SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549 Form 10-Q [X] OUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the quarterly period ended September 30, 2004 Or TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES [] EXCHANGE ACT OF 1934 For the transition period from ____ Commission File No. 111596 PERMA-FIX ENVIRONMENTAL SERVICES, INC. (Exact name of registrant as specified in its charter) Delaware 58-1954497 (IRS Employer Identification Number) (State or other jurisdiction of incorporation or organization) 1940 N.W. 67th Place, Gainesville, FL (Address of principal executive offices) (Zip Code) (352) 373-4200 (Registrant's telephone number) (Former name, former address and former fiscal year, if changed since last report) 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 [X] No $[_]$

Indicate by checkmark whether the registrant is an accelerated filer (as defined in Rule 12b-2 of the Act). Yes [X] 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 Common Stock, \$.001 Par Value Outstanding at November 4, 2004 41,761,117 (excluding 988,000 shares held as treasury stock)

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

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PERMA-FIX ENVIRONMENTAL SERVICES, INC. CONSOLIDATED FINANCIAL STATEMENTS

PART I, ITEM 1

The 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. Certain information and note disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles 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 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.

It is suggested that these 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, 2003.

The results of operations for the nine months ended $\,$ September 30, 2004, are not necessarily indicative of results to be expected for the fiscal year ending December 31, 2004.

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PERMA-FIX ENVIRONMENTAL SERVICES, INC. CONSOLIDATED BALANCE SHEETS

	September 30,	December 31,
(Amounts in Thousands, Except for Share Amounts)	(Unaudited)	,
ASSETS		
Current assets:		
Cash	\$ 458	\$ 411
Restricted cash	61	30
Accounts receivable, net of allowance		
for doubtful accounts of \$601 and \$661	31,391	23,576
Inventories	787	544
Prepaid expenses	3,957	2,274
Other receivables	40	92
Current assets of discontinued operations	802	1,454
Total current assets	37,496	
Property and equipment:		
Buildings and land		17,629
Equipment	30,498	28,513
Vehicles	3,233	2,709
Leasehold improvements	11,624	11,082
Office furniture and equipment	1,825	1,654
Construction in progress	2,363	2,621
	68,137	64,208
Less accumulated depreciation and		
amortization	(20,607)	(16,897)
Net property and equipment	47,530	47,311
Property and equipment of discontinued		
operations, net of accumulated		
depreciation of \$0 and \$2,298	600	5,758
Intangibles and other assets:		
Permits	13,723	16,150
Goodwill	1,330	5,817
Finite risk sinking fund	2,225	1,234
Other assets	3,406	4,635
Long-term assets of discontinued operations		929
Total assets	\$ 106,310	\$ 110,215
	=======	=======

The accompanying notes are an integral part of these consolidated $\mbox{financial statements.} \label{financial}$

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PERMA-FIX ENVIRONMENTAL SERVICES, INC. CONSOLIDATED BALANCE SHEETS, CONTINUED

(Amounts in Thousands, Except for Share Amounts)	September 30, 2004 (Unaudited)	December 31, 2003
LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities: Accounts payable Current environmental accrual Accrued expenses Unearned revenue	\$ 6,111 395 11,573 5,207	\$ 5,518 1,054 11,138 2,271

Current liabilities of discontinued		
operations	3,214	1,345
Current portion of long-term debt	6,074	2,896
Total current liabilities		24,222
Environmental accruals	2,434	1,432
Accrued closure costs	5,006	4,874
Other long-term liabilities	1,705	1,677
Long-term liabilities of discontinued operations	1,804	91
Long-term debt, less current portion	19,338	26,192
Total long-term liabilities	30,287	34,266
Total liabilities	62 961	58,488
local Habilities	02,001	30,400
Commitments and Contingencies (see Note 5)		
Preferred Stock of subsidiary, \$1.00 par value; 1,467,396 shares authorized, 1,284,730 shares issued and outstanding, liquidation		
value \$1.00 per share	1,285	1,285
Stockholders' equity: Preferred Stock, \$.001 par value; 2,000,000 shares authorized, 2,500 shares issued and outstanding Common Stock, \$.001 par value; 75,000,000 shares authorized,		
42,708,117 and 37,241,881 shares		
issued, including 988,000 shares		
held as treasury stock, respectively	43	37
Additional paid-in capital	80,843	69,640
Accumulated deficit	(36,798)	
Interest rate swap	(62)	(130)
		52,304
Less Common Stock in treasury at	14 0001	
cost; 988,000 shares	(1,862)	(1,862)
Total stockholders' equity	42,164	50,442
Total liabilities and stockholders' equity	\$ 106,310	
	=======	

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

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PERMA-FIX ENVIRONMENTAL SERVICES, INC. CONSOLIDATED STATEMENTS OF OPERATIONS (Unaudited)

<TABLE>

<caption></caption>	Three Month Septembe	r 30,	Nine Months Ended September 30,		
(Amounts in Thousands, Except for Per Share Amounts)	2004	2003	2004	2003	
	<c></c>	<c></c>	<c></c>	<c></c>	
Net revenues	\$ 24,337	\$ 23,781	\$ 60,277	\$ 60,425	
Cost of goods sold	•	,	43,195		
Gross profit			17,082		
Selling, general and administrative expenses	4,419	4,610	12,832	13,008	
Loss (gain) on disposal or impairment of fixed assets	1,014	(14)	996	(15)	
Impairment loss on intangible assets	7,101		7,101		
Income (loss) from operations	(5,005)			5,707	
Other income (expense):					
Interest income		2	2	7	
Interest expense	(294)		(1,535)		
Interest expense-financing fees	(1,566)	(256)	(2,079)	(814)	
Other	(92)	(42)	(354)	(82)	
Income (loss) from continuing operations before Preferred stock dividends	(6,957)	4,044	(7,813)	2,711	
Preferred Stock dividends	(48)	(48)	(142)	(142)	
Income (loss) from continuing operations	(7,005)	3,996	(7,955)	2,569	
Discontinued operations:					
Income (loss) from discontinued operations	(740)	29	(1,765)	(226)	
Loss on disposals from discontinued operations	(9,835)		(9,835)		
Total income (loss) on discontinued operations	(10,575)	29	(11,600)	(226)	
Net Income (loss) applicable to Common Stock	\$ (17 , 580)				
••	=======	=======	=======	=======	

Net income (loss) per common share-basic:				
Continuing operations	\$ (.17)	\$.12	\$ (.20)	\$.08
Discontinued operations	(.25)		(.29)	(.01)
Net income (loss) per common share	\$ (.42)	\$.12	\$ (.49)	\$.07
	=======	======	======	======
Net income (loss) per common share-diluted:				
Continuing operations	\$ (.17)	\$.11	\$ (.20)	\$.07
Discontinued operations	(.25)		(.29)	(.01)
Net income (loss) per common share	\$ (.42)	\$.11	\$ (.49)	\$.06
	======	=======	=======	=======
Number of shares and potential common shares used in net				
income (loss) per common share:				
Basic	41,648	34,885	40,051	34,764
	======	=======	=======	=======
Diluted	41,648	38,247	40,051	39,089
	======	======	======	======

</TABLE>

The accompanying notes are an integral part of these consolidated $$\operatorname{\sc financial}$$ statements.

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PERMA-FIX ENVIRONMENTAL SERVICES, INC. CONSOLIDATED STATEMENTS OF CASH FLOWS (Unaudited)

<TABLE> <CAPTION>

Nine Months Ended September 30,

		mber 30,
(Amounts in Thousands)	2004	2003
<s></s>	<c></c>	<c></c>
Cash flows from operating activities:		
Income (loss) from continuing operations before preferred stock dividends	\$ (7,813)	\$ 2,711
Adjustments to reconcile net income (loss) from continuing operations to cash		
provided by (used in) operations:		
Depreciation and amortization	3,540	3,146
Debt discount amortization	838	243
Provision for bad debt and other reserves	123	192
Loss (gain) on disposal or impairment of plant, property and equipment	996	(15)
Intangible asset impairment	7,101	
Changes in assets and liabilities:		
Accounts receivable	(5,735)	(5,237)
Prepaid expenses, inventories and other assets	590	(1,421)
Accounts payable and accrued expenses	1,852	1,942
		1 561
Net cash provided by continuing operations	1,492	1,561
Net cash used by discontinued operations	(1,465)	(490)
Cash flows from investing activities:		
Purchases of property and equipment, net	(2,318)	(1,615)
Proceeds from sale of plant, property and equipment	31	14
Change in restricted cash, net	(1)	(2)
Change in finite risk sinking fund	(991)	(1,234)
Funds used for acquisitions (net of cash acquired)	(2,903)	
Discontinued operations		(47)
Net cash used in investing activities	(6,182)	(2,884)
Cash flows from financing activities:		
Net borrowings of revolving credit	3,168	3,221
Principal repayments of long-term debt	(7,866)	(2,620)
Proceeds from issuance of stock	10,900	1,194
Net cash provided by financing activities	6,202	1,795
Increase (decrease) in cash	 47	(18)
Cash at beginning of period	411	212
Oash at and of marked	 \$ 458	 \$ 194
Cash at end of period	\$ 458 ======	\$ 194 ======
Supplemental disclosure:		
Interest paid	\$ 1,629	\$ 1,855
Non-cash investing and financing activities:		
Issuance of Common Stock for services	184	25
Issuance of Common Stock for payment of dividends	125	125
Gain on interest rate swap	68	55
Long-term debt incurred for purchase of property and equipment		

 184 | 1,250 |The accompanying notes are integral part of these consolidated $$\operatorname{\sc financial}$$ statements.

(Amounts in thousands,	Preferr	ed Stock	Common		Additional Paid-In	Accumulated	Interest	Common Stock Held In	Total Stockholders'
except for share amounts)	Shares	Amount	Shares	Amount	Capital	Deficit	Rate Swap	Treasury	Equity
<s></s>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>
Balance at December 31, 2003	2,500	\$	37,241,881	\$ 37	\$69,640	\$(17,243)	\$ (130)	\$(1,862)	\$ 50,442
Comprehensive loss:									
Net loss						(19,413)			(19,413)
Other Comprehensive income:									
Gain on interest rate swap							68		68
Comprehensive loss									(19,345)
Preferred Stock dividends						(142)			(142)
Issuance of Common Stock for									
Preferred Stock dividend			54,581		125				125
Issuance of Common Stock									
for cash and services			795,542	1	1,213				1,214
Issuance of Common Stock				_					
in private placement			4,616,113	5	9,865				9,870
						+ + 0 6 - 5 0 0			
Balance at September 30, 2004	2,500	ş	42,708,117	\$ 43	\$80,843	\$(36,798)	\$ (62)	\$(1,862)	\$ 42,164

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

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PERMA-FIX ENVIRONMENTAL SERVICES, INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

September 30, 2004 (Unaudited)

Reference is made herein to the notes to consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2003.

1. Summary of Significant Accounting Policies

Our accounting policies are as set forth in the notes to consolidated $\,$ financial statements referred to above.

Reclassifications

Certain prior period amounts have been $\,$ reclassified to conform with the current period presentation.

Stock-Based Compensation

We account for our stock-based employee compensation plans under the accounting provisions of APB Opinion 25, Accounting for Stock Issued to Employees, and have furnished the pro forma disclosures required under Statement of Financial Accounting Standards ("SFAS") 123, Accounting for Stock-Based Compensation, and SFAS 148, Accounting for Stock-Based Compensation - Transition and Disclosure.

