit and post such files).
Yes ☒ No ☐

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

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

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

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

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

Class	Outstanding at May 2, 2023
Common Stock, $.001 Par Value	13,419,165 shares

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

INDEX

			Page No.
PART I	**FINANCIAL INFORMATION**		
	Item 1.	Condensed Consolidated Financial Statements	3
		Condensed Consolidated Balance Sheets - March 31, 2023 and December 31, 2022	3
		Condensed Consolidated Statements of Operations - Three Months Ended March 31, 2023 and 2022	5
		Condensed Consolidated Statements of Comprehensive Loss - Three Months Ended March 31, 2023 and 2022	6
		Condensed Consolidated Statements of Stockholders' Equity - Three Months Ended March 31, 2023 and 2022	7
		Condensed Consolidated Statements of Cash Flows - Three Months Ended March 31, 2023 and 2022	8
		Notes to Condensed Consolidated Financial Statements	9
	Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	23
	Item 3.	Quantitative and Qualitative Disclosures About Market Risk	32
	Item 4.	Controls and Procedures	33
PART II	**OTHER INFORMATION**		
	Item 1.	Legal Proceedings	33
	Item 1A.	Risk Factors	33
	Item 6.	Exhibits	34

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)	March 31, 2023 (Unaudited)	December 31, 2022
ASSETS		
Current assets:		
Cash	$ 2,411	$ 1,866
Accounts receivable, net of allowance for credit losses of $7 and $57, respectively	10,881	9,364
Unbilled receivables	6,701	6,062
Inventories	1,104	814
Prepaid and other assets	3,800	5,405
Current assets related to discontinued operations	19	15
Total current assets	24,916	23,526
Property and equipment:		
Buildings and land	24,045	24,021
Equipment	21,704	21,242
Vehicles	442	442
Leasehold improvements	23	23
Office furniture and equipment	1,133	1,299
Construction-in-progress	1,016	727
Total property and equipment	48,363	47,754
Less accumulated depreciation	(29,299)	(28,797)
Net property and equipment	19,064	18,957
Property and equipment related to discontinued operations	81	81
Operating lease right-of-use assets	1,852	1,971
Intangibles and other long term assets:		
Permits	9,615	9,610
Other intangible assets - net	567	629
Finite risk sinking fund (restricted cash)	11,637	11,570
Deferred tax assets	4,350	4,116
Other assets	421	438
Total assets	$ 72,503	$ 70,898

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)	March 31, 2023 (Unaudited)	December 31, 2022
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 11,812	$ 10,325
Accrued expenses	4,725	4,593
Disposal/transportation accrual	1,130	887
Deferred revenue	5,003	4,813
Accrued closure costs - current	610	682
Current portion of long-term debt	446	476
Current portion of operating lease liabilities	401	416
Current portion of finance lease liabilities	161	154
Current liabilities related to discontinued operations	289	362
Total current liabilities	24,577	22,708
Accrued closure costs	7,387	7,284
Long-term debt, less current portion	443	563
Long-term operating lease liabilities, less current portion	1,493	1,584
Long-term finance lease liabilities, less current portion	320	318
Long-term liabilities related to discontinued operations	911	908
Total long-term liabilities	10,554	10,657
Total liabilities	35,131	33,365
Commitments and Contingencies (Note 9)		
Stockholders' Equity:		
Preferred Stock, $.001 par value; 2,000,000 shares authorized, no shares issued and outstanding	—	—
Common Stock, $.001 par value; 30,000,000 shares authorized; 13,397,436 and 13,332,398 shares issued, respectively; 13,389,794 and 13,324,756 shares outstanding, respectively	13	13
Additional paid-in capital	115,452	115,209
Accumulated deficit	(77,847)	(77,436)
Accumulated other comprehensive loss	(158)	(165)
Less Common Stock in treasury, at cost; 7,642 shares	(88)	(88)
Total stockholders' equity	37,372	37,533
Total liabilities and stockholders' equity	$ 72,503	$ 70,898

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

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

(Amounts in Thousands, Except for Per Share Amounts)	Three Months Ended March 31, 2023	2022
Revenues	$ 20,107	$ 15,915
Cost of goods sold	17,098	14,279
Gross profit	3,009	1,636
Selling, general and administrative expenses	3,486	3,422
Research and development	99	96
Loss on disposal of property and equipment	—	1
Loss from operations	(576)	(1,883)
Other income (expense):		
Interest income	127	11
Interest expense	(53)	(35)
Interest expense-financing fees	(20)	(13)
Other	—	(2)
Loss from continuing operations before taxes	(522)	(1,922)
Income tax benefit	(204)	(673)
Loss from continuing operations, net of taxes	(318)	(1,249)
Loss from discontinued operations (net of taxes) (Note 10)	(93)	(94)
Net loss	$ (411)	$ (1,343)
Net loss per common share - basic and diluted:		
Continuing operations	$ (.02)	$ (.09)
Discontinued operations	(.01)	(.01)
Net loss per common share	$ (.03)	$ (.10)
Number of common shares used in computing net loss per share:		
Basic	13,358	13,234
Diluted	13,358	13,234

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

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

(Amounts in Thousands)	Three Months Ended March 31, 2023	2022
Net loss	$ (411)	$ (1,343)
Other comprehensive income:		
Foreign currency translation gain	7	26
Total other comprehensive income	7	26
Comprehensive loss	$ (404)	(1,317)

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

PERMA-FIX ENVIRONMENTAL SERVICES, INC
Condensed Consolidated Statement of Stockholders' Equity
(Unaudited)
(Amounts in thousands, except for share amounts)

	Common Stock		Additional Paid-In	Common Stock Held In	Accumulated Other Comprehensive	Accumulated	Total Stockholders'
	Shares	Amount	Capital	Treasury	Loss	Deficit	Equity
Balance at December 31, 2022	13,332,398	$ 13	$ 115,209	$ (88)	$ (165)	$ (77,436)	$ 37,533
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	13,397,436	$ 13	$ 115,452	$ (88)	$ (158)	$ (77,847)	$ 37,372
Balance at December 31, 2021	13,222,552	$ 13	$ 114,307	$ (88)	$ (28)	$ (73,620)	$ 40,584
Net loss	—	—	—	—	—	(1,343)	(1,343)
Foreign currency translation	—	—	—	—	26	—	26
Issuance of Common Stock for services	19,520	—	123	—	—	—	123
Stock-Based Compensation	—	—	102	—	—	—	102
Balance at March 31, 2022	13,242,072	$ 13	$ 114,532	$ (88)	$ (2)	$ (74,963)	$ 39,492

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

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

(Amounts in Thousands)	Three Months Ended March 31, 2023	2022
Cash flows from operating activities:		
Net loss	$ (411)	$ (1,343)
Less: loss from discontinued operations, net of taxes (Note 10)	(93)	(94)
Loss from continuing operations, net of taxes	(318)	(1,249)
Adjustments to reconcile loss from continuing operations to cash provided by operating activities :		
Depreciation and amortization	747	456
Amortization of debt issuance costs	20	13
Deferred tax benefit	(204)	(673)
Recovery of credit losses on accounts receivable	(6)	(55)
Loss on disposal of plant, property, and equipment	—	1
Issuance of common stock for services	118	123
Stock-based compensation	118	102
Changes in operating assets and liabilities of continuing operations:		
Accounts receivable	(1,511)	1,105
Unbilled receivables	(639)	3,720
Prepaid expenses, inventories and other assets	1,876	1,097
Accounts payable, accrued expenses and unearned revenue	1,561	(4,492)
Cash provided by continuing operations	1,762	148
Cash used in discontinued operations	(198)	(142)
Cash provided by operating activities	1,564	6
Cash flows from investing activities:		
Purchases of property and equipment	(748)	(345)
Proceeds from sale of plant, property, and equipment	—	24
Cash used in investing activities of continuing operations	(748)	(321)
Cash flows from financing activities:		
Repayments of revolving credit borrowings	(20,257)	(17,494)
Borrowing on revolving credit	20,257	17,494
Proceeds from issuance of Common Stock upon exercise of options	7	—
Principal repayments of finance lease liabilities	(41)	(58)
Principal repayments of long term debt	(137)	(110)
Payment of debt issuance costs	(33)	(21)
Cash used in financing activities	(204)	(189)
Increase (decrease) in cash and finite risk sinking fund (restricted cash)	612	(504)
Cash and finite risk sinking fund (restricted cash) at beginning of period	13,436	15,911
Cash and finite risk sinking fund (restricted cash) at end of period	$ 14,048	$ 15,407
Supplemental disclosure:		
Interest paid	$ 55	$ 34
Income taxes paid	—	6
Non-cash investing and financing activities:		
Equipment purchase subject to finance lease	50	114

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

Reference is made herein to the notes to consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2022.