SFAS 123 requires pro forma information regarding net income and earnings per share as if compensation cost for our employee and director stock options had been determined in accordance with the fair market value-based method prescribed in SFAS 123. We estimate the fair value of each stock option at the grant date by using the Black-Scholes option-pricing model with the following assumptions used for grants in 2004 and 2003: no dividend yield; an expected life of ten years; expected volatility between 21.7 and 23.8%; and risk free interest rates between 2.75% and 3.82%.

Under the accounting provisions of SFAS 123, our net income (loss) and net income (loss) per share would have been decreased (increased) to the pro forma amounts indicated below (in thousands except for per share amounts):

<TABLE>

CAPITON	Three Months Ended September 30,		Nine Months Ended September 30,		
	2004	2003	2004	2003	
<\$>	<c></c>	<c></c>	<c></c>	<c></c>	
Net income (loss) from continuing operations, as reported Deduct: Total Stock-based employee compensation expense determined under fair value based method for	\$ (7,005)	\$ 3,996	\$ (7,955)	\$ 2,569	
all awards, net of related tax effects	(98)	(129)	(279)	(328)	
Pro forma net income (loss) from continuing operations	\$ (7,103) =======	\$ 3,867 ======	\$ (8,234) =======	\$ 2,241 ======	
Loss per share:					
Basic - as reported	\$ (.17) ======	\$.12 ======	\$ (.20) ======	\$.08 =====	
Basic - pro-forma	\$ (.17) =======	\$.11	\$ (.21) ======	\$.06 =====	
Diluted - as reported	\$ (.17) =======	\$.11 ======	\$ (.20)	\$.07	
Diluted - pro-forma	\$ (.17) ======	\$.10 ======	\$ (.21) ======	\$.06 =====	

2. Earnings Per Share

Basic EPS is based on the weighted average number of shares of Common Stock outstanding during the period. Diluted EPS includes the dilutive effect of potential common shares. Diluted loss per share for the three and nine months ended September 30, 2004, do not include potential common shares as their effect would be anti-dilutive.

The following is a reconciliation of basic net income (loss) per share and diluted net income (loss) per share for the three and nine months ended September 30, 2004, and 2003.

<TABLE> <CAPTION>

COL TION?	Septemb	Three Months Ended September 30,		
(Amounts in thousands except per share amounts)	2004	2003		2003
<\$>	<c></c>	<c></c>	<c></c>	
Earnings per share from continuing operations Income (loss) -basic	\$ (7,005) 	\$ 3,996		\$ 2,569
Effect of dilutive securities - Preferred Stock dividends		48		142
Income (loss) - diluted	\$ (7,005) ======			\$ 2,711 ======
Basic income (loss) per share	\$ (.17) ======	\$.12	\$ (.20)	\$.08
Diluted income (loss) per share	\$ (.17) ======	\$.11 ======	\$ (.20) ======	\$.07
Earnings per share from discontinued operations Income (loss) - basic and diluted	\$(10 , 575)	\$ 29	\$(11,600)	\$ (226)
income (1033) basic and diluced	======	======	======	======
Basic income (loss) per share	\$ (.25) ======	\$ ======	\$ (.29) ======	\$ (.01) ======
Diluted income (loss) per share	\$ (.25) ======	\$ =====	\$ (.29) =====	\$ (.01) =====
Weighted average shares outstanding - basic Potential shares exercisable under stock option plans Potential shares upon exercise of Warrants Potential shares upon conversion of Preferred Stock	41,648 	34,885 344 1,351 1,667		34,764 450 2,208 1,667
Weighted average shares outstanding - diluted	41,648 ======	38,247 ======		39,089 ======
Potential shares excluded from above weighted average share calculations due to their anti-dilutive effect include:				
Upon exercise of Options Upon exercise of Warrants Upon conversion of Preferred Stock				

 12,791 | | 2,932 12,791 1,667 | 1,551 95 |

3. Goodwill and Other Intangible Assets

Statement of Financial Accounting Standards ("SFAS") 142 "Goodwill and Other Intangible Assets" requires us to test goodwill and other intangible assets for impairment on an annual basis, and upon certain events that indicate a possible impairment. In conjunction with our third quarter financial reporting process, as a result of a disparity of our Industrial reporting unit's actual operating results to long-term projections and the discontinuation of operations at our Industrial segment facility in Detroit, Michigan as of September 30, 2004, (See Note 8) we engaged an independent appraisal firm to perform preliminary impairment tests of permits and goodwill, separately, for the Industrial reporting unit. The preliminary impairment tests of the Industrial reporting unit resulted in an estimated impairment to permits of \$2,215,000 and an estimated impairment to goodwill of approximately \$4,886,000. The aggregate impairment of \$7,101,000 is our best estimate and was recorded in the third quarter as a component of Income (loss) from operations in the Consolidated Statements of Operations. The preliminary impairment tests of the Industrial reporting unit will be finalized, along with the annual impairment tests, during the fourth quarter of 2004, thus our estimated impairment loss is subject to

refinement and may be adjusted, if necessary. The appraisers estimate the fair value of our reporting units using a discounted cash flow valuation approach.

Long-term debt consists of the following at September 30, 2004, and December 31, 2003:

<CAPTION>

2004 (Unaudited)

December 31, 2003

<\$>	<c></c>	<c></c>
Revolving Credit facility dated December 22, 2000, borrowings based upon eligible accounts receivable, subject to monthly borrowing base calculation,		
variable interest paid monthly at prime rate plus 1% (5.75% at September 30, 2004), balance due in December 2005.	\$12,404	\$ 9,235
Term Loan dated December 22, 2000, payable in equal monthly installments of principal of \$83, balance due in December 2005, variable interest paid monthly at prime rate plus 1 1/2 % (6.25% at September 30, 2004).	3,333	4,083
Three promissory notes dated May 27, 1999, payable in equal monthly installments of principal and interest of \$90 over 60 months, interest at 7.0%, paid in full in June 2004.		
Unsecured promissory note dated August 31, 2000, payable in lump sum in August 2005, interest paid annually at 7.0%.		531
Senior subordinated notes dated July 31, 2001, payable in lump sum on July 31, 2006, interest payable quarterly at an annual interest rate of 13.5%, net of unamortized debt discount of \$838 at December 31, 2003. Paid in full in August 2004.	3,500	3,500
Promissory note dated June 25, 2001, payable in semiannual installments on June 30 and December 31 through December 31, 2008, variable interest accrues at the applicable law rate determined under the IRS Code Section (7.0% on September 30, 2004) and is payable in one lump sum at the end of installment period.		4,787
Installment agreement dated June 25, 2001, payable in semiannual installments on June 30 and December 31 through December 31, 2008, variable interest accrues at the applicable law rate determined under the IRS Code Section (7.0% on September 30, 2004) and is payable in one lump sum at the end of installment period.	3,194	3,354
Various capital lease and promissory note obligations, payable 2004 to 2009, interest at rates ranging from 5.2% to 17.9%.	793	833
Less current portion of long-term debt	2,188	2,765
	25,412 6,074	29,088 2,896
	\$19 , 338	\$26,192

</TABLE>

Revolving Credit and Term Loan

On December 22, 2000, we entered into a Revolving Credit, Term Loan and Security Agreement ("Agreement") with PNC Bank, National Association, a national banking association ("PNC") acting as agent ("Agent") for lenders, and as issuing bank. The Agreement provided, at inception, for a term loan ("Term Loan") in the amount of \$7,000,000, which requires principal repayments based upon a seven-year amortization, payable over five years, with monthly installments of \$83,000 and the remaining unpaid principal balance due on December 22, 2005. The Agreement also provided for a revolving line of credit ("Revolving Credit") with a maximum principal amount outstanding at any one time of \$18,000,000, as amended. The Revolving Credit advances are subject to limitations of an amount up to the sum of (a) up to 85% of Commercial Receivables aged 90 days or less from invoice date, (b) up to 85% of Commercial Broker Receivables aged up to 120 days from invoice date, (c) up to 85% of acceptable Government Agency Receivables aged up to 150 days from invoice date, and (d) up to 50% of

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acceptable unbilled amounts aged up to 60 days, less (e) reserves Agent reasonably deems proper and necessary. The Revolving Credit advances are due and payable in full on December 22, 2005. As of September 30, 2004, the excess availability under our Revolving Credit was \$10,127,000 based on our eligible receivables. However, during the third quarter of 2004, our borrowings approached the maximum line capacity under the Revolving Credit, thereby reducing the line availability from which we could borrow to \$5,294,000.

Pursuant to the Agreement the Term Loan bears interest at a floating rate equal to the prime rate plus 1 1/2%, and the Revolving Credit at a floating rate equal to the prime rate plus 1%. The loans are subject to a prepayment fee of 1 1/2% in the first year, 1% in the second and third years and 3/4% after the third anniversary until termination date.

Three Promissory Notes

Pursuant to the terms of the Stock Purchase Agreements in connection with the acquisition of Perma-Fix of Orlando, Inc. ("PFO"), Perma-Fix of South Georgia, Inc. ("PFSG") and Perma-Fix of Michigan, Inc. ("PFMI"), a portion of the consideration was paid in the form of the Promissory Notes, in the aggregate amount of \$4,700,000 payable to the former owners of PFO, PFSG and PFMI. The Promissory Notes were paid in full in June 2004.

Unsecured Promissory Note

On August 31, 2000, as part of the consideration for the purchase of Diversified Scientific Services, Inc. ("DSSI"), we issued to Waste Management Holdings a long-term unsecured promissory note (the "Unsecured Promissory Note") in the aggregate principal amount of \$3,500,000, bearing interest at a rate of 7% per annum and having a five-year term with interest to be paid annually and principal due in one lump sum at the end of the term of the Unsecured Promissory

Senior Subordinated Notes

On July 31, 2001, we issued approximately \$5,625,000 of our 13.50% Senior Subordinated Notes due July 31, 2006 (the "Notes"). The Notes were issued pursuant to the terms of a Note and Warrant Purchase Agreement, dated July 31, 2001 (the "Purchase Agreement"), between the Company, Associated Mezzanine Investors - PESI, L.P. ("AMI"), and Bridge East Capital, L.P. ("BEC"). The Notes were unsecured and were unconditionally guaranteed by our subsidiaries. The notes were paid in full in August 2004. We also paid early termination fees of \$190,000 and recorded a non-cash expense of \$1,217,000 for the write-off of prepaid financing fees and a debt discount.

Under the terms of the Purchase Agreement, we also issued to AMI and BEC Warrants to purchase up to 1,281,731 shares of our Common Stock ("Warrant Shares") at an initial exercise price of \$1.50 per share (the "Warrants"), subject to adjustment under certain conditions, which were valued at \$1,622,000. The Warrants, as issued, also contain a cashless exercise provision. The Warrant Shares are registered under an S-3 Registration Statement that was declared effective on November 27, 2002.

In connection with the sale of the Notes, the Company, AMI, and BEC entered into an Option Agreement, dated July 31, 2001 (the "Option Agreement"). Pursuant to the Option Agreement, the Company granted each purchaser an irrevocable option requiring the Company to purchase any of the Warrants or Warrant Shares then held by the purchaser (the "Put Option"). The Put Option may be exercised at any time commencing July 31, 2004, and ending July 31, 2008. In addition, each purchaser granted to the Company an irrevocable option to purchase all the Warrants or the Warrant Shares then held by the purchaser (the "Call Option"). The Call Option may be exercised at any time commencing July 31, 2005, and ending July 31, 2008. The purchase price under the Put Option and the Call Option is based on the quotient obtained by dividing (a) the sum of six times the Company's consolidated EBITDA for the period of the 12 most recent consecutive months minus Net Debt plus the Warrant Proceeds by (b) the Company's Diluted Shares (as the terms EBITDA, Net Debt, Warrant Proceeds, and Diluted Shares are defined in the Option Agreement). We account for the changes in redemption value immediately as they

1(

occur and adjust the carrying value of the security to equal the redemption value at the end of each reporting period. On September 30, 2004, the Put Option had no value and no liability was recorded.

Promissory Note

In conjunction with our acquisition of East Tennessee Materials and Energy Corporation ("M&EC"), M&EC issued a promissory note for a principal amount of \$3,714,000 to PDC, dated June 25, 2001, for monies advanced to M&EC for certain services performed by PDC. The promissory note is payable over eight years on a semiannual basis on June 30 and December 31. Interest is accrued at the applicable law rate ("Applicable Rate") pursuant to the provisions of section 6621 of the Internal Revenue Code of 1986 as amended, (7.0% on September 30, 2004) and payable in lump sum at the end of the loan period. On September 30, 2004, the outstanding balance was \$4,184,000 including accrued interest of approximately \$990,000. PDC has directed M&EC to make all payments under the promissory note directly to the IRS to be applied to PDC's obligations under its installment agreement with the IRS.

Installment Agreement

Additionally, M&EC entered into an installment agreement with the Internal Revenue Service ("IRS") for a principal amount of \$923,000 effective June 25, 2001, for certain withholding taxes owed by M&EC. The installment agreement is payable over eight years on a semiannual basis on June 30 and December 31. Interest is accrued at the Applicable Rate and is adjusted on a quarterly basis and payable in lump sum at the end of the installment period. On September 30, 2004, the Applicable Rate was 7.0%. On September 30, 2004, the outstanding balance was \$1,033,000 including accrued interest of approximately \$240,000.

5. Commitments and Contingencies

Hazardous Waste

In connection with our waste management services, we handle both hazardous and non-hazardous waste, which we transport to our own, or other facilities for destruction or disposal. As a result of disposing of hazardous substances, in the event any cleanup is required, we could be a potentially responsible party for the costs of the cleanup notwithstanding any absence of fault on our part.

Legal

In the normal course of conducting our business, we are involved in various litigations. Except as stated below, there has been no material change in legal proceedings from those disclosed previously in the Company's Form 10-K for the year ended December 31, 2003 and the Company's Form 10-Q for the quarters ended March 31, 2004 and June 30, 2004.

We previously disclosed that during January 2004, the U.S. Environmental Protection Agency ("EPA") issued to Perma-Fix of Dayton, Inc. ("PFD"), our wholly owned subsidiary, a Notice of Findings of Violations ("Findings") alleging that PFD committed numerous violations of the Clean Air Act (the "Act") or regulations thereunder, and, although EPA did not assert any penalties or fines in the Findings, they did, however, specify that EPA had several enforcement options, including issuing an administrative penalty order or bringing judicial action against PFD. PFD has had numerous meetings with EPA

regarding this matter. On September 28, 2004, PFD received an Administrative Compliance Order ("Order"), dated September 21, 2004, from EPA alleging that PFD was a "major source" of hazardous air pollutants and, as a major source, PFD was required to have obtained a Title V air permit, and thereby was not in compliance with provisions of the Act and/or regulations thereunder applicable to a major source. The Order further provides that PFD has six months from the effective date of the Order, to develop, submit, obtain and comply with numerous costly and burdensome compliance initiatives applicable to one that is a major source of hazardous air pollutants and to submit an application to the State of Ohio for a Title V Air permit. The Order does not assert any penalties or fines but provides that PFD is not absolved of any liabilities, including liability for penalties, for the alleged violations cited in the Order, and that failure to comply with the Order may subject PFD to penalties up to \$32,500 per day

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for each $\,$ violation. PFD had 10 days from the receipt of the Order to request a conference with EPA regarding the Order and PFD timely scheduled such a conference for the first week of November. The conference was subsequently postponed indefinitely by the EPA, and the EPA and PFD are exchanging information in an effort to resolve this matter. We have retained environmental consultants who have advised us that, based on the tests that they have performed, they do not believe that PFD is a major source of hazardous air pollutants. We have been further advised by counsel that if PFD is not a major source of hazardous air pollutants, PFD would not be required to obtain a Title V air permit, would not have violated the provisions of the Act alleged in the and would not be required to comply with the costly and burdensome compliance initiatives contained in the Order. Also, we have been further advised that the Order may be in violation of certain constitutional issues involving due process based on a recent decision by the United States Court of Appeals, 11th Circuit. A determination that PFD was a major source of hazardous air pollutants and required to comply with the Order, such could have a material adverse effect on us. We intend that PFD will vigorously defend itself in connection with this matter.

In October 2004, Perma-Fix of South Georgia, Inc. ("PFSG") and Perma-Fix of Orlando, Inc. ("PFO") were notified that they are PRPs at the Malone Service Company Superfund site in Texas City, Texas ("Site"). The EPA designated both PFSG and PFO as de minimis parties, which is determined as a generator that contributed less than 0.6% of the total hazardous materials at the Site. The EPA has made a settlement offer to all de minimis parties, that requires response within 45 days of receipt of the notice. If we accept the settlement offer our liability would be approximately \$229,000. We are in the process of reviewing this claim and our potential exposure in connection with this Site.

During September 2004, PFMI received a letter alleging that PFMI owed Reliance Insurance Company, in liquidation, the sum of \$525,000 as a result of retrospective premiums under a retroactive premium agreement. Our counsel responded and advised that PFMI had numerous defenses to the demand, including, but not limited to, that the policy expired almost eight years ago and failure to adjust the premiums in a timely manner violated the agreement between the Company and Reliance and that under Michigan law it is deemed to be an unfair and deceptive act or practice in the business of insurance for an insurer to fail to complete a final audit within 120 days after termination of the policy. The Company and PFMI intend to vigorously defend this matter. However, we have accrued approximately \$217,000 for this contingent liability.

See Note 8 for a discussion as to certain contingent liabilities due to the discontinuation of operations at the facility in Detroit, Michigan, owned by our subsidiary, Perma-Fix of Michigan, Inc.

Insurance

We believe we maintain insurance coverage adequate for our needs and which is similar to, or greater than, the coverage maintained by other companies of our size in the industry. There can be no assurances, however, those liabilities, which may be incurred by us, will be covered by our insurance or that the dollar amount of such liabilities, which are covered, will not exceed our policy limits. Under our insurance contracts, we usually accept self-insured retentions, which we believe is appropriate for our specific business risks. We are required by EPA regulations to carry environmental impairment liability insurance providing coverage for damages on a claims-made basis in amounts of at least \$1,000,000 per occurrence and \$2,000,000 per year in the aggregate. To meet the requirements of customers, we have exceeded these coverage amounts.

In June 2003, we entered into a 25-year finite risk insurance policy, which provides financial assurance to the applicable states for our permitted facilities in the event of unforeseen closure. Prior to obtaining or renewing operating permits we are required to provide financial assurance that guarantee to the states that, in the event of closure, our permitted facilities will be closed in accordance with the regulations. The policy provides \$35,000,000 of financial assurance coverage and has available capacity to allow for annual inflation and other performance and surety bond requirements. On the fourth and subsequent anniversaries of the contract inception, the Company may elect to terminate this contract. During the

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second quarter of 2003 we made an upfront payment of \$4,000,000, of which \$2,766,000 represents the full premium for the 25-year term of the policy, and the remaining \$1,234,000, was deposited in a sinking fund account. Additionally, in February 2004 we paid the first of nine required annual installments of \$1,004,000, of which \$991,000 was deposited in the sinking fund account, the remaining \$13,000 represents a terrorism premium. As of September 30, 2004, we have recorded \$2,225,000 in our Finite Risk Sinking Fund on the balance sheet.

6. Acquisitions

On March 23, 2004, our subsidiary, Perma-Fix of Maryland, Inc. ("PFMD") completed it's acquisition of certain assets of USL Environmental Services, Inc. d/b/a A&A Environmental ("A&A"), primarily located in Baltimore, Md., and our subsidiary, Perma-Fix of Pittsburgh, Inc. ("PFP") completed its acquisition of certain assets of US Liquids of Pennsylvania, Inc. d/b/a EMAX ("EMAX"). Both A&A and EMAX are wholly owned subsidiaries of US Liquids Inc. ("USL"). PFMD is using the acquired assets of A&A to provide a full line of environmental, marine and industrial maintenance services. PFMD offers expert environmental services such as 24-hour emergency response, vacuum services, hazardous and non-hazardous waste disposal, marine environmental and other remediation services. PFP is utilizing the acquired assets of EMAX to provide a variety of environmental services such as transportation of drums and bulk loads, tank cleaning, industrial maintenance, dewatering, drum management and chemical packaging. PFP also has a wastewater treatment group, which provides for the treatment of non-hazardous wastewaters such as leachates, oily waters, industrial process waters and off-spec products.

We paid \$2,915,000 in cash for the acquired assets and assumed certain liabilities of A&A and EMAX. The acquisitions were accounted for using the purchase method effective March 23, 2004, and accordingly, the estimated fair values of the assets acquired and liabilities assumed of A&A and EMAX as of this date, and the results of operations since this date, are included in the accompanying consolidated financial statements. As of March 23, 2004, we performed preliminary purchase price allocations based upon information available as of this date, and we are in the process of obtaining third party evaluations of certain assets, thus, the allocation of the purchase prices are subject to refinement. Accordingly, the purchase prices were preliminarily allocated to the net assets and net liabilities so acquired and assumed based on their estimated fair values. Included in these preliminary allocations were current assets of \$2,481,000, property and equipment of \$2,066,000, current liabilities of approximately \$1,141,000 and long-term environmental liability of \$491,000. Based on the preliminary purchase price allocations no goodwill was recorded.

7. Private Placement

On March 22, 2004, we completed a private placement for gross proceeds of approximately \$10,386,000 through the sale of 4,616,113 shares of our Common Stock at \$2.25 per share and Warrants to purchase an additional 1,615,638 shares of our Common Stock exercisable at \$2.92 per share and a term of three years. The private placement was sold to fifteen accredited investors. The net cash proceeds received of \$9,946,000, after paying placement agent fees, were used in connection with the acquisitions of certain acquired assets of A&A and EMAX discussed above, and to initially pay down the Revolving Credit, while finalizing the prepayment of other higher interest debt. We have incurred an additional \$76,000 for expenses related to the private placement. During the third quarter of 2004, we used a portion of our availability under our Revolving Credit, to repay our Senior Subordinated Notes with an interest rate of 13.5% (See Note 4). We also issued Warrants to purchase an aggregate of 160,000 shares of our Common Stock, exercisable at \$2.92 per share and with a three year term, for consulting services related to the private placement.

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8. Discontinued Operations

On October 4, 2004, our Board of Directors approved the discontinuation of operations at the facility in Detroit, Michigan, owned by our subsidiary, Perma-Fix of Michigan, Inc. ("PFMI"). The decision to discontinue operations at the Detroit facility was principally as a result of two fires that significantly disrupted operations at the facility in 2003, and the facility's critical drain on the financial resources of our Industrial segment. We are in the process of remediating the facility and evaluating our available options for future use or sale of the property. The operating activities for the current and prior periods have been reclassified to discontinued operations in our Consolidated Statements of Operations.