1. Basis of Presentation

The condensed consolidated financial statements included herein have been prepared by the Company (which may be referred to as we, us or our), without an audit, pursuant to the rules and regulations of the Securities and Exchange Commission ("the Commission"). Certain information and note disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") have been condensed or omitted pursuant to such rules and regulations, although the Company believes the disclosures which are made are adequate to make the information presented not misleading. Further, the condensed consolidated financial statements reflect, in the opinion of management, all adjustments (which include only normal recurring adjustments) necessary to present fairly the financial position and results of operations as of and for the periods indicated. The results of operations for the three months ended March 31, 2023 are not necessarily indicative of results to be expected for the fiscal year ending December 31, 2023.

The Company suggests that these condensed consolidated financial statements be read in conjunction with the consolidated financial statements and the notes thereto included in the Company's Annual Report on Form 10-K for the year ended December 31, 2022.

The condensed consolidated financial statements include the accounts of our wholly-owned subsidiaries. The Company's continuing operations also consisted of Perma-Fix ERRG, a variable interest entity ("VIE") for which we were the primary beneficiary. During the fourth quarter of 2022, project work under the JV was completed.

2. Summary of Significant Accounting Policies

Our accounting policies are as set forth in the notes to the December 31, 2022 consolidated financial statements referred to above.

Recently Issued Accounting Standards – Not Yet Adopted

In August 2020, the FASB issued ASU No. 2020-06, "Debt – Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging – Contracts in Entity's Own Equity." ASU 2020-06 simplifies the accounting for convertible instruments by removing major separation models and removing certain settlement condition qualifiers for the derivatives scope exception for contracts in an entity's own equity, and simplifies the related diluted net income per share calculation for both Subtopics. ASU 2020-06 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2023, for the Company as a smaller reporting company. Early adoption is permitted, but no earlier than fiscal years beginning after December 15, 2020, including interim periods within those fiscal years. The Company is currently evaluating the impact of this ASU on its financial statements and 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 March 31, 2023			Three Months Ended March 31, 2022		
	Treatment	Services	Total	Treatment	Services	Total
Fixed price	$ 9,594	$ 8,647	$ 18,241	$ 7,479	$ 5,761	$ 13,240
Time and materials	—	1,866	1,866	—	2,675	2,675
Total	$ 9,594	$ 10,513	$ 20,107	$ 7,479	$ 8,436	$ 15,915

Revenue by generator
(In thousands)

	Three Months Ended March 31, 2023			Three Months Ended March 31, 2022		
	Treatment	Services	Total	Treatment	Services	Total
Domestic government	$ 7,257	$ 9,718	$ 16,975	$ 5,815	$ 8,245	$ 14,060
Domestic commercial	2,206	597	2,803	1,436	162	1,598
Foreign government	95	177	272	92	6	98
Foreign commercial	36	21	57	136	23	159
Total	$ 9,594	$ 10,513	$ 20,107	$ 7,479	$ 8,436	$ 15,915

Contract Balances

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

(In thousands)	March 31, 2023	December 31, 2022	Year-to-date Change ($)	Year-to-date Change (%)
Contract assets				
Unbilled receivables - current	$ 6,701	$ 6,062	$ 639	10.5%
Contract liabilities				
Deferred revenue	$ 5,003	$ 4,813	$ 190	3.9%

During the three months ended March 31, 2023 and 2022, the Company recognized revenue of $3,494,000 and $3,521,000, 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.

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. Finance leases consist primarily of processing and transport equipment used by our facilities' operations.

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

	Three Months Ended March 31,	
	2023	2022
Operating Lease:		
Lease cost	$ 156	$ 157
Finance Leases:		
Amortization of ROU assets	38	47
Interst on lease liablity	6	11
	44	58
Short-term lease rent expense	—	3
Total lease cost	$ 200	$ 218

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

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

The weighted average remaining lease term and the weighted average discount rate for operating and finance leases at March 31, 2022 were:

	Operating Leases	Finance Leases
Weighted average remaining lease terms (years)	6.7	4.0
Weighted average discount rate	7.6%	6.1%

The following table reconciles the undiscounted cash flows for the operating and finance leases at March 31, 2023 to the operating and finance lease liabilities recorded on the balance sheet (in thousands):

	Operating Leases	Finance Leases
2023	$ 412	$ 138
2024	416	182
2025	324	160
2026	301	30
2027	286	12
2028 and thereafter	656	2
Total undiscounted lease payments	2,395	524
Less: Imputed interest	(501)	(43)
Present value of lease payments	$ 1,894	$ 481
Current portion of operating lease obligations	$ 401	$ —
Long-term operating lease obligations, less current portion	$ 1,493	$ —
Current portion of finance lease obligations	$ —	$ 161
Long-term finance lease obligations, less current portion	$ —	$ 320

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

	Three Months Ended March 31,	
	2023	2022
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flow from operating leases	$ 144	$ 143
Operating cash flow from finance leases	$ 6	$ 11
Financing cash flow from finance leases	$ 41	$ 58
ROU assets obtained in exchange for lease obligations for:		
Finance liabilities	$ 50	$ 147

5. Intangible Assets

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

		March 31, 2023			December 31, 2022		
Other Intangibles (amount in thousands)	Weighted Average Amortization Period (Years)	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Patent	8.3	$ 697	$ (377)	$ 320	$ 711	$ (374)	$ 337
Software	3	647	(484)	163	640	(468)	172
Customer relationships	10	3,370	(3,286)	84	3,370	(3,250)	120
Total		$ 4,714	$ (4,147)	$ 567	$ 4,721	$ (4,092)	$ 629

The intangible assets noted above are amortized on a straight-line basis over their useful lives with the exception of customer relationships which are being amortized using an accelerated method.

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

Year	Amount (In thousands)
2023 (Remaining)	$ 140
2024	62
2025	26
2026	25
2027	22

Amortization expenses relating to the definite-lived intangible assets as discussed above were $55,000 and $56,000 for the three months ended March 31, 2023 and 2022, respectively.

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

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

On January 19, 2023, the Company granted ISOs to certain employees for the purchase, under the Company's 2017 Stock Option Plan (the "2017 Plan"), of up to an aggregate 295,000 shares of the Company's Common Stock. The total ISOs granted included an ISO for each of the Company's executive officers for the purchase set forth in his respective ISO Agreement, as follows: 70,000 shares for the Chief Executive Officer ("CEO"); 40,000 shares for the Chief Financial Officer ("CFO"); 30,000 shares for the Executive Vice President ("EVP") of Strategic Initiatives; 30,000 shares for the EVP of Waste Treatment Operations; and 30,000 shares for the EVP of Nuclear and Technical Services. Each of the ISOs granted has a contractual term of six years with one-fifth yearly vesting over a five-year period. The exercise price of the ISO is $3.95 per share, which was equal to the fair market value of the Company's Common Stock on the date of grant.

The Company granted a NQSO to Robert Ferguson on July 27, 2017 from the Company's 2017 Plan for the purchase of up to 100,000 shares of the Company's Common Stock ("Ferguson Stock Option") in connection with his work as a consultant to the Company's Test Bed Initiative ("TBI") at our Perma-Fix of Northwest Richland, Inc. facility at an exercise price of $3.65 per share, which was the fair market value of the Company's Common Stock on the date of grant. The term of the Ferguson Stock Option is seven years from the grant date. The vesting of the Ferguson Stock Option is subject to the achievement of three separate milestones by certain dates. The first milestone was met and the 10,000 shares under the first milestone were issued to Robert Ferguson in May 2018. The Company had previously entered into amendments whereby the vesting dates for the second and third milestones for the purchase of up to 30,000 and 60,000 shares of the Company's Common Stock were extended to December 31, 2022 and December 31, 2023, respectively. The 30,000 shares under the second milestone failed to vest by December 31, 2022 and therefore were forfeited. The Company has not recognized compensation costs (fair value of approximately $502,000 at March 31, 2023) for the remaining 60,000 Ferguson Stock Option under the remaining final milestone since achievement of the performance obligation under the remaining final milestone is uncertain at December 31, 2023. Upon Mr. Ferguson's death, the remaining Ferguson Stock Option is now held by Mr. Ferguson's personal representative and/or beneficiary.

The following table summarizes stock-based compensation recognized for the three months ended March 31, 2023 and 2022 for our employee and director stock options.

Stock Options	Three Months Ended March 31,	
	2023	2022
Employee Stock Options	$ 86,000	$ 86,000
Director Stock Options	32,000	16,000
Total	$ 118,000	$ 102,000

At March 31, 2023, the Company has approximately $1,769,000 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 3.8 years.