PFMI recorded revenues of \$1,569,000 and \$4,465,000, and operating losses of \$1,765,000 and \$226,000 for the nine months ended September 30, 2004 and 2003, respectively. Our estimated loss on disposals from discontinued operations of \$9,835,000 for the three and nine months ended September 30, 2004, consisted of asset impairments, pension costs, environmental remediation and other expenses as described in the following table:

(Amounts in thousands)	Noncash Charges	Accruals	Total Charges (Credits)
Pension plan withdrawal liability	\$	\$1,474	\$1,474
Severance liability		47	47
Environmental closure and remediation accrual		2,733	2,733
Tangible asset impairment	4,591		4,591
Goodwill and permit impairment	929		929
Other		61	61
Loss on disposal from discontinued operations	\$5 , 520	\$4,315	\$9,835

The pension plan withdrawal liability is a result of terminating our union employees at PFMI. The liability is an estimate, and we are in the process of completing an actuarial study of the withdrawal liability under the pension plan. The tangible asset impairment is our best estimate of the write down of tangible assets to fair value. The goodwill and permit impairment is our best estimate of the portion of our goodwill and permits of the Industrial reporting unit allocated to PFMI. Other costs consist of estimated amounts to be paid to

close the facility and remediate the property. The environmental closure and remediation accrual is based on our estimate at the time of this report and could change based on the final remediation costs.

Assets and liabilities related to the discontinued operation have been reclassified to separate categories in the Consolidated Balance Sheets as of September 30, 2004 and December 31, 2003. As of September 30, 2004, assets are recorded at their net realizable value, and consist of land and buildings of \$600,000, accounts receivable of \$347,000, and estimated insurance proceeds receivable of \$455,000. The insurance receivable is an estimate of the direct costs from the first fire at PFMI. We have submitted insurance claims for both fires at PFMI, and are currently negotiating settlements for those claims, but at this time we cannot estimate actual proceeds to be received. If the proceeds exceed the estimated insurance receivable we will recognize a gain for the additional proceeds. Liabilities as of September 30, 2004, consist of accounts payable and current accruals of \$2,464,000.

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9. Operating Segments

Pursuant to FAS 131, we define an operating segment as:

- o A business activity from which we may earn revenue and incur expenses;
- o Whose operating results are regularly reviewed by the chief operating decision maker to make decisions about resources to be allocated to the segment and assess its performance; and
- o For which discrete financial information is available.

We have three operating segments, which are defined as each business line that we operate. This however, excludes corporate headquarters, which does not generate revenue, and Perma-Fix of Michigan, Inc., a discontinued operation. See Note 8 for further information on discontinued operations.

Our operating segments are defined as follows:

The Industrial Waste Management Services segment, which provides on-and-off site treatment, storage, processing and disposal of hazardous and non-hazardous industrial waste, commercial waste and wastewater through our seven facilities; Perma-Fix Treatment Services, Inc., Perma-Fix of Dayton, Inc., Perma-Fix of Ft. Lauderdale, Inc., Perma-Fix of Orlando, Inc., Perma-Fix of South Georgia, Inc., Perma-Fix of Maryland, Inc. (which acquired certain assets and assumed certain liabilities of A&A) and Perma-Fix of Pittsburgh, Inc. (which acquired certain assets of EMAX).

The Nuclear Waste Management Services segment, which provides treatment, storage, processing and disposal services for waste which is both hazardous and low-level radioactive ("Mixed Waste"). Included in such is research, development, on and off-site waste remediation of nuclear mixed and low-level radioactive waste through our three facilities; Perma-Fix of Florida, Inc., Diversified Scientific Services, Inc. and East Tennessee Materials and Energy Corporation.

The Consulting Engineering Services segment provides environmental engineering and regulatory compliance services through Schreiber, Yonley & Associates, Inc. which includes oversight management of environmental restoration projects, air and soil sampling and compliance and training activities, as well as, engineering support as needed by our other segments.

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The table below presents certain financial $\,$ information in thousands by business segment for the three and nine months ended September 30, 2004 and 2003.

Segment Reporting for the Quarter Ended September 30, 2004

<TABLE>

Industrial Nuclear Waste Waste Corporate(2) Consolidated Segments Total Services Services Engineering Total and Other <S> <C> <C> <C> <C> <C> <C> \$12,886(3) \$ 24,337 \$ 24,337 Revenue from external customers \$ 10,606 \$ 845 \$ 917 96 1,747 --1,747 Intercompany revenues 734 -- -- 301 191 -- 191 671 7 1,201 3,219 43 (5,788) 64,760 2,125 96,441 254 -- 443 Interest income --199 (7) 294 Interest expense 1,375 10 Interest expense-financing fees 1,566 523 (9,050) 1,211 Depreciation and amortization (1,217) Segment profit (loss) (7.005)106,310 9,869(4) Segment assets(1) Expenditures for segment assets

Segment Reporting for the Quarter Ended September 30, 2003

<TABLE> <CAPTION>

Industrial	Nuclear				
Waste	Waste		Segments	Corporate(2)	Consolidated
Services	Services	Engineering	Total	and Other	Total

<\$>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>
Revenue from external customers	\$ 10,529	\$12,487(3)	\$ 765	\$ 23,781	\$	\$ 23,781
Intercompany revenues	836	702	143	1,681		1,681
Interest income	1			1	1	2
Interest expense	182	505	(2)	685	50	735
Interest expense-financing fees					256	256
Depreciation and amortization	420	637	9	1,066	18	1,084
Segment profit	71	3,831	94	3,996		3,996
Segment assets(1)	32,441	60,841	2,130	95,412	19,037(4)	114,449
Expenditures for segment assets	237	425	44	706	143(5)	849

 | | | | | |Segment Reporting for the Nine Months Ended September 30, 2004

<TABLE>

	Industrial Waste Services	Nuclear Waste Services	Engineering	Segments Total	Corporate(2) and Other	Consolidated Total
<s></s>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>
Revenue from external customers	\$ 27,005	\$30,871(3)	\$2,401	\$ 60,277	\$	\$ 60,277
Intercompany revenues	1,782	2,766	316	4,864		4,864
Interest income	2			2		2
Interest expense	544	971		1,515	20	1,535
Interest expense-financing fees		192		192	1,887	2,079
Depreciation and amortization	1,516	1,978	21	3,515	25	3,540
Segment profit (loss)	(11,140)	4,333	69	(6,738)	(1,217)	(7,955)
Segment assets(1)	29,556	64,760	2,125	96,441	9,869(4)	106,310
Expenditures for segment assets						

 644 | 1,783 | 17 | 2,444 | 58 | 2,502 |Segment Reporting for the Nine Months Ended September 30, 2003

<TABLE>

	Industrial Waste Services	Nuclear Waste Services	Engineering	Segments Total	Corporate(2) and Other	Consolidated Total
<\$>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>
Revenue from external customers	\$ 29,254	\$28,753(3)	\$2,418	\$ 60,425	\$	\$ 60,425
Intercompany revenues	2,876	2,009	417	5,302		5,302
Interest income	4			4	3	7
Interest expense	535	1,448	(8)	1,975	132	2,107
Interest expense-financing fees		3		3	811	814
Depreciation and amortization	1,215	1,848	27	3,090	56	3,146
Segment profit (loss)	(1,081)	3,400	250	2,569		2,569
Segment assets(1)	32,441	60,841	2,130	95,412	19,037(4)	114,449
Expenditures for segment assets						

 1,033 | 1,493 | 52 | 2,578 | 335 (5) | 2,913 |16

- (1) Segment assets have been adjusted for intercompany accounts to reflect actual assets for each segment.
- (2) Amounts reflect the activity for corporate headquarters not included in the segment information.
- (3) The consolidated revenues include revenues within the Nuclear Waste Services segment from Bechtel Jacobs for the quarter and nine months ended September 30, 2004, which total \$2,627,000 or 10.8% and 6,752,000 or 11.2% of consolidated revenues and \$5,099,000 or 20.9% and \$11,191,000 or 18.6% of consolidated revenues for the same periods in 2003.
- (4) Amount includes assets of approximately \$1,416,000 and \$10,224,000 of assets from Perma-Fix of Michigan, Inc. a discontinued operation from the Industrial segment as of September 30, 2004 and 2003, respectively. (see Note 8).
- (5) Amount includes asset expenditures from our discontinued operation of \$8,000 and \$48,000 for the three and nine months ended September 30, 2003.

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PERMA-FIX ENVIRONMENTAL SERVICES, INC. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS PART I, ITEM 2

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,

- o anticipated improvement in our financial performance;
- o ability to comply with the general working capital requirements;
- o ability to be able to continue to borrow under the revolving line of credit;
- o Ability to generate sufficient cash flow from operations to fund all costs of operations and remediation of certain formerly leased property in Dayton, Ohio, and our facilities in Memphis, Tennessee; Detroit, Michigan; and Valdosta, Georgia;
- o ability to remediate certain contaminated sites for projected amounts;
- o ability to fund up to the additional \$1,100,000 of the \$3,600,000 revised capital expenditure estimate during 2004;
- o as the M&EC facility continues to enhance its processing capabilities and completes certain expansion projects, we could see higher total revenues with Bechtel Jacobs;
- o increasing other sources of revenue at M&EC;
- o Growth of our Nuclear segment;
- o positive results in our Industrial segment from our strategy;
- o improvement in the fourth quarter;
- o ability under the joint ventures to win contract awards and perform remedial activities;
- o completion of the contract with the Fortune 500 company during the first quarter of next year, and
- o $\,$ ability to remediate $\,$ and close the Detroit, $\,$ Michigan $\,$ facility for the estimated amount.

While the Company believes the expectations reflected in such forward-looking statements are reasonable, it can give no assurance such expectations will prove to have been 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:

- o general economic conditions;
- o material reduction in revenues;
- o inability to collect in a timely manner a material amount of receivables;
- o increased competitive pressures;
- o the ability to maintain and obtain required permits and approvals to conduct operations;
- o the ability to develop new and existing technologies in the conduct of operations;
- o ability to retain or renew certain required permits;
- o discovery of additional contamination or expanded contamination at a certain Dayton, Ohio, property formerly leased by the Company or the Company's facilities at Memphis, Tennessee; Valdosta, Georgia and Detroit, Michigan, which would result in a material increase in remediation expenditures;

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- o changes in federal, state and local laws and regulations, especially environmental laws and regulations, or in interpretation of such;
- o potential increases in equipment, maintenance, operating or labor costs;
- o management retention and development;
- o termination of the Oak Ridge contracts as a result of our lawsuit against Bechtel Jacobs or otherwise;
- o the requirement to use internally generated funds for purposes not presently anticipated;
- o inability to be profitable on an annualized basis;
- o the inability of the Company to maintain the listing of its Common Stock on the NASDAQ;
- o the determination that PFMI, PFSG, or PFO was responsible for a material amount of remediation at certain superfund sites; and
- o terminations of contracts with federal agencies or subcontracts involving federal agencies, or reduction in amount of waste

delivered to the Company under these contracts or subcontracts.

The Company undertakes no obligations to update publicly any forward-looking statement, whether as a result of new information, future events or otherwise.

Overview

We provide services through three reportable operating segments. The Industrial Waste Management Services segment ("Industrial segment") is engaged in on-site and off-site treatment, storage, disposal and processing of a wide variety of by-products and industrial, hazardous and non-hazardous wastes. The Nuclear Waste Management Services segment ("Nuclear segment") provides treatment, storage, processing and disposal services of mixed waste (waste containing both hazardous and low-level radioactive materials) and low-level radioactive wastes, including research, development and on-site and off-site waste remediation. Our Consulting Engineering Services segment provides a wide variety of environmental related consulting and engineering services to both industry and government.