The summary of the Company's total Stock Option Plans as of March 31, 2023 and March 31, 2022, 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 [2]
Options outstanding January 1, 2023	1,018,400	$ 5.02		
Granted	295,000	$ 3.95		
Exercised	(44,400)	$ 3.56		$ 370,196
Forfeited/expired	(4,500)	$ 3.90		
Options outstanding end of period [1]	1,264,500	$ 4.83	4.2	$ 8,791,279
Options exercisable at March 31, 2023[1]	499,500	$ 4.30	2.3	$ 6,047,029

	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value [2]
Options outstanding January 1, 2022	1,019,400	$ 4.91		-
Granted	—	—		
Exercised	—	—		$ —
Forfeited/expired	—	—		
Options outstanding end of period [1]	1,019,400	$ 4.91	3.8	$ 1,150,167
Options exercisable at March 31, 2022[1]	455,900	$ 3.92	2.5	$ 779,362

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

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

During the three months ended March 31, 2023, the Company issued a total of 33,319 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 $120,000 in compensation expenses (included in selling, general and administration ("SG&A") expenses) in connection with the issuance of shares of its Common Stock to outside directors.

During the three months ended March 31, 2023, the Company issued an aggregate 29,319 shares of its Common Stock from cashless exercises of options for the purchase of 42,000 shares of the Company's Common Stock at $3.60 per share. Additionally, the Company issued 2,400 shares of its Common Stock from the exercise of an option for the purchase of 2,400 shares of the Company's Common Stock at $2.785 per share resulting in proceeds of approximately $6,700.

In connection with a $2,500,000 loan that the Company entered into with Mr. Robert Ferguson (the "Ferguson Loan") on April 1, 2019, the Company issued a warrant to Mr. Ferguson for the purchase of up to 60,000 shares of our Common Stock at an exercise price of $3.51 per share. The warrant expires on April 1, 2024 and remains outstanding at March 31, 2023. Upon Mr. Ferguson's death, the warrant is now held by Mr. Ferguson's personal representative and/or beneficiary. The Ferguson Loan was paid-in-full in December 2020.

7. Loss Per Share

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

	Three Months Ended (Unaudited) March 31,	
(Amounts in Thousands, Except for Per Share Amounts)	2023	2022
Loss per common share from continuing operations		
Loss from continuing operations, net of taxes	$ (318)	$ (1,249)
Basic and diluted loss per share	$ (.02)	$ (.09)
Loss per common share from discontinued operations, net of taxes		
Loss from discontinued operations, net of taxes	$ (93)	$ (94)
Basic and diluted loss per share	$ (.01)	$ (.01)
Net loss per common share		
Net loss	$ (411)	$ (1,343)
Basic and diluted loss per share	$ (.03)	$ (.10)
Weighted average shares outstanding:		
Basic weighted average shares outstanding	13,358	13,234
Add: dilutive effect of stock options	—	—
Add: dilutive effect of warrants	—	—
Diluted weighted average shares outstanding	13,358	13,234
Potential shares excluded from above weighted average share calculations due to their anti-dilutive effect include:		
Stock options	335	405
Warrant	—	—

8. Long Term Debt

Long-term debt consists of the following:

(Amounts in Thousands)	March 31, 2023	December 31, 2022
Revolving Credit facility dated May 8, 2020, borrowings based upon eligible accounts receivable, subject to monthly borrowing base calculation, balance due on May 15, 2024. Effective interest rate for first quarter of 2023 was 9.7% [1]	$ —	$ —
Term Loan dated May 8, 2020, payable in equal monthly installments of principal, balance due on May 15, 2024. Effective interest rate for first quarter of 2023 Effective interest rate for the first quarter of 2023 was 8.0% [1]	432[2]	552[2]
Capital Line dated May 4, 2021, payable in equal monthly installments of principal, balance due on May 15, 2024. Effective interest rate for first quarter of 2023 Effective interest rate for the first quarter of 2023 was 8.0% [1]	437	463
Notes Payable to 2023 and 2025, annual interest rate of 5.6% and 9.1%.	20	24
Total debt	889	1,039
Less current portion of long-term debt	446	476
Long-term debt	$ 443	$ 563

(1) Our revolving credit facility is collateralized by our accounts receivable, and our term loan and capital line are collateralized by our property, plant, and equipment.

(2) Net of debt issuance costs of ($101,000) and ($88,000) at March 31, 2023 and December 31, 2022, respectively.

Revolving Credit and Term Loan Agreement

The Company entered into a Second Amended and Restated Revolving Credit, Term Loan and Security Agreement, dated May 8, 2020 ("Loan Agreement"), with PNC National Association ("PNC"), acting as agent and lender. The Loan Agreement, as amended, provides the Company with the following credit facility with a maturity date of May 15, 2024: (a) up to $12,500,000 revolving credit ("revolving credit") (see a discussion of an amendment that the Company entered into with its lender on March 21, 2023, which reduced the maximum revolving credit to $12,500,000 from the previous amount of $18,000,000). The maximum that the Company can borrow under the revolving credit is based on a percentage of eligible receivables (as defined) at any one time reduced by outstanding standby letters of credit and borrowing reductions that the Company's lender may impose from time to time; (b) a term loan ("term loan") of approximately $1,742,000, requiring monthly installments of $35,547; and (c) a capital expenditure line ("capital loan") 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"). Only interest was payable on advances during the Borrowing Period. Amount advanced under the capital line at the end of the Borrowing Period totaled approximately $524,000 which requires monthly installments in principal of approximately $8,700 plus interest, starting June 1, 2022. At the maturity date of the Loan Agreement, as amended, any unpaid principal balance plus interest, if any, will become due.

On March 21, 2023, the Company entered into an amendment to its Loan Agreement, as amended, with its lender which provides, among other things, the following:

- removed the quarterly fixed charge coverage ratio ("FCCR") testing requirement for the fourth quarter of 2022 and removes the FCCR testing requirement the first quarter of 2023;
- reduced the maximum revolving credit line under the credit facility from $18,000,000 to $12,500,000;
- reinstates the quarterly FCCR testing requirement starting in the second quarter of 2023 using a trailing twelve-month period (with no change to the minimum 1.15:1 ratio requirement for each quarter); and
- requires maintenance of a minimum of $3,000,000 in borrowing availability under the revolving credit until the minimum FCCR requirement for the quarter ended June 30, 2023 has been met and certified to the lender.

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 amended, as interest expense-financing fees.

Pursuant to the Loan Agreement, as amended, payment of annual rate of interest due on the revolving credit is at prime (8.00% at March 31, 2023) plus 2% or Term 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 and payment of annual rate of interest due on the term loan and the capital loan is at prime plus 2.50% or Term SOFR Rate plus 3.50% plus an SOFR Adjustment applicable for an interest period selected by the Company. A 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.

After May 7, 2022, the Company may terminate its Loan Agreement, as amended upon 90 days' prior written notice upon payment in full of our obligations under the Loan Agreement, as amended, with no early termination fees.

At March 31, 2023, the borrowing availability under the Company's revolving credit was approximately $7,133,000 based on our eligible receivables and is net of approximately $3,016,000 in outstanding standby letters of credit. The Company's borrowing availability of $7,133,000 at March 31, 2023 included a requirement from our lender that we maintain a minimum of $3,000,000 in borrowing availability as discussed above.

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 the FCCR requirement in the first quarter of 2023 pursuant to the March 21, 2023 amendment as discussed above, otherwise, it met all of its other financial covenant requirements.

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

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

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

The majority of Tetra Tech's claims have been dismissed by the Court. Remaining claims include: (1) Intentional Interference with Contractual Relations; and (2) Inducing a Breach of Contract. The Company continues to believe it has no liability exposure to Tetra Tech.

Perma-Fix of 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. As of March 31, 2023, PF Canada has approximately $1,855,000 in unpaid receivables due from CNL as a result of work performed under the TOA. Additionally, CNL has approximately $1,061,000 in contractual holdback under the TOA that is payable to PF Canada. CNL also established a bond securing approximately $1,900,000 (CAD) to cover certain issues raised in connection with the TOA. Under the TOA, CNL may be entitled to set off certain costs and expenses incurred by CNL in connection with the termination of the TOA, including the bond as discussed above, against amounts owed to PF Canada for work performed by PF Canada or its subcontractors. PF Canada continues to be in discussions with CNL to finalize the amounts due to PF Canada under the TOA and continues to believe these amounts are due and payable to PF Canada.

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 $22,454,000 at March 31, 2023. At March 31, 2023 and December 31, 2022, 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 $11,637,000 and $11,570,000, respectively, which included interest earned of $2,166,000 and $2,099,000 on the finite risk sinking funds as of March 31, 2023 and December 31, 2022, respectively. Interest income for the three months ended March 31, 2023 and 2022 was approximately $67,000 and $11,000, respectively. If we so elect, AIG is obligated to pay us an amount equal to 100% of the finite risk sinking fund account balance in return for complete release of liability from both us and any applicable regulatory agency using this policy as an instrument to comply with financial assurance requirements.

Letter of Credits and Bonding Requirements

From time to time, the Company is required to post standby letters of credit and various bonds to support contractual obligations to customers and other obligations, including facility closures. At March 31, 2023, the total amount of standby letters of credit outstanding was approximately $3,016,000 and the total amount of bonds outstanding was approximately $27,321,000.

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 $93,000 (net of tax benefit of $30,000) and $94,000 (net of tax benefit of $63,000) for the three months ended March 31, 2023 and 2022. The losses were primarily due to costs incurred in the administration and continued monitoring of our discontinued operations. The Company's discontinued operations had no revenues for each of the periods noted above.

The following table presents the major class of assets of discontinued operations as of March 31, 2023 and December 31, 2022. No assets and liabilities were held for sale at each of the periods noted.

(Amounts in Thousands)	March 31, 2023	December 31, 2022
Current assets		
Other assets	$ 19	$ 15
Total current assets	19	15
Long-term assets		
Property, plant and equipment, net [1]	81	81
Total long-term assets	81	81
Total assets	$ 100	$ 96
Current liabilities		
Accounts payable	$ 39	$ 104
Accrued expenses and other liabilities	138	146
Environmental liabilities	112	112
Total current liabilities	289	362
Long-term liabilities		
Closure liabilities	162	159
Environmental liabilities	749	749
Total long-term liabilities	911	908
Total liabilities	$ 1,200	$ 1,270

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

11. Operating Segments

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

Our reporting segments are defined below:

TREATMENT SEGMENT, which includes:

- nuclear, low-level radioactive, mixed waste (containing both hazardous and low-level radioactive constituents), hazardous and non-hazardous waste treatment, processing and disposal services primarily through four uniquely licensed and permitted treatment and storage facilities; and
- R&D activities to identify, develop and implement innovative waste processing techniques for problematic waste streams.

SERVICES SEGMENT, which includes:

- Technical services, which include:
    - professional radiological measurement and site survey of large government and commercial installations using advanced methods, technology and engineering;
    - 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;
    - 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
    - on-site waste management services to commercial and governmental customers.

- Nuclear services, which include:
    - technology-based services including engineering, decontamination and decommissioning ("D&D"), specialty services and construction, logistics, transportation, processing and disposal;
    - 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 months ended March 31, 2023 and 2022 (in thousands):

Segment Reporting for the Quarter Ended March 31, 2023

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

Segment Reporting for the Quarter Ended March 31, 2022

	Treatment	Services	Segments Total	Corporate[1]	Consolidated Total
Revenue from external customers	$ 7,479	$ 8,436	$ 15,915	$ —	$ 15,915
Intercompany revenues	—	—	—	—	—
Gross profit	638	998	1,636	—	1,636
Research and development	65	14	79	17	96
Interest income	—	—	—	11	11
Interest expense	(14)	(1)	(15)	(20)	(35)
Interest expense-financing fees	—	—	—	(13)	(13)
Depreciation and amortization	371	71	442	14	456
Segment (loss) income before income taxes	(481)	285	(196)	(1,726)	(1,922)
Income tax benefit	(559)	(114)	(673)	—	(673)
Segment income (loss)	78	399	477	(1,726)	(1,249)
Expenditures for segment assets	296	49	345	—	345(2)

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

(2) Net of financed amount of $50,000 and $114,000 for the three months ended March 31, 2023 and 2022, respectively.

12. Income Taxes

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

The Company had income tax benefits of approximately $204,000 and $673,000 for continuing operations for the three months ended March 31, 2023 and 2022, respectively. The Company's effective tax rate was approximately 39.1% and 35.0% for the three months ended March 31, 2023 and the corresponding period of 2022, respectively. The Company's tax rates for the three months ended March 31, 2023 and 2022 were impacted by non-deductible expenses and state taxes.

13. Employee Retention Credit ("ERC")

The Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act"), which was enacted on March 27, 2020, provides an ERC for qualifying businesses keeping employees on their payroll during the COVID-19 pandemic. The ERC was subsequently amended by the Taxpayer Certainty and Disaster Tax Relief Act of 2020, the Consolidated Appropriation Act of 2021, and the American Rescue Plan Act of 2021, all of which amended and extended the ERC availability and guidelines under the CARES Act. Following these amendments, the Company determined that it was eligible for the ERC, and as a result of the foregoing legislations, was eligible to claim a refundable tax credit against the Company's share of certain payroll taxes equal to 70% of the qualified wages paid to employees between July 1, 2021 and September 30, 2021. Qualified wages were limited to $10,000 per employee per calendar quarter in 2021 for a maximum allowable ERC per employee of $7,000 per calendar quarter in 2021. For purposes of the amended ERC, an eligible employer is defined as having experienced a significant (20% or more) decline in gross receipts during one or more of the first three 2021 calendar quarters when compared to 2019.

During the third quarter of 2022, the Company determined it was eligible for the ERC and amended its third quarter 2021 employer payroll tax filings claiming a refund from the U.S. Treasury in the amount of approximately $1,975,000. As there is no authoritative guidance under U.S. GAAP on accounting for government assistance to for-profit business entities, the Company accounted for the ERC by analogy to International Accounting Standard ("IAS") 20, Accounting for Government Grants and Disclosure of Government Assistance. In accordance with IAS 20, management determined it had reasonable assurance for receipt of the ERC and recorded the expected refund as other income (within "Other income (expense)") on the Company's Condensed Consolidated Statements of Operations and other receivables (within "Prepaid and other assets") on the Company's Condensed Consolidated Balance Sheets. On March 30, 2023, the Company received the ERC refund of $1,975,000 including approximately $60,000 in interest (recorded within "Interest Income" on the Company's Condensed Consolidated Statements of Operations for the three months ended March 31, 2023), totaling approximately $2,035,000.

14. Executive Compensation

Management Incentive Plans ("MIPs")
On January 19, 2023, the Company's Board and the Compensation and Stock Option Committee (the "Compensation Committee") approved individual MIP for the calendar year 2023 for each of the Company's executive officers. Each MIP is effective January 1, 2023 and applicable for year 2023. Each MIP provides guidelines for the calculation of annual cash incentive-based compensation, subject to Compensation Committee oversight and modification. The performance compensation under each of the MIPs is based upon meeting certain of the Company's separate target objectives during 2023. Assuming each target objective is achieved under the same performance threshold range under each MIP, the total potential target performance compensation payable ranges from 25% to 150% of the 2023 base salary for the CEO ($93,717 to $562,305), 25% to 100% of the 2023 base salary for the CFO ($76,193 to $304,772), 25% to 100% of the 2023 base salary for the EVP of Strategic Initiatives ($63,495 to $253,980), 25% to 100% of the 2023 base salary for the EVP of Nuclear and Technical Services ($76,193 to $304,772) and 25% to 100% ($65,308 to $261,233) of the 2023 base salary for the EVP of Waste Treatment Operations.

15. Subsequent Events

Management evaluated events occurring subsequent to March 31, 2023 through May 10, 2023, 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.

Employment Agreements

On April 20, 2023, the Company's Board and the Compensation Committee approved and the Company entered into, an employment agreement with each of Mark Duff, CEO (the "CEO Employment Agreement"), Ben Naccarato, CFO (the "CFO Employment Agreement"), Dr. Louis Centofanti, EVP of Strategic Initiatives (the "EVP of Strategic Initiatives Employment Agreement"), Andrew Lombardo, EVP of Nuclear and Technical Services (the "EVP of Nuclear and Technical Services Employment Agreement"), and Richard Grondin, EVP of Waste Treatment Operations (the "EVP of Waste Treatment Operations Employment Agreement"), collectively with the CEO Employment Agreement, the CFO Employment Agreement, the EVP of Strategic Initiative Employment Agreement, the EVP of Nuclear and Technical Services Employment Agreement and the EVP of Waste Treatment Operations Employment Agreement, the "New Employment Agreements" and each individually the "New Employment Agreement." The Company had previously entered into an employment agreement dated July 20, 2020, with each of Mark Duff, Ben Naccarato, Dr. Louis Centofanti, Andrew Lombardo and Richard Grondin, with each of the five employment agreements due to expire on July 22, 2023. These five employment agreements dated July 22, 2020 were terminated effective April 20, 2023.

The New Employment Agreements, which are substantially identical, except for compensation, are effective April 20, 2023. Pursuant to the New Employment Agreements, each of these executive officers is provided an annual salary, which annual salary may be increased from time to time, but not reduced, as determined by the Compensation Committee. In addition, each of these executive officers is entitled to participate in the Company's broad-based benefit plans and certain performance compensation payable under separate MIP as approved by the Company's Compensation Committee and the Company's Board (see "Note 14 – Executive Compensation – Management Incentive Plans ("MIPs")" for a discussion of the individual 2023 MIPs approved for the Company's executive officers).