The results, for the third quarter of 2004 reflect the continued growth in revenue and receipt of further contract awards within the Nuclear segment, which resulted in increased revenue for both the three and nine months ended September 30, 2004, as compared to the same periods of 2003. We continue to enhance our processing capabilities and efficiencies within the Nuclear segment, which has led to the expansion of our services within additional governmental sites, beyond the current Bechtel Jacobs Company Oak Ridge contracts, and from other large Fortune 500 companies. We continue to work through the restructuring efforts within the Industrial segment, which included the discontinued operations of our Detroit, Michigan facility, the write down of certain fixed assets and the impairment of certain goodwill and other intangible assets, all of which resulted in non-recurring charges, which negatively impacted the quarter. We continue to strengthen our balance sheet and borrowing position, and reduce our debt, which should have a positive effect as we move into the final quarter of the year.

During the third quarter in 2004 we recorded impairment estimates to intangible assets in the aggregate of \$7,101,000, which is a charge against income from operations. For further disclosure refer to the Results of Operations section of this Management's Discussion and Analysis. Additionally, we discontinued our operations at our facility in Detroit, Michigan. This resulted in an aggregate loss from discontinued operations of \$10,575,000 and \$11,600,000 for the three and nine months ended September 30, 2004. The discontinued operation is further discussed in this Management's Discussion and Analysis.

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Results of Operations

The table below should be used when reviewing management's discussion and analysis for the three and nine months ended September 30, 2004 and 2003. The results of operations for the discontinued operations have been reclassified for all reported periods out of their respective revenue and expense categories and are recorded in the aggregate under Net income (loss) from discontinued operations.

<TABLE>

<caption></caption>								
		Three Months Ended September 30,			Nine Months Ended September 30,			
Consolidated (amounts in thousands)	2004	%	2003	%	2004	*	2003	*
<s></s>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>
Net revenues	\$ 24,337	100.0	\$ 23,781	100.0	\$ 60,277	100.0	\$ 60,425	100.0
Cost of goods sold	16,808	69.1	14,110	59.3	43,195	71.7	41,725	69.1
Gross profit	7,529	30.9	9,671	40.7	17,082	28.3	18,700	30.9
Selling, general and administrative Loss (gain) on disposal/impairment of	4,419	18.2	4,610	19.4	12,832	21.3	13,008	21.5
fixed assets	1,014	4.1	(14)	(.1)	996	1.7	(15)	
Impairment loss on intangible assets	7,101	29.2			7,101	11.7		
Income (loss) from operations	\$ (5,005)	(20.6)	\$ 5,075	21.4	\$ (3,847)	(6.4)	\$ 5,707	9.4
	======	=====	======	=====	======	=====	======	=====
Interest expense	\$ (294)	(1.2)	\$ (735)	(3.1)	\$ (1,535)	(2.5)	\$ (2,107)	(3.5)
Interest expense-financing fees	(1,566)	(6.4)	(256)	(1.1)	(2,079)	(3.4)	(814)	(1.3)
Preferred Stock dividends Net income (loss) from discontinued	(48)	(.2)	(48)	(.2)	(142)	(.2)	(142)	(.2)
operations								

 (10,575) | (43.5) | 29 | .1 | (11,600) | (19.2) | (226) | (.4) |Summary - Three and Nine Months Ended September 30, 2004 and 2003

Net Revenue

Consolidated net revenues increased to \$24,337,000 for the quarter ended September 30, 2004, as compared to \$23,781,000 for the same quarter in 2003. The increase of \$556,000 or 2.3\$ is primarily attributable to an increase in the Nuclear segment of approximately \$399,000 or 3.2\$, resulting from the continued expansion within the mixed waste market as our facilities demonstrate their ability to accept and process more complex waste streams, and we receive new contracts for additional services. The third quarter of 2004 has revenue from a contract awarded by a Fortune 500 company in late June 2004 to treat and dispose

of mixed waste from research and development activities. Revenues from Bechtel Jacobs Company, which includes the Oak Ridge contracts, totaled \$2,627,000 or 10.8% of total consolidated revenues for the three months ended September 30, 2004, compared to \$5,099,000 or 20.9% for the three months ended September 30, 2003. See "Known Trends and Uncertainties - Significant Contracts" of this Management's Discussion and Analysis. Adding to this increase, were both the Consulting Engineering Service segment with an increase of \$80,000 or 10.5% and the Industrial segment with an increase of \$77,000 or 0.7%. The increase in the Industrial segment resulted principally from the \$2,609,000 of revenue contributed from the two facilities acquired as of March 23, 2004. See "Acquisitions" in this Management's Discussion and Analysis for further information on the acquired facilities. Primarily offsetting the increase within the Industrial segment was \$1,870,000 of revenue recognized in the third quarter of 2003, from the Army's Newport Hydrolysate project, which was not duplicated in the third quarter of 2004. The remaining decrease is attributable to a reduction in government revenues and to the continued restructuring and the strategic decision to eliminate low margin broker business and replace it with higher margin generator direct revenue.

Consolidated net revenues decreased to \$60,277,000 from \$60,425,000 for the nine-month period ended September 30, 2004. This decrease of \$148,000 or 0.2% is principally attributable to a decrease in the

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Industrial segment of approximately \$2,249,000 resulting primarily from the continued restructuring of the segment as discussed above. Positively impacting the first nine months of 2003 was the Army's Newport Hydrolysate project, which we recognized revenue of \$3,055,000, which was not duplicated in 2004. The decrease for the first nine months of 2004 is also attributable to the reduction in government revenues of approximately \$1,478,000. The remaining decrease of \$3,522,000 was a result of restructuring and strategic decision to focus on higher margin generator direct revenue. Partially offsetting the decrease within the Industrial segment is \$5,806,000 of revenue contributed from two facilities acquired as of March 23, 2004. See "Acquisitions" in this Management's Discussion and Analysis for further information on the acquired facilities. The Consulting Engineering Service segment also experienced a decrease of approximately \$17,000. Offsetting these decreases, was an increase in the Nuclear segment of approximately \$2,118,000, resulting from the continued expansion within the mixed waste market as our facilities demonstrate their ability to accept and process more complex waste streams and we receive new contracts for additional services, including a Fortune 500 company as discussed above. Additionally, the first and second guarters of 2003 were negatively effected by the government's inability to ship waste to our facilities due to the war in Iraq and prolonged terrorism alerts, which has not been an obstacle during 2004. Consolidated revenues with Bechtel Jacobs Company, which includes the Oak Ridge contracts, totaled \$6,752,000 or 11.2% of total revenues for the nine months ended September 30, 2004, compared to \$11,191,000 or 18.6% for the nine months ended September 30, 2003. See "Known Trends and Uncertainties -Significant Contracts" of this Management's Discussion and Analysis. The backlog of stored waste within the Nuclear segment at September 30, approximately \$12,688,000, compared to \$5,782,000 at December 31, 2003.

Cost of Goods Sold

Cost of goods sold increased \$2,698,000 or 19.1% for the quarter ended September 30, 2004, as compared to the quarter ended September 30, 2003. This increase in cost of goods sold predominantly reflects an increase in the Industrial segment of approximately \$1,361,000, which principally relates to additional costs related to the revenue generated from the two facilities acquired, as of March 23, 2004, and the additional operating costs incurred as the segment completes its restructuring and integration efforts. Partially offsetting this increase is the reduction in costs from 2003 due to the Army's Newport Hydrolysate project, repeated in 2004, which carried significantly lower costs than replacement revenue from the acquired facilities. Additionally, the Nuclear segment experienced an increase of approximately \$1,171,000 due to an increase in disposal and treatment costs associated with the particular waste streams processed during the third quarter of 2004. The Consulting Engineering Services segment accounted for approximately \$166,000 of the increase in cost of goods sold, which corresponds with the increase in revenue and higher materials and personnel costs. Depreciation expense of \$1,143,000 and \$1,016,000 for the quarters ended September 30, 2004 and 2003, respectively, is included in cost of goods sold, which reflects an increase of \$127,000. The acquisitions contributed \$126,000 to this increase.

Cost of goods sold increased \$1,470,000 or 3.5% for the nine-month period ended September 30, 2004, as compared to the nine-month period ended September 30, 2003. This increase in cost of goods sold primarily reflects an increase in the Nuclear segment of \$1,078,000, which correlates with the increase in revenue. Additionally, the Consulting Engineering Services segment experienced an increase in cost of goods sold of approximately \$223,000, which relates to the direct costs of projects completed this year. higher payroll and other Industrial segment experienced an increase of approximately \$169,000, which primarily reflects the additional operating costs incurred as the segment completes its restructuring and integration efforts and increased costs related to revenue generated from the two facilities acquired, as of March 23, 2004. Partially offsetting this increase was the reduction in costs from 2003 due to the Army's Newport Hydrolysate project, not repeated in 2004. Included within goods sold is depreciation expense of \$3,349,000 and \$2,946,000 for the nine months ended September 30, 2004 and 2003, respectively, reflecting an increase of \$403,000 over 2003, of which \$282,000 was a result of the acquired facilities.

The resulting gross profit for the quarter ended September 30, 2004, decreased \$2,142,000 to \$7,529,000, which as a percentage of revenue is 30.9%, as compared to 40.7% for the quarter ended September 30, 2003. The decrease in gross profit percentage primarily reflects a decrease in the Industrial segment from 27.1% in 2003 to 14.8% in 2004. This segment's decrease principally reflects the decrease in gross profit from the elimination of the Army's Newport Hydrolysate project, a higher margin contract, included in the third quarter of 2003. The remaining reduction in gross margin for the segment was the addition of the March 23, 2004, acquisitions and the on going restructuring. Additionally, the Nuclear segment decreased from 52.2% in 2003 to 44.6% in 2004, reflecting mainly a less favorable product mix during the quarter and increased disposal costs that correspond with different contracts. There was a decrease in the Consulting Engineering Services segment from 38.3% in 2003 to 24.4% in 2004, which reflects the impact of lower margin projects being performed in the third quarter of 2004.

The resulting gross profit for the nine months ended September 30, 2004, decreased \$1,618,000 to \$17,082,000, which as a percentage of revenue is 28.3%, reflecting a decrease from the 2003 corresponding nine months percentage of revenue of 30.9%. This decrease in gross profit percentage principally reflects a decrease in the Industrial segment from 22.5% in 2003 to 15.4% in 2004. This segment's decrease primarily reflects the fixed costs of operating the facilities being spread over reduced revenues, relating in part to the restructuring. Additionally, the decrease in gross profit percentage was significantly affected by the elimination of the Army's Newport Hydrolysate project included in the third quarter of 2003, which had a very high gross margin. Additionally, there was a decrease in the Consulting Engineering Services segment from 36.5% in 2003 to 26.8% in 2004, which reflects the impact of lower margin projects being performed in the first nine months of 2004. The decrease in gross profit percentage was partially offset by an increase in the Nuclear segment from 39.1% in 2003 to 39.8% in 2004.

Selling, General and Administrative

Selling, general and administrative expenses decreased \$191,000 or 4.1% for the quarter ended September 30, 2004, as compared to the quarter ended September 30, 2003. This decrease was realized by both the Industrial and Consulting Engineering segments, and included reductions in payroll related expenses and outside services. Partially offsetting the decrease from the restructuring within the Industrial segment was the additional expenses related to the two facilities acquired effective March 23, 2004. Additionally, the Nuclear segment had a slight increase in payroll and related expenses. Depreciation and amortization expense of \$68,000 was included within selling, general and administrative expenses for both third quarters of 2004 and 2003. As a percentage of revenue, selling, general and administrative expenses decreased to 18.2% for the quarter ended September 30, 2004, compared to 19.4% for the same period in 2003.