Each of the New Employment Agreements is effective for three years from April 20, 2023 (the "Initial Term") unless earlier terminated by the Company or by the executive officer. At the end of the Initial Term of each New Employment Agreement, each New Employment Agreement will automatically be extended for one additional year, unless at least six months prior to the expiration of the Initial Term, the Company or the executive officer provides written notice not to extend the terms of the New Employment Agreement.

Pursuant to the New Employment Agreements, if the executive officer's employment is terminated due to death, disability or for cause (as defined in the agreements), the Company will pay to the executive officer or to his estate an amount equal to the sum of any unpaid base salary and accrued unused vacation time through the date of termination and any benefits due to the executive officer under any employee benefit plan (the "Accrued Amounts") plus any performance compensation payable pursuant to the MIP with respect to the fiscal year immediately preceding the date of termination. In the event that an executive officer's employment is terminated due to death, the Company will also pay a lump-sum payment (the "Cash Medical Continuation Benefit") equal to eighteen times the monthly premium that would be required to be paid, pursuant to the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("COBRA") to continue group health coverage for the executive officer's eligible covered dependents in effect on the date of the executive officer's termination of employment, based on the premium for the first month of COBRA coverage. Such cash payment will be taxable and will be made regardless of whether the executive officer's eligible covered dependents elect COBRA continuation coverage.

If the executive officer terminates his employment for "good reason" (as defined in the agreements) or is terminated by the Company without cause (including any such termination for "good reason" or without cause within 24 months after a Change in Control (as defined in the agreements), the Company will pay the executive officer Accrued Amounts, (a) two years of full base salary, plus (b) (i) two times the performance compensation (under the executive officer's MIP) earned with respect to the fiscal year immediately preceding the date of termination provided the performance compensation earned with respect to the fiscal year immediately preceding the date of termination has not yet been paid, or (ii) if performance compensation earned with respect to the fiscal year immediately preceding the date of termination has already been paid to the executive officer, the executive officer will be paid an additional year of the performance compensation earned with respect to the fiscal year immediately preceding the date of termination, and (c) the Cash Medical Continuation Benefit. If the executive officer terminates his employment for a reason other than for good reason, the Company will pay to the executive officer an amount equal to the Accrued Amounts plus any performance compensation payable pursuant to the MIP applicable to such executive officer.

Additionally, in the event of a Change in Control (as defined in the agreements), all outstanding stock options to purchase the common stock held by the executive officer will immediately become exercisable in full commencing on the date of termination through the original term of the options. In the event of the death of an executive officer, all outstanding stock options to purchase common stock held by the executive officer will immediately become exercisable in full commencing on the date of death, with such options exercisable for the lesser of the original option term or twelve months from the date of the executive officer's death. In the event an executive officer terminates his employment for "good reason" (as defined in the agreements) or is terminated by the Company without cause, all outstanding stock options to purchase common stock held by the officer will immediately become exercisable in full commencing on the date of termination, with such options exercisable for the lesser of the original option term or within 60 days from the date of the executive officer's date of termination. Severance benefits payable with respect to a termination (other than Accrued Amounts) shall not be payable until the termination constitutes a "separation from service" (as defined under Treasury Regulation Section 1.409A-1(h)).

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 Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended (collectively, 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;
- reducing operating costs and non-essential expenditures;
- ability to meet loan agreement quarterly covenant requirements;
- cash flow requirements;
- maintain satisfactory margins;
- Canadian receivable;
- sufficient liquidity to fund operations for the next twelve months;
- future results of operations and liquidity;
- effect of macroeconomic concerns, such as inflation and higher interest rates, on our business;
- manner in which the applicable government will be required to spend funding to remediate various sites;
- finalization of partnership agreement with Springfields Fuels Limited;
- continued increases in operating costs;
- fund capital expenditures from cash from operations and/or financing;
- steady improvement in waste shipments and work under projects during balance of 2023;
- fund remediation expenditures for sites from funds generated internally;
- compliance with environmental regulations;
- potential effect of being a PRP;
- potential sites for violations of environmental laws and remediation of our facilities; and
- increase our sales price.

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;
- public not accepting our new technology;
- inability to develop new and existing technologies in the conduct of operations;
- inability to maintain and obtain closure and operating insurance requirements;
- inability to retain or renew certain required permits;
- discovery of additional contamination or expanded contamination at any of the sites or facilities leased or owned by us or our subsidiaries which would result in a material increase in remediation expenditures;
- delays at our third-party disposal site can extend collection of our receivables greater than twelve months;
- refusal of third-party disposal sites to accept our waste;
- changes in federal, state and local laws and regulations, especially environmental laws and regulations, or in interpretation of such;
- requirements to obtain permits for 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 requirement 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;
- 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;
- impact of COVID-19 and economic uncertainties;
- new governmental regulations; and
- risk factors and other factors set forth in “Special Note Regarding Forward-Looking Statements” contained in the Company’s 2022 Form 10-K and the “Forward-Looking Statements” contained in the Management’s Discussion and Analysis of Financial Condition and Results of Operations” (“MD&A”) of this first quarter 2023 10-Q.

Overview

Revenue increased by $4,192,000 or 26.3% to $20,107,000 for the three months ended March 31, 2023 from $15,915,000 for the corresponding period of 2022. We saw increases in both segments where Treatment Segment revenue increased by $2,115,000 to $9,594,000 or 28.3% from $7,479,000 and Services Segment revenue increased by $2,077,000 or 24.6% to $10,513,000 from $8,436,000. The increase in revenue in the Treatment Segment was primarily due to overall higher waste volume which was offset by lower averaged price waste due to revenue mix. The increase in revenue in the Services Segment was due to achievement of full operational status on certain projects which had been curtailed/delayed primarily in the early part of 2022 due, in part, from the lingering effects of the COVID-19 pandemic. As previously disclosed, the lingering effects of COVID-19 impacted our revenue in 2022 as work under projects and waste shipments continued to be delayed by certain customers into the first half of 2022. Additionally, in 2022, procurement and planning on behalf of our government clients continued to be delayed which did not ease until the second half of 2022. Total gross profit for the first quarter of 2023 increased $1,373,000 or 83.9% due to increased revenue generated in both segments. Selling, General, and Administrative ("SG&A") expenses increased $64,000 or 1.9% for the three months ended March 31, 2023 as compared to the corresponding period of 2022.

We expect to see continued steady improvements in waste receipts and increase in project work from existing contracts, contracts recently won, and bids submitted in both segments that are awaiting awards. We expect this positive trend to continue during the balance of 2023 as the lingering effects of the COVID-19 pandemic continue to subside.

In March 2023, we received the Employee Retention Credit ("ERC") of $1,975,000 that we applied for during the third quarter of 2022 as permitted under the CARES Act. In addition to the $1,975,000, we also received approximately $60,000 in interest (recorded within "Interest Income" on our Condensed Consolidated Statements of Operations).

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/or potential further impact from COVID-19. 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, and our governmental contracts/TOAs with the Canadian government authorities also allow the authorities to terminate the contract/task orders at any time for convenience. Work under all of our contracts/TOAs with Canadian government authorities has substantially been completed. A significant account receivable due to PF Canada is subject to continuing negotiations. See "Known Trends and Uncertainties – Perma-Fix Canada, Inc. ("PF Canada")" within this MD&A for additional discussion as to a terminated Canadian TOA. Significant reductions in the level of governmental funding or specifically mandated levels for different programs that are important to our business could have a material adverse impact on our business, financial position, results of operations, and cash flows.

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

Results of Operations

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

Summary – Three Months Ended March 31, 2023 and 2022

Consolidated (amounts in thousands)	Three Months Ended March 31, 2023	%	2022	%
Revenues	$ 20,107	100.0	$ 15,915	100.0
Cost of good sold	17,098	85.0	14,279	89.7
Gross profit	3,009	15.0	1,636	10.3
Selling, general and administrative	3,486	17.3	3,422	21.5
Research and development	99	.5	96	.6
Loss on disposal of property and equipment	—	—	1	—
Loss from operations	$ (576)	(2.8)	$ (1,883)	(11.8)
Interest income	127	.6	11	—
Interest expense	(53)	(.3)	(35)	(.2)
Interest expense-financing fees	(20)	(.1)	(13)	(.1)
Other	—	—	(2)	—
Loss from continuing operations before taxes	(522)	(2.6)	(1,922)	(12.1)
Income tax benefit	(204)	(1.0)	(673)	(4.3)
Loss from continuing operations	$ (318)	(1.6)	$ (1,249)	(7.8)

Revenues

Consolidated revenues increased $4,192,000 for the three months ended March 31, 2023, compared to the three months ended March 31, 2022, as follows:

(In thousands)	2023	% Revenue	2022	% Revenue	Change	% Change
Treatment						
Government waste	$ 6,642	33.0	$ 5,437	34.2	$ 1,205	22.2
Hazardous/non-hazardous [1]	1,511	7.5	1,001	6.3	510	50.9
Other nuclear waste	1,441	7.2	1,041	6.5	400	38.4
Total	9,594	47.7	7,479	47.0	2,115	28.3
Services						
Nuclear services	10,082	50.2	8,281	52.0	1,801	21.7
Technical services	431	2.1	155	1.0	276	178.1
Total	10,513	52.3	8,436	53.0	2,077	24.6
Total	$ 20,107	100.0	$ 15,915	100.0	$ 4,192	26.3

[1] Includes wastes generated by government clients of $710,000 and $470,000 for the three months ended March 31, 2023 and the corresponding period of 2022, respectively.