Selling, general and administrative expenses decreased \$176,000 or 1.4% for the nine months ended September 30, 2004, as compared to the same period in 2003. This decrease relates to all segments, but the largest of which is the Consulting Engineering Services and Industrial segments reductions in payroll and related expenses, with the decrease in the Industrial segment primarily due to the restructuring of the segment. Partially offsetting the decrease within the Industrial segment are the additional expenses related to the two facilities acquired, effective March 23, 2004. Offsetting the company's decrease was an increase in corporate administrative expenses and the Nuclear segment's payroll related expenses, as stronger infrastructures are built as we comply with the Sarbanes Oxley Act of 2002. Included in selling, general and administrative expenses is depreciation and amortization expense of \$191,000 and \$200,000 for the nine months ended September 30, 2004 and 2003, respectively. As a percentage of revenue, selling, general and administrative expenses decreased to 21.3% for the nine months ended September 30, 2004, compared to 21.5% for the same period in 2003.

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Loss (Gain) on Disposal/Impairment of Fixed Assets

The loss on fixed asset disposal/impairment for the quarter ended September 30, 2004, was \$1,014,000, as compared to a gain of \$14,000 for the same quarter in 2003. This loss is principally a result of the Industrial segment writing down certain fixed assets, totaling \$1,026,000, which have been determined to have no fair value. As part of the restructuring process, management abandoned various projects at certain facilities.

The loss on fixed asset disposal/impairment for the nine months ended September 30, 2004, was \$996,000, as compared to a gain of \$15,000 for the same nine-month period in 2003. This loss is principally a result of the Industrial segment writing down certain fixed assets, totaling \$1,026,000, which have been determined to have no fair value. As part of the restructuring process, management abandoned various projects at certain facilities.

Impairment on Intangible Assets

In conjunction with our third quarter financial reporting process, as a result of a disparity of our Industrial reporting unit's actual operating results to long-term projections and the discontinuation of operations at our Industrial segment facility in Detroit, Michigan, as of September 30, 2004, (see Discontinued Operations in this Management's Discussion and Analysis), we engaged an independent appraisal firm to perform preliminary impairment tests of permits and goodwill, separately for the Industrial reporting unit. The preliminary impairment tests of the Industrial reporting unit resulted in an estimated impairment to permits of \$2,215,000 and an estimated impairment to goodwill of approximately \$4,886,000. The aggregate impairment of \$7,101,000 is our best estimate and was recorded in the third quarter as a component of Income

(loss) from operations in the Consolidated Statements of Operations. The preliminary impairment tests of the Industrial reporting unit will be finalized, along with the annual impairment tests, during the fourth quarter of 2004, thus our estimated impairment loss is subject to refinement and may be adjusted, if necessary.

Interest Expense

Interest expense decreased \$441,000 for the quarter ended September 30, 2004, as compared to the corresponding period of 2003. This decrease reflects lower borrowing levels and interest rates on our PNC revolving credit and term loan, resulting in a decrease in interest expense of \$92,000. In March 2004, we received proceeds from the private placement that were used to temporarily reduce the revolver resulting in this decrease in interest expense. Additionally, as a result of the prepayment of the senior subordinated debt in August 2004, interest expense decreased by \$63,000. In June 2004, the final repayment of debt associated with past acquisitions was completed resulting in a decrease in interest expense of \$36,000. The remainder of the decrease is primarily due to an adjustment to the interest payable associated with the PDC and IRS notes, which totaled \$219,000.

Interest expense also decreased by \$572,000 for the nine-month period ended September 30, 2004, as compared to the corresponding period of 2003. This decrease reflects the impact of lower interest rates and decreased borrowing levels on the revolving credit and term loans with PNC, which resulted in a decrease in interest expense of \$203,000 when compared to prior year. In March 2004, we received proceeds related to the private placement that was used to temporarily reduce the revolver, which resulted in a decrease in interest expense. Additionally, the final repayment of debt associated with past acquisitions resulted in a decrease in interest expense of \$76,000. Additionally, as a result of the prepayment of the senior subordinated debt in August 2004, interest expense decreased by \$63,000. The remainder of the decrease is primarily due to an adjustment to the interest payable associated with the PDC and IRS notes, which totaled \$219,000.

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Interest Expense - Financing Fees

Interest expense-financing fees increased by \$1,310,000 during the three months ended September 30, 2004, as compared to the same period in 2003. This increase is primarily a result of the write-off of \$1,217,000 of prepaid financing fees and debt discount associated with the early termination of senior subordinated notes, which were paid in full in August 2004. Additionally, we expensed an early termination fee of \$190,000, paid as a result of the pre-payment. These financing fees are principally associated with the credit facility and term loan with PNC and the senior subordinated notes, and are amortized to expense over the term of the loan agreements.

Interest expense-financing fees increased by \$1,265,000 for the nine months ended September 30, 2004, as compared to the corresponding period of 2003. This increase was primarily due to a one-time write-off of fees in March 2004, associated with other short term financing and the write-off of \$1,217,000 of prepaid financing fees and debt discount associated with the early termination of senior subordinated notes, which were paid in full in August 2004. Additionally, we expensed an early termination fee of \$190,000 paid as a result of the pre-payment.

Preferred Stock Dividends

Preferred Stock dividends remained relatively constant at \$48,000 for the quarters ended September 30, 2004 and 2003. The Preferred Stock dividends are comprised of approximately \$31,000 accrued dividends from our Series 17 Preferred Stock, and \$17,000 from the accrual of preferred dividends on the Preferred Stock of our subsidiary, M&EC. Preferred dividends for the nine months remained constant at \$142,000 for 2004 and 2003.

Discontinued Operation

On October 4, 2004, our Board of Directors approved the discontinuation of operations at the facility in Detroit, Michigan ("Detroit facility"), owned by our subsidiary, Perma-Fix of Michigan, Inc. ("PFMI"). The decision to discontinue operations at the Detroit facility was principally as a result of two fires that significantly disrupted operations at the facility in 2003, and the facility's critical drain on the financial resources of our Industrial segment. We are in the process of remediating the facility and evaluating our available options for future use or sale of the property. The operating activities for the current and prior periods have been reclassified to discontinued operations in our Consolidated Statements of Operations.

PFMI recorded revenues of \$1,569,000 and \$4,465,000, and operating losses of \$1,765,000 and \$226,000 for the nine months ended September 30, 2004 and 2003, respectively. Our estimated loss on disposals from discontinued operations of \$9,835,000 for the three and nine months ended September 30, 2004, consisted of asset impairments, pension costs, environmental remediation and other expenses.

We recorded \$1,474,000 for a pension plan withdrawal liability as a result of terminating our union employees at PFMI. The liability is an estimate, and we are in the process of completing an actuarial study of the withdrawal liability under the pension plan. Additionally, we recorded accruals for environmental closure and remediation, costs of \$2,733,000, severance costs of \$47,000 and miscellaneous costs of \$61,000. We recorded a non-cash tangible asset impairment of \$4,591,000 and impairment to goodwill and permits of \$929,000. The tangible asset impairment is our best estimate write down of tangible assets to fair value. The goodwill and permit impairment is our estimate of the portion of our goodwill and permits for the Industrial segment allocated to PFMI. Other costs consist of amounts to be paid to close the facility and remediate the property.

The environmental closure and remediation accrual is based on our estimate at the time of this report and could change based on the final remediation costs.

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Assets and liabilities related to the discontinued operation have been reclassified to separate categories in the Consolidated Balance Sheets as of September 30, 2004 and December 31, 2003. As of September 30, 2004, assets are recorded at their net realizable value, and consist of land and buildings of \$600,000, accounts receivable of \$347,000, and estimated insurance proceeds receivable of \$455,000. The insurance receivable is an estimate of the direct costs from the first fire at PFMI. We have submitted insurance claims for both fires at PFMI, and are currently negotiating settlements for those claims, but at this time we cannot estimate actual proceeds to be received. If the proceeds exceed the estimated insurance receivable we will recognize a gain for the additional proceeds. Liabilities as of September 30, 2004, consist of accounts payable and current accruals of \$2,554,000 and environmental and closure accruals of \$2,464,000.

Liquidity and Capital Resources of the Company

Our capital requirements consist of general working capital needs, scheduled principal payments on our debt obligations and capital leases, remediation projects and planned capital expenditures. Our capital resources consist primarily of cash generated from operations, funds available under our revolving credit facility and proceeds from issuance of our Common Stock. Our capital resources are impacted by changes in accounts receivable as a result of revenue fluctuation, economic trends, collection activities, and the profitability of the segments.

At September 30, 2004, we had cash of \$458,000. This cash total reflects an increase of \$47,000 from December 31, 2003, as a result of net cash provided by operations of \$27,000 and cash provided by financing activities of \$6,202,000 (principally proceeds from the issuance of Common Stock in connection with Warrant and option exercises, issuances under our employee stock purchase plan and the private placement completed in the first quarter, partially offset by net repayments of our revolving credit facility and long-term debt) offset by cash used in investing activities of \$6,182,000 (principally funds used for acquisitions, net purchases of equipment, and a deposit to the finite risk sinking fund). We are in a net borrowing position and therefore attempt to move all excess cash balances immediately to the revolving credit facility, so as to reduce debt and interest expense. We utilize a centralized cash management system, which includes remittance lock boxes and is structured to accelerate collection activities and reduce cash balances, as idle cash is moved without delay to the revolving credit facility. The cash balance at September 30, 2004, represents payroll account fundings, which were not withdrawn until after quarter-end.

Operating Activities

Accounts receivable, net of allowance for doubtful accounts, totaled \$31,391,000, an increase of \$7,815,000 from the December 31, 2003 balance of \$23,576,000. This increase reflects the impact of additional accounts receivable of \$2,226,000 as a result of the assets purchased in the acquisitions discussed below in this Management's Discussion and Analysis. Additionally, the Nuclear segment experienced an increase of \$5,633,000 as a result of the seasonal increase in revenue that comes from DOE/DOD contractors. Offsetting these increases, were slight decreases in the Industrial segment of \$35,000 and the Consulting Engineering segment of \$9,000.

As of September 30, 2004, total consolidated accounts payable was \$6,111,000, an increase of \$593,000 from the December 31, 2003, balance of \$5,518,000. This increase in accounts payable reflects the impact of the acquisitions, which resulted in an increase of \$864,000. Additionally, accounts payable increased due to un-financed capital expenditures, offset by decreases in trade accounts payable, which was achieved by improved cash flow.

Working capital at September 30, 2004, was \$4,922,000, as compared to working capital of \$4,159,000 at December 31, 2003, reflecting an increase of \$763,000. This working capital increase reflects the increased accounts receivable balance primarily due to the acquisitions, which contributed \$1,514,000 of

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this increase, net of the increased accounts payable balance at the end of the period. Negatively impacting this September 30, 2004 working capital position was the reclass of \$3.5 million from long term debt to current portion, for the unsecured promissory note due in full in August 2005, and the recording of certain current liabilities of the discontinued operations.

Investing Activities

Our purchases of capital equipment for the nine-month period ended September 30, 2004, totaled approximately \$2,502,000, including financed purchases of \$184,000. These expenditures were for expansion and improvements to the operations principally within our Industrial and Nuclear segments. The capital expenditures were funded by cash provided by operations and from proceeds from the issuance of stock, upon exercise of Warrants, options and private placement funds. We had budgeted capital expenditures of up to approximately \$5,600,000 for 2004, which includes an estimated \$1,675,000 for completion of certain 2003 projects in process, as well as other identified capital purchases for the expansion and improvement to the operations and for certain compliance related enhancements. We have revised our capital expenditures estimate for 2004, down to approximately \$3,600,000. Our purchases during 2004 include approximately \$994,000 to complete certain of the 2003 projects in process. We anticipate funding capital expenditures by a combination of lease financing, internally

generated funds, and/or the proceeds received from Option and Warrant exercises.

Financing Activities

On December 22, 2000, we entered into a Revolving Credit, Term Loan and Security Agreement ("Agreement") with PNC Bank, National Association, a national banking association ("PNC") acting as agent ("Agent") for lenders, and as issuing bank. The Agreement provided, at inception, for a term loan ("Term Loan") in the amount of \$7,000,000, which requires principal repayments based upon a seven-year amortization, payable over five years, with monthly installments of \$83,000 and the remaining unpaid principal balance due on December 22, 2005. The Agreement also provided for a revolving line of credit ("Revolving Credit") with a maximum principal amount outstanding at any one time of \$18,000,000, as amended. The Revolving Credit advances are subject to limitations of an amount up to the sum of (a) up to 85% of Commercial Receivables aged 90 days or less from invoice date, (b) up to 85% of Commercial Broker Receivables aged up to 120 days from invoice date, (c) up to 85% of acceptable Government Agency Receivables aged up to $150~{\rm days}$ from invoice date, and (d) up to 50% of acceptable unbilled amounts aged up to 60 days, less (e) reserves Agent reasonably deems proper and necessary. The Revolving Credit advances are due and payable in full on December 22, 2005. As of September 30, 2004, the excess availability under our Revolving Credit was \$10,127,000 based on our eligible However, during the third quarter of 2004, our borrowings receivables. approached the maximum line capacity under the Revolving Credit, thereby reducing the line availability from which we could borrow to \$5,294,000 as of September 30, 2004.

Pursuant to the Agreement the Term Loan bears interest at a floating rate equal to the prime rate plus 1 1/2%, and the Revolving Credit at a floating rate equal to the prime rate plus 1%. The loans are subject to a prepayment fee of 1 1/2% in the first year, 1% in the second and third years and 3/4% after the third anniversary until termination date.

Pursuant to the terms of the Stock Purchase Agreements in connection with the acquisition of Perma-Fix of Orlando, Inc. ("PFO"), Perma-Fix of South Georgia, Inc. ("PFSG") and Perma-Fix of Michigan, Inc. ("PFMI"), a portion of the consideration was paid in the form of the Promissory Notes, in the aggregate amount of \$4,700,000 payable to the former owners of PFO, PFSG and PFMI. The Promissory Notes were paid in full in June 2004.

On August 31, 2000, as part of the consideration for the purchase of Diversified Scientific Services, Inc. ("DSSI"), we issued to Waste Management Holdings a long-term unsecured promissory note (the

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"Unsecured Promissory Note") in the aggregate principal amount of \$3,500,000, bearing interest at a rate of 7\$ per annum and having a five-year term with interest to be paid annually and principal due in one lump sum at the end of the term of the Unsecured Promissory Note (August 2005).

On July 31, 2001, we issued approximately \$5,625,000 of our 13.50% Senior Subordinated Notes due July 31, 2006 (the "Notes"). The Notes were issued pursuant to the terms of a Note and Warrant Purchase Agreement, dated July 31, 2001 (the "Purchase Agreement"), between the Company, Associated Mezzanine Investors - PESI, L.P. ("AMI"), and Bridge East Capital, L.P. ("BEC"). The notes were paid in full in August 2004. We also paid early termination fees of \$190,000 and recorded a non-cash expense of \$1,217,000 for the write-off of prepaid financing fees and a debt discount.

Under the terms of the Purchase Agreement, we also issued to AMI and BEC Warrants to purchase up to 1,281,731 shares of our Common Stock ("Warrant Shares") at an initial exercise price of \$1.50 per share (the "Warrants"), subject to adjustment under certain conditions, which were valued at \$1,622,000. The Warrants, as issued, also contain a cashless exercise provision. The Warrant Shares are registered under an S-3 Registration Statement that was declared effective on November 27, 2002.

In connection with the sale of the Notes, the Company, AMI, and BEC entered into an Option Agreement, dated July 31, 2001 (the "Option Agreement"). the Option Agreement, the Company granted each purchaser an irrevocable option requiring the Company to purchase any of the Warrants or Warrant Shares then held by the purchaser (the "Put Option"). The Put Option may be exercised at any time commencing July 31, 2004, and ending July 31, 2008. In addition, each purchaser granted to the Company an irrevocable option to purchase all the Warrants or the Warrant Shares then held by the purchaser (the "Call Option"). The Call Option may be exercised at any time commencing July 31, 2005, and ending July 31, 2008. The purchase price under the Put Option and the Call Option is based on the quotient obtained by dividing (a) the sum of six times the Company's consolidated EBITDA for the period of the 12 most recent consecutive months minus Net Debt plus the Warrant Proceeds by (b) the Company's Diluted Shares (as the terms EBITDA, Net Debt, Warrant Proceeds, and Diluted Shares are defined in the Option Agreement). We account for the changes in redemption value immediately as they occur and adjust the carrying value of the security to equal the redemption value at the end of each reporting period. On September 30, 2004, the Put Option had no value and no liability was recorded.

In conjunction with our acquisition of East Tennessee Materials and Energy Corporation ("MKEC"), MKEC issued a promissory note for a principal amount of \$3,714,000 to PDC, dated June 25, 2001, for monies advanced to MKEC for certain services performed by PDC. The promissory note is payable over eight years on a semiannual basis on June 30 and December 31. Interest is accrued at the applicable law rate ("Applicable Rate") pursuant to the provisions of section 6621 of the Internal Revenue Code of 1986 as amended, (7.0% on September 30, 2004) and payable in lump sum at the end of the loan period. On September 30, 2004, the outstanding balance was \$4,184,000 including accrued interest of approximately \$990,000. PDC has directed MKEC to make all payments under the

promissory note directly to the IRS to be applied to PDC's obligations under its installment agreement with the IRS.

Additionally, M&EC entered into an installment agreement with the Internal Revenue Service ("IRS") for a principal amount of \$923,000 effective June 25, 2001, for certain withholding taxes owed by M&EC. The installment agreement is payable over eight years on a semiannual basis on June 30 and December 31. Interest is accrued at the Applicable Rate and is adjusted on a quarterly basis and payable in lump sum at the end of the installment period. On September 30, 2004, the Applicable Rate was 7.0%. On September 30, 2004, the outstanding balance was \$1,033,000 including accrued interest of approximately \$240,000.

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The accrued dividends on the outstanding Preferred Stock for the period July 1, 2003, through December 31, 2003, in the amount of approximately \$63,000 were paid in February 2004 in the form of 19,643 shares of our Common Stock. The dividends for the period January 1, 2004, through June 30, 2004, total \$62,000, and were paid in August 2004, through the issuance of 34,938 shares of our Common Stock. The accrued dividends for the period July 1, 2004 through September 30, 2004, total \$32,000 and will be paid in January 2005. Under our loan agreements, we are prohibited from paying cash dividends on our outstanding capital stock.

In summary, we have continued to take steps to improve our operations and liquidity as discussed above. However, we continue to invest our working capital back into our facilities to fund capital additions for expansion within both the Nuclear and Industrial segments. We have experienced the positive impact of increased accounts receivable and increased availability under our Revolving Credit. Additionally, accounts payable have remained relatively steady through our typically strong third quarter. Offsetting these positives was the negative impact of current reserves recorded on discontinued operations and the reclassification of long-term debt to current. The reserves recorded on discontinued operations could be reduced or paid over a longer period of time than initially anticipated. If we are unable to improve our operations and become profitable in the foreseeable future, such would have a material adverse effect on our liquidity position.

Acquisitions

On March 23, 2004, our subsidiary, PFMD completed its acquisition of certain assets of A&A and our subsidiary, PFP completed its acquisition of certain assets of EMAX. We paid \$2,915,000 in cash for the acquired assets and assumed liabilities of A&A and EMAX, using funds received in connection with the private placement discussed below. A&A and EMAX had unaudited combined revenues of approximately \$15.0 million in 2003 and a combined loss of approximately \$299,000.

Private Placement

On March 22, 2004, we completed a private placement for gross proceeds of approximately \$10,386,000 through the sale of 4,616,113 shares of our Common Stock at \$2.25 per share and Warrants to purchase an additional 1,615,638 shares of our Common Stock exercisable at \$2.92 per share and a term of three years. The private placement was sold to fifteen accredited investors. The net cash proceeds received of \$9,946,000, after paying placement agent fees, were used in connection with the acquisitions of certain acquired assets of A&A and EMAX discussed above, and to initially pay down the Revolving Credit, while finalizing the prepayment of other higher interest debt. We have incurred an additional \$76,000 for expenses related to the private placement. During the third quarter of 2004, we used a portion of our availability under our Revolving Credit, to repay our Senior Subordinated Notes with an interest rate of 13.5%. We also issued Warrants to purchase an aggregate of 160,000 shares of our Common Stock, exercisable at \$2.92 per share and with a three year term, for consulting services related to the private placement.

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Contractual Obligations

The following table summarizes our contractual obligations at September 30, 2004, and the effect such obligations are expected to have on our liquidity and cash flow in future periods, (in thousands):

<TABLE> <CAPTION>

Payments due by period

Contractual Obligations	Total	2004	2005-2007	2008-2009	After 2009
<\$>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>
Long-term debt	\$25,412	\$ 1,444	\$22,929	\$ 1,039	\$
Interest on long-term debt	1,230			1,230	
Operating leases	3,282	338	2,828	116	
Finite risk policy	8,030		3,011	2,008	3,011
Pension withdrawal liability	1,474		1,474		
Purchase obligations (1)					
Total contractual obligations	\$39,428	\$ 1,782	\$30,242	\$ 4,393	\$ 3,011
	======	======	======	======	======

</TABLE>

⁽¹⁾ We are not a party to any significant long-term service or supply contracts with respect to our processes. We refrain from entering into any long-term purchase commitments in the ordinary course of business.

In June 2003, we entered into a 25-year finite risk insurance policy, which provides financial assurance to the applicable states for our permitted facilities in the event of unforeseen closure. Prior to obtaining or renewing operating permits we are required to provide financial assurance that guarantees to the states that in the event of closure our permitted facilities will be closed in accordance with the regulations. The policy provides \$35,000,000 of financial assurance coverage and has available capacity to allow for annual inflation and other performance and surety bond requirements. insurance policy required an upfront payment of \$4,000,000, of which \$2,766,000 represents the full premium for the 25-year term of the policy, and the remaining \$1,234,000, was deposited in a sinking fund account. Additionally, in February 2004 we paid the first of nine required annual installments of \$1,004,000, of which \$991,000 was deposited in the sinking fund account, remaining \$13,000 represents a terrorism premium. As of September 30, 2004, we have recorded \$2,225,000 in our sinking fund on the balance sheet. On the fourth and subsequent anniversaries of the contract inception, we may elect to terminate this contract. If we so elect, the insurer will pay us an amount equal to 100% of the sinking fund account balance in return for complete releases of liability from both us and any applicable regulatory agency using this policy as an instrument to comply with financial assurance requirements.