Treatment Segment revenue increased by $2,115,000 or 28.3% for the three months ended March 31, 2023 over the same period in 2022. The overall increase was primarily due to higher waste volume offset by lower averaged price waste from revenue mix. As previously disclosed, starting in the latter part of the second quarter of 2022, our Treatment Segment began to see steady improvements in waste receipts from certain customers who had previously delayed waste shipments due, in part, from the lingering effects of COVID-19 which continue to subside. Services Segment revenue increased by approximately $2,077,000 or 24.6%. The increase in revenue in the Services Segment was primarily due to achievement of full operational status on certain projects which had been curtailed/delayed in the early part of 2022 due, in part, from the lingering effects of the COVID-19 pandemic. Our Services Segment revenues are project based; as such, the scope, duration, and completion of each project vary. As a result, our Services Segment revenues are subject to differences relating to timing and project value. Revenue from both of our Segments were also positively impacted from contracts recently won as procurement and planning on behalf of our government clients continue to progress as the lingering effects of COVID-19 pandemic continue to subside.

Cost of Goods Sold

Cost of goods sold increased $2,819,000 for the quarter ended March 31, 2023, compared to the quarter ended March 31, 2022, as follows:

(In thousands)	2023	% Revenue	2022	% Revenue	Change
Treatment	$ 8,342	87.0	$ 6,841	91.5	$ 1,501
Services	8,756	83.3	7,438	88.2	1,318
Total	$ 17,098	85.0	$ 14,279	89.7	$ 2,819

Cost of goods sold for the Treatment Segment increased by approximately $1,501,000 or 21.9%. Treatment Segment's variable costs increased by approximately $816,000 primarily due to higher material and supplies, disposal, transportation, and lab costs. Treatment Segment's overall fixed costs were higher by approximately $685,000 resulting from the following: general expenses were higher by $266,000 primarily due to higher utility costs; depreciation expenses were higher by approximately $198,000 due to depreciation for asset retirement obligations in connection with our EWOC facility; regulatory expenses were higher by approximately $63,000; maintenance costs were higher by approximately $60,000; and salaries and payroll related expenses were higher by $98,000. Services Segment cost of goods sold increased $1,318,000 or 17.7% primarily due to higher revenue. The increase in cost of goods sold was primarily due to higher salaries/payroll related, outside services, and travel costs totaling approximately $1,193,000; higher material and supplies, lab and regulatory expenses totaling approximately $24,000; higher depreciation expense totaling approximately $89,000 from additional equipment; and slightly higher general expenses by approximately $12,000 in various categories. Included within cost of goods sold is depreciation and amortization expense of $726,000 and $439,000 for the three months ended March 31, 2023, and 2022, respectively.

Gross Profit

Gross profit for the quarter ended March 31, 2023 increased $1,373,000 over the corresponding period of 2022, as follows:

(In thousands)	2023	% Revenue	2022	% Revenue	Change
Treatment	$ 1,252	13.0	$ 638	8.5	$ 614
Nuclear Services					
Services	1,757	16.7	998	11.8	759
Total	$ 3,009	15.0	$ 1,636	10.3	$ 1,373

Treatment Segment gross profit increased by $614,000 or approximately 96.2% and gross margin increased to 13.0% from 8.5% primarily due to higher revenue from higher waste volume. Services Segment gross profit increased by $759,000 or 76.1% and gross margin increased to 16.7% from 11.8% primarily due to higher margin projects. Our overall Services Segment gross margin is impacted by our current projects which are competitively bid on and will therefore, have varying margin structures.

SG&A

SG&A expenses increased $64,000 for the three months ended March 31, 2023, as compared to the corresponding period for 2022, as follows:

(In thousands)	2023	% Revenue	2022	% Revenue	Change
Administrative	$ 1,670	—	$ 1,687	—	$ (17)
Treatment	1,006	10.5	1,040	13.9	(34)
Services	810	7.7	695	8.2	115
Total	$ 3,486	17.3	$ 3,422	21.5	$ 64

Administrative SG&A expenses were lower primarily due to lower outside services expenses by approximately $71,000 resulting from fewer consulting/audit/outside services matters. This overall lower expense was offset primarily by higher payroll related expenses. Treatment Segment SG&A expenses were lower primarily due to lower salaries and payroll related expenses by approximately $62,000 which was offset by overall higher general expenses in various categories. The increase in Services Segment SG&A was primarily due to the following: credit losses on accounts receivable were higher by approximately $44,000, as in the first quarter of 2022, our Services Segment collected on certain accounts that were previously deemed to be uncollectible; travel expenses were higher by approximately $10,000; outside services expense were slightly higher by approximately $6,000; and salaries and payroll related expenses were higher by approximately $55,000 due to more administrative support functions resulting from higher revenue. Included in SG&A expenses is depreciation and amortization expense of $21,000 and $17,000 for the three months ended March 31, 2023 and 2022, respectively.

Interest Income

Interest income increased by approximately $116,000 in the first quarter of 2023 as compared to the corresponding period of 2022 due to higher interest earned from our finite risk sinking fund and interest received in connection with the refund that we received in March 2023 from the ERC program under the CARES Act (see a discussion of this refund, along with interest in "Overview" within this Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A").

Interest Expense

Interest expense increased approximately $18,000 in the first quarter of 2023 as compared to the corresponding period of 2022 primarily due to higher interest rates on our term loan balance and revolver under our credit facility. Also, we incurred interest from advances made in May of 2022 from the capital line under our credit facility.

Income Taxes

We had income tax benefits of approximately $204,000 and $673,000 for continuing operations for the three months ended March 31, 2023 and 2022, respectively. Our effective tax rate was approximately 39.1% and 35.0% for the three months ended March 31, 2023 and the corresponding period of 2022, respectively. Our tax rates for the three months ended March 31, 2023 and 2022 were impacted by non-deductible expenses and state taxes.

Liquidity and Capital Resources

Our cash flow requirements during the three months ended March 31, 2023 were primarily financed by our operations, cash on hand (which included the ERC, along with interest, that we received in March 2023), and credit facility availability. Our cash flow requirements for the next twelve months will consist primarily of general working capital needs, scheduled principal payments on our debt obligations, remediation projects, and planned capital expenditures. We plan to fund these requirements from our operations, credit facility availability, and cash on hand. We are continually reviewing operating costs and reviewing the possibility of further reducing operating costs and non-essential expenditures to bring them in line with revenue levels, when necessary. At March 31, 2023, we had borrowing availability under our revolving credit facility of approximately $7,133,000 which was based on a percentage of eligible receivables and subject to certain reserves. Our borrowing availability of $7,133,000 at March 31, 2023 included a requirement from our lender that we maintain a minimum of $3,000,000 in borrowing availability under our revolving credit until the minimum fixed FCCR requirement for the quarter ended June 30, 2023 has been met and certified to our lender. Although we believe that our cash flows from operations, our available liquidity from our credit facility, and our cash on hand should be sufficient to fund our operations for the next twelve months, we continue to work toward improving our liquidity by either amending our existing lines of credit, obtaining new term loans or entering into equity transactions. There are no assurances that we will be successful in increasing our liquidity through these efforts.

The following table reflects the cash flow activities during the first three months of 2023:

(In thousands)		
Cash provided by operating activities of continuing operations	$	1,762
Cash used in operating activities of discontinued operations		(198)
Cash used in investing activities of continuing operations		(748)
Cash used in financing activities of continuing operations		(204)
Increase in cash and finite risk sinking fund (restricted cash)	$	612

At March 31, 2023, we were in a positive cash position with no revolving credit balance. At March 31, 2023, we had cash on hand of approximately $2,411,000.

Operating Activities

Accounts receivable, net of credit losses, totaled $10,881,000 at March 31, 2023, an increase of $1,517,000 from the December 31, 2022 balance of $9,364,000. The increase was attributed to increased revenue, timing of invoicing, and our accounts receivable collection. Our contracts with our customers are subject to various payment terms and conditions. Our accounts receivable at March 31, 2023 include invoices for work performed for a certain Canadian project that remain outstanding and subject to negotiations (See discussion under "Known Trends and Uncertainties – Perma-Fix Canada, Inc. ("PF Canada") for a discussion as to this certain account receivable.

Prepaid and other assets totaled $3,800,000 at March 31, 2023, a decrease of $1,605,000 from the December 31, 2022 balance of $5,405,000. The decrease was primarily due to the receipt of the ERC of $1,975,000 in March 2023 that we applied for during the third quarter of 2022.

Accounts payable, totaled $11,812,000 at March 31, 2023, an increase of $1,487,000 from the December 31, 2022 balance of $10,325,000. 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 all segments.

We had working capital of $339,000 (which included working capital of our discontinued operations) at March 31, 2023, as compared to working capital of $818,000 at December 31, 2022. The decrease in our working capital was primarily due to increases in our accounts payable and accruals which were mostly offset by increases in our accounts and unbilled receivables.

Investing Activities

For the three months ended March 31, 2023, our purchases of capital equipment totaled approximately $798,000, of which $50,000 was subject to financing, with the remaining funded from cash from operations and our credit facility. We have budgeted approximately $2,000,000 for 2023 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 and/or financing. The initiation and timing of projects are also determined by financing alternatives or funds available for such capital projects.

During March 2022, we signed a joint venture term sheet addressing plans to partner with Springfields Fuels Limited ("SFL"), an affiliate of Westinghouse Electric Company LLC, to develop and manage a nuclear waste-materials treatment facility (the "Facility") in the United Kingdom. The Facility is for the purpose of expanding the partners' waste treatment capabilities for the European nuclear market. It is expected that upon finalization of a partnership agreement, SFL will have an ownership interest of fifty-five (55) percent and our interest will be forty-five (45) percent. The finalization, form and capitalization of this unpopulated partnership is subject to numerous conditions, including but not limited to, winning a certain contract, completion and execution of a definitive agreement and facility design, granting of required regulatory, lender or permitting approvals and updated cost and profitability analysis based on current and forecast future economic conditions. Upon finalization of this venture, we will be required to make an investment in this venture. The amount of our investment, the period of which it is to be made and the method of funding are to be determined.

Financing Activities

We entered into a Second Amended and Restated Revolving Credit, Term Loan and Security Agreement, dated May 8, 2020 ("Loan Agreement"), with PNC National Association ("PNC"), acting as agent and lender. The Loan Agreement, as amended, provides us with the following credit facility with a maturity date of May 15, 2024: (a) up to $12,500,000 revolving credit ("revolving credit") (see a discussion of an amendment that we entered into with our lender on March 21, 2023 which reduced the maximum revolving credit to $12,500,000 from the previous amount of $18,000,000). The maximum that we can borrow under the revolving credit is based on a percentage of eligible receivables (as defined) at any one time reduced by outstanding standby letters of credit and borrowing reductions that our lender may impose from time to time; (b) a term loan ("term loan") of approximately $1,742,000, requiring monthly installments of $35,547; and (c) a capital expenditure line ("capital loan") 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"). Only interest was payable on advances during the Borrowing Period. Amount advanced under the capital line at the end of the Borrowing Period totaled approximately $524,000 which requires monthly installments in principal of approximately $8,700 plus interest, starting June 1, 2022. At March 31, 2023, balance on the capital line was approximately $437,000. At the maturity date of the Loan Agreement, as amended, any unpaid principal balance plus interest, if any, will become due.

On March 21, 2023, we entered into an amendment to our Loan Agreement, as amended, with our lender which provides, among other things, the following:

- removed the FCCR testing requirement for the fourth quarter of 2022 and removes the FCCR testing requirement the first quarter of 2023;
- reduced the maximum revolving credit line under the credit facility from $18,000,000 to $12,500,000;
- reinstates the quarterly FCCR testing requirement starting in the second quarter of 2023 using a trailing twelve-month period (with no change to the minimum 1.15:1 ratio requirement for each quarter); and
- requires maintenance of a minimum of $3,000,000 in borrowing availability under the revolving credit until the minimum FCCR requirement for the quarter ended June 30, 2023 has been met and certified to the lender.

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 amended, as interest expense-financing fees.

Pursuant to the Loan Agreement, as amended, payment of annual rate of interest due on the revolving credit is at prime (8.00% at March 31, 2023) plus 2% or Term 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 us and payment of annual rate of interest due on the term loan and the capital expenditure line is at prime plus 2.50% or Term SOFR Rate plus 3.50% plus an SOFR Adjustment applicable for an interest period selected by us. A 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.

After May 7, 2022, the Company may terminate its Loan Agreement, as amended, upon 90 days' prior written notice upon payment in full of our obligations under the Loan Agreement, as amended, with no early termination fees.

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 the FCCR requirement in the first quarter of 2023 pursuant to the March 21, 2023 amendment as discussed above, otherwise, we met all of our other financial covenant requirements. We expect to meet our quarterly financial covenant requirements for the next twelve months under our Loan Agreement, as amended.

Off Balance Sheet Arrangements

From time to time, we are required to post standby letters of credit and various bonds to support contractual obligations to customers and other obligations, including facility closures. At March 31, 2023, the total amount of standby letters of credit outstanding totaled approximately $3,016,000 and the total amount of bonds outstanding totaled approximately $27,321,000. We also provide closure and post-closure requirements through a financial assurance policy for certain of our Treatment Segment facilities through AIG. At March 31, 2023, the closure and post-closure requirements for these facilities were approximately $22,454,000.

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, 2022.

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. Our Treatment and Services Segments have significant relationships with the U.S governmental authorities through contracts entered into indirectly as subcontractors for others who are prime contractors or directly as the prime contractor to government authorities. We also had significant relationships with Canadian government authorities primarily through TOAs entered into with Canadian government authorities. Project work under all TOAs with Canadian government authorities has substantially been completed. 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. The contracts/TOAs that we are/were a party to with Canadian governmental authorities also generally provide that the government authorities may terminate the contracts/TOAs at any time for any reason for convenience. Our inability to continue under existing contracts that we have with the U.S government (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 (domestic and foreign (primarily Canadian)), either indirectly as a subcontractor or directly as a prime contractor to government entities, representing approximately $17,247,000 or 85.8% of our total revenue during the three months ended March 31, 2023, as compared to $14,158,000 or 89.0% of our total revenue during the corresponding period of 2022.

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 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. As of March 31, 2023, PF Canada has approximately $1,855,000 in unpaid receivables due from CNL as a result of work performed under the TOA. Additionally, CNL has approximately $1,061,000 in contractual holdback under the TOA that is payable to PF Canada. CNL also established a bond securing approximately $1,900,000 (CAD) to cover certain issues raised in connection with the TOA. Under the TOA, CNL may be entitled to set off certain costs and expenses incurred by CNL in connection with the termination of the TOA, including the bond as discussed above, against amounts owed to PF Canada for work performed by PF Canada or its subcontractors. PF Canada continues to be in discussions with CNL to finalize the amounts due to PF Canada under the TOA and continues to believe these amounts are due and payable to PF Canada.

Potential Partnership with Springfields Fuels Limited. As discussed above, we have signed a term sheet addressing plans to partner with Springfields Fuels Limited, an affiliate of Westinghouse Electric Company LLC, to develop and manage a nuclear waste-materials treatment facility in the United Kingdom. See "Liquidity and Capital Resources – Investing Activities" of this MD&A for a discussion of this transaction.

Inflation and Supply Chain. Our financial results have been negatively impacted from the effects of inflation, supply chain issues, labor shortage, and higher interest rates from the countries' macroeconomic concerns due, in part, from the impact of COVID-19. Continued increases in any of our operating costs, including utility, transportation, wage rates, and supply costs, may further increase our overall cost of goods sold or operating expenses. Additionally, as previously disclosed, labor shortages and supply chain issues had previously impacted production at certain of our facilities which impacted our financial results. We may attempt to increase our sales prices in order to maintain satisfactory margin from the effect of these factors is discussed above; however, competitive pressures in our industry may have the effect of inhibiting our ability to reflect these increased costs in the prices of our services that we provide to our customers and therefore reduce our profitability.

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. At March 31, 2023, we had total accrued environmental remediation liabilities of $861,000 with no change from the December 31, 2022 balance. At March 31, 2023, $112,000 of the total accrued environmental liabilities was recorded as current.

Item 3. Quantitative and Qualitative Disclosures about Market Risks

Not required for smaller reporting companies.

Item 4. Controls and Procedures

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

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our periodic reports filed with the Securities and Exchange Commission is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the Securities and Exchange Commission and that such information is accumulated and communicated to our management. As of the end of the period covered by this report, we carried out an evaluation with the participation of our Principal Executive Officer and Principal Financial Officer. Based on this recent assessment, our Principal Executive Officer and Principal Financial Officer have concluded that our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended) were effective as of March 31, 2023.

(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, 2022. 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, 2022.

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, 2022, except for the following under "Risks Relating to our Business Operations."

Climate change could have a negative impact to the Company's result of operations and financial condition.

Climate change may present both immediate and long-term risks to the Company and our customers and the risks may increase over time. Climate risks can arise from both physical risks (those risks related to the physical effects of climate change) and transition risks (risks related to governmental regulatory requirements, legal technology, market and reputational changes from a transition to a low carbon economy). Climate change could have a material, adverse effect on environmental companies like ours that are involved in the treatment, disposal and other services related to hazardous waste, radioactive waste and/or mixed (waste that contain both hazardous and radioactive) waste by changing or restricting how we perform our services or what services we can perform or taking action that materially increases our costs to do business in order to regulate or reduce climate change.

The collapse of certain U.S. banks and potentially other financial institutions could adversely affect our business, financial condition and results of operations.

Recent negative developments affecting the banking industry, and resulting media coverage, have eroded confidence in the banking system. Concerns regarding the financial systems could result in less favorable commercial financing terms, including higher interest rates, costs, tighter financial and operating covenants, and systemic limitations on access to credit and liquidity sources, thereby making it more difficult for us to acquire capital on acceptable terms, when needed. Additionally, recent developments affecting the banking industry have generated significant market volatility and consumer confidence which in turn, could result in reduced demands for our services which could negatively impact our business operations, financial condition, and results of operations.

Item 6. Exhibits

(a) **Exhibits**

3(ii)	Second Amended and Restated Bylaws of Perma-Fix Environmental Services, Inc., as amended effective April 20, 2023, as incorporated by reference from Exhibit 3(ii) to the Company's Form 8-K filed on April 26, 2023.
4.1	Sixth Amendment to Second Amended and Restated Revolving Credit, Term Loan and Security Agreement dated March 21, 2023, between Perma-Fix Environmental Services, Inc. and PNC Bank, National Association, as incorporated by reference from Exhibit 4.3 to the Company's 2022 Form 10-K filed on March 23, 2023.
10.1	2023 Incentive Compensation Plan for Chief Executive Officer, effective January 1, 2023, as incorporated by reference from Exhibit 99.1 to the Company's Form 8-K filed on January 23, 2023. CERTAIN INFORMATION WITHIN THIS EXHIBIT HAS BEEN EXCLUDED BECAUSE IT IS NOT MATERIAL AND WOULD LIKELY CAUSE COMPETITIVE HARM TO THE COMPANY IF PUBLICLY DISCLOSED.
10.2	2023 Incentive Compensation Plan for Chief Financial Officer, effective January 1, 2023, as incorporated by reference from Exhibit 99.2 to the Company's Form 8-K filed on January 23, 2023. CERTAIN INFORMATION WITHIN THIS EXHIBIT HAS BEEN EXCLUDED BECAUSE IT IS NOT MATERIAL AND WOULD LIKELY CAUSE COMPETITIVE HARM TO THE COMPANY IF PUBLICLY DISCLOSED.
10.3	2023 Incentive Compensation Plan for Executive Vice President of Strategic Initiatives, effective January 1, 2023, as incorporated by reference from Exhibit 99.3 to the Company's Form 8-K filed on January 23, 2023. CERTAIN INFORMATION WITHIN THIS EXHIBIT HAS BEEN EXCLUDED BECAUSE IT IS NOT MATERIAL AND WOULD LIKELY CAUSE COMPETITIVE HARM TO THE COMPANY IF PUBLICLY DISCLOSED.
10.4	2023 Incentive Compensation Plan for Executive Vice President of Nuclear and Technical Services, effective January 1, 2023, as incorporated by reference from Exhibit 99.4 to the Company's Form 8-K filed on January 23, 2023. CERTAIN INFORMATION WITHIN THIS EXHIBIT HAS BEEN EXCLUDED BECAUSE IT IS NOT MATERIAL AND WOULD LIKELY CAUSE COMPETITIVE HARM TO THE COMPANY IF PUBLICLY DISCLOSED.
10.5	2023 Incentive Compensation Plan for Executive Vice President of Waste Treatment Operations, effective January 1, 2023, as incorporated by reference from Exhibit 99.5 to the Company's Form 8-K filed on January 23, 23. CERTAIN INFORMATION WITHIN THIS EXHIBIT HAS BEEN EXCLUDED BECAUSE IT IS NOT MATERIAL AND WOULD LLIKELY CAUSE COMPETITIVE HARM TO THE COMPANY IF PUBLICLY DISCLOSED.
10.6	Incentive Stock Option Agreement between Perma-Fix Environmental Services, Inc. and Chief Executive Officer, dated January 19, 2023, as incorporated by reference from Exhibit 99.6 to the Company's Form 8-K filed on January 23, 2023.
10.7	Incentive Stock Option Agreement between Perma-Fix Environmental Services, Inc. and Chief Financial Officer, dated January 19, 2023, as incorporated by reference from Exhibit 99.7 to the Company's Form 8-K filed on January 23, 2023.
10.8	Incentive Stock Option Agreement between Perma-Fix Environmental Services, Inc. and EVP of Strategic Initiatives, dated January 19, 2023, as incorporated by reference from Exhibit 99.8 to the Company's Form 8-K filed on January 23, 2023.
10.9	Incentive Stock Option Agreement between Perma-Fix Environmental Services, Inc. and EVP of Nuclear and Technical Services, dated January 19, 2023, as incorporated by reference from Exhibit 99.9 to the Company's Form 8-K filed on January 23, 2023.
10.10	Incentive Stock Option Agreement between Perma-Fix Environmental Services, Inc. and EVP of Waste Treatment Operations, dated January 19, 2023, as incorporated by reference from Exhibit 99.10 to the Company's Form 8-K filed on January 23, 2023.
10.11	Employment Agreement dated April 20, 2023 between Mark Duff, Chief Executive Officer and Perma-Fix Environmental Services, Inc., as incorporated by reference from Exhibit 99.1 to the Company's Form 8-K filed on April 26, 2023.

10.12	Employment Agreement dated April 20, 2023 between Ben Naccarato, Chief Financial Officer and Perma-Fix Environmental Services, Inc., as incorporated by reference from Exhibit 99.2 to the Company's Form 8-K filed on April 26, 2023.
10.13	Employment Agreement dated April 20, 2023 between Dr. Louis Centofanti, EVP of Strategic Initiatives and Perma-Fix Environmental Services, Inc., as incorporated by reference from Exhibit 99.3 to the Company's Form 8-K filed on April 26, 2023.
10.14	Employment Agreement dated April 20, 2023 between Andrew Lombardo, EVP of Nuclear and Technical Services and Perma-Fix Environmental Services, Inc., as incorporated by reference from Exhibit 99.4 to the Company's Form 8-K filed on April 26, 2023.
10.15	Employment Agreement dated April 20, 2023 between Richard Grondin, EVP of Waste Treatment Operations and Perma-Fix Environmental Services, Inc., as incorporated by reference from Exhibit 99.5 to the Company's Form 8-K filed on April 26, 2023.
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*

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

SIGNATURES

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

PERMA-FIX ENVIRONMENTAL SERVICES

Date: May 10, 2023

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

Date: May 10, 2023

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

EXHIBIT 31.1

CERTIFICATIONS

I, Mark Duff, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Perma-Fix Environmental Services, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of the internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 10, 2023

/s/ Mark Duff
Mark Duff
Chief Executive Officer, President
and Principal Executive Officer

EXHIBIT 31.2

CERTIFICATIONS

I, Ben Naccarato, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Perma-Fix Environmental Services, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of the internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 10, 2023

/s/ Ben Naccarato

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

EXHIBIT 32.1

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

In connection with the Quarterly Report of Perma-Fix Environmental Services, Inc. ("PESI") on Form 10-Q for the quarter ended March 31, 2023, as filed with the Securities and Exchange Commission on the date hereof (the "Form 10-Q"), I, Mark Duff, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that:

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

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

Dated: May 10, 2023

/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.

EXHIBIT 32.2

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

In connection with the Quarterly Report of Perma-Fix Environmental Services, Inc. ("PESI") on Form 10-Q for the quarter ended March 31, 2023, as filed with the Securities and Exchange Commission on the date hereof (the "Form 10-Q"), I, Ben Naccarato, Executive Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that:

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

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

Dated: May 10, 2023

/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.