Critical Accounting Policies

In preparing the consolidated financial statements in conformity with accounting principles generally accepted in the United States, management makes estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements, as well as, the reported amounts of revenues and expenses during the reporting period. We believe the following critical accounting policies affect the more significant estimates used in preparation of the consolidated financial statements:

Revenue Recognition Estimates. Effective September 1, 2003, we refined our percentage of completion methodology for purposes of revenue recognition in our Nuclear segment. As we accept more complex waste streams in this segment, the treatment of those waste streams becomes more complicated and more time consuming. We have continued to enhance our waste tracking capabilities and systems, which has enabled us to better match the revenue earned to the processing milestones achieved. The major milestones are receipt, treatment/processing, and shipment/final disposition. Upon receiving mixed waste we generally recognize 33% of revenue as we incur costs for transportation, analytical and labor

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associated with the receipt of mixed wastes. As the waste is processed, shipped and disposed of we generally recognize the remaining 67% of revenue and all associated costs. We continually review these revenue recognition percentages by evaluating the processing milestones and specific contracts, to insure the most accurate percentage of completion. We are also reviewing the Industrial segment revenue recognition methodology to determine if any refinement is necessary.

Allowance for Doubtful Accounts. The carrying amount of accounts receivable is reduced by an allowance for doubtful accounts, which is a valuation allowance that reflects management's best estimate of the amounts that are uncollectable. We regularly review all accounts receivable balances and based on an assessment of current credit worthiness, estimate the portion, if any, of the balance that is uncollectable. This allowance was approximately 0.8%, of revenue for both 2003 and 2002, and approximately 2.9%, and 3.3% of accounts receivable for the nine-month periods ended September 30, 2004 and 2003, respectively.

Intangible Assets. Intangible assets relating to acquired businesses consist primarily of the cost of purchased businesses in excess of the estimated fair value of net assets acquired ("goodwill") and the recognized permit value of the business. We continually reevaluate the propriety of the carrying amount of permits and goodwill to determine whether current events and circumstances warrant adjustments to the carrying value. Effective January 1, 2002, we adopted SFAS 142. We utilized an independent appraisal firm to test goodwill and permits, separately, for impairment. The initial report provided by the appraiser indicated that no impairment existed as of January 1, 2002. and permits were again tested as of October 1, 2002 and October 1, 2003, and each of these tests also indicated no impairment. Effective January 1, 2002, we discontinued amortizing indefinite life intangible assets (goodwill and permits) as required by SFAS 142. The appraisers estimated the fair value of our operating segments using a discounted cash flow valuation approach. This approach is dependent on estimates for future sales, operating income, depreciation and amortization, working capital changes, and capital expenditures, as well as, expected growth rates for cash flows and long-term interest rates, all of which are impacted by economic conditions related to our industry as well as conditions in the U.S. capital markets. As discussed in the Results of Operations section of this Management's Discussion and Analysis, had a preliminary impairment test performed on our Industrial segment, which resulted in an estimated impairment to permits of \$2,215,000 and goodwill of \$4.886.000

Accrued Closure Costs. Accrued closure costs represent a contingent environmental liability to clean up a facility in the event we cease operations in an existing facility. The accrued closure costs are estimates based on guidelines developed by federal and/or state regulatory authorities under RCRA. Such costs are evaluated annually and adjusted for inflationary factors and for approved changes or expansions to the facilities. Increases due to inflationary factors for 2004 and 2003, have been approximately 1.6% and 1.1% respectively, and based on the historical information, we do not expect future inflationary changes to differ materially. Increases or decreases in accrued closure costs resulting from changes or expansions at the facilities are determined based on specific RCRA guidelines applied to the requested change. This calculation

includes certain estimates, such as disposal pricing, external labor, analytical costs and processing costs, which are based on current market conditions. We have no intention, at this time, to close any of our facilities, however as discussed above, we are currently evaluating our options regarding the continued operations of the Michigan facility.

Accrued Environmental Liabilities. We have four remediation projects currently in progress. The current and long-term accrual amounts for the projects are our best estimates based on proposed or approved processes for clean-up. The circumstances that could affect the outcome range from new technologies that are being developed every day to reduce our overall costs, to increased contamination levels that could arise as we complete remediation which could increase our costs, neither of which we anticipate at this time. In addition, significant changes in regulations could adversely or favorably affect our costs to

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remediate existing sites or potential future sites, which cannot be reasonably quantified. We have also accrued long-term environmental liabilities for our recently acquired facilities, however as these are not permitted facilities we are currently under no obligation to clean up the contamination.

Disposal Costs. We accrue for waste disposal based upon a physical count of the total waste at each facility at the end of each accounting period. Current market prices for transportation and disposal costs are applied to the end of period waste inventories to calculate the disposal accrual. Costs are calculated using current costs for disposal, but economic trends could materially affect our actual costs for disposal. As there are limited disposal sites available to us, a change in the number of available sites or an increase or decrease in demand for the existing disposal areas could significantly affect the actual disposal costs either positively or negatively.

Known Trends and Uncertainties

Seasonality. Historically we have experienced reduced revenues, operating losses or decreased operating profits during the first and fourth quarters of our fiscal years due to a seasonal slowdown in operations from poor weather conditions and overall reduced activities during the holiday season and through January and February of the first quarter. During our second and third fiscal quarters there has historically been an increase in revenues and operating profits. Management expects this trend to continue in future years. As discussed above, this trend continued in 2004, but the reduction in revenues and the net loss for the first quarter 2004 was greater than we have historically experienced in prior first quarter periods as previously discussed. The DOE and DOD represent major customers for the Nuclear segment. In conjunction with the federal government's September 30 fiscal year-end, the Nuclear segment experiences seasonably large shipments during the third quarter, leading up to this government fiscal year-end, as a result of incentives and other quota requirements. Correspondingly for a period of approximately three months following September 30, the Nuclear segment is generally seasonably slow, as the governmental budgets are still being finalized, planning for the new year is occurring and we enter the holiday season.

Economic Conditions. Economic downturns or recessionary conditions can adversely affect the demand for our services, principally within the Industrial segment. Reductions in industrial production generally follow such economic conditions, resulting in reduced levels of waste being generated and/or sent off for treatment. We believe that our revenues and profits were negatively affected within this segment by the recessionary conditions in 2003, and that this trend continued into 2004.

Significant contracts. Our revenues are principally derived from numerous and varied customers. However, our Nuclear segment has a significant relationship with Bechtel Jacobs. Bechtel Jacobs is the government appointed manager of the environmental program to perform certain treatment and disposal services in Oak Ridge, Tennessee. In this capacity Bechtel Jacobs entered into certain subcontracts with our Oak Ridge, Tennessee subsidiary ("MsEC"). Our revenues from Bechtel Jacobs contributed 11.2% of total consolidated revenues in the nine months ended September 30, 2004 and 18.6% of total consolidated revenues during the same period in 2003. As the M&EC facility continues to enhance its processing capabilities and completes certain expansion projects and with the amended pricing structure under the Oak Ridge contracts, we could see higher total revenue with Bechtel Jacobs and under the Oak Ridge contracts. The Oak Ridge contracts have been extended for a period of two years, through June 2005, with several pricing modifications, but, as with most contracts with the federal may be terminated or renegotiated at any time at the government's In February 2003, M&EC commenced legal proceedings against Bechtel election. Jacobs, the general contractor under the Oak Ridge contracts, seeking payment from Bechtel Jacobs of approximately \$4.3\$ million in surcharges relating to certain wastes that were treated by M&EC in 2001 and 2002 under the Oak Ridge contracts. We have recognized approximately \$381,000 in revenue for these surcharges, which represented an initial offer for settlement by Bechtel Jacobs. Bechtel Jacobs continues to deliver waste to M&EC for treatment, and

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M&EC continues to accept such waste. In addition, subsequent to the filing of the lawsuit, M&EC has entered into a new contract with Bechtel Jacobs to treat DOE waste. There is no guarantee of future business under the Oak Ridge contracts, and either party may terminate the Oak Ridge contracts at any time. Termination of these contracts could have a material adverse effect on us. We are working towards increasing other sources of revenues at M&EC to reduce the risk of reliance on one major source of revenues.

During the second quarter of 2004, the Nuclear segment was awarded a contract

from a Fortune 500 company valued at approximately \$6,218,000 to treat and dispose of mixed waste generated from research and development activities. This contract requires innovative treatment processing technologies we developed to accommodate the complex nature of these wastes. The contract should be completed during the first quarter of 2005. We recognized \$2,422,000 in revenues from this contract for the three months ended September 30, 2004 or 9.9% of total consolidated revenues for the quarter. Revenues from the contract for the nine-month period were \$2,652,000 or 4.4% of total consolidated revenues.

During October 2004, the Nuclear segment was awarded a three-year contract valued at approximately \$23,000,000 for the treatment of mixed low-level wastes generated at the Department of Energy's ("DOE") Hanford Site. Fluor Hanford, a prime contractor supporting DOE's cleanup mission at Hanford, has awarded this contract to us to provide specialized thermal treatment for a variety of mixed low-level radioactive wastes generated at Hanford. As with contracts or subcontracts with or involving the federal government, this contract may be terminated or renegotiated at anytime at the government's option.

During the first quarter of 2004, we finalized negotiations on two joint venture agreements with other remedial waste companies for the purposes of bidding on certain contracts and, if such contracts are awarded, to perform various remedial activities. If the joint ventures are awarded the contracts, we would be required to make an initial contribution of working capital to the newly formed joint venture companies. The potential initial working capital contribution for the two joint ventures in the aggregate would be approximately \$550,000.

Insurance. We maintain insurance coverage similar to, or greater than, the coverage maintained by other companies of the same size and industry, which complies with the requirements under applicable environmental laws. We evaluate our insurance policies annually to determine adequacy, cost effectiveness and desired deductible levels. Due to the downturn in the economy and changes within the environmental insurance market, we have no guarantee that we will be able to obtain similar insurance in future years, or that the cost of such insurance will not increase materially.

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, as 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. Compared to certain of our competitors, we dispose of significantly less hazardous or industrial by-products from our operations due to rendering material non-hazardous, discharging treated wastewaters to publicly-owned treatment works and/or processing wastes into saleable products. In the past, numerous third party disposal sites have improperly managed wastes that subsequently required remedial action; consequently, any party utilizing these sites

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may be liable for some or all of the remedial costs. Despite our aggressive compliance and auditing procedures for disposal of wastes, we have in the past and may in the future, be notified that we are a PRP at a remedial action site, which could have a material adverse effect on us.

We have budgeted for 2004 approximately \$1,143,000 in environmental expenditures to comply with federal, state and local regulations in connection with remediation of certain contaminates at four locations. The four locations where these expenditures will be made are the Leased Property in Dayton, Ohio (EPS), a former RCRA storage facility as operated by the former owners of PFD, PFM's facility in Memphis, Tennessee, PFSG's facility in Valdosta, Georgia and PFMI's facility in Detroit, Michigan. We have estimated the expenditures for 2004 to be approximately \$592,000 at the EPS site, \$216,000 at the PFM location, \$246,000 at the PFSG site and \$89,000 at the PFMI site of which \$25,000; \$40,000; \$83,000; and \$82,000, respectively, were spent during the first nine months of 2004. Additional funds will be required for the next seven years to properly remediate these sites. We expect to fund the 2004 expenses to remediate these four sites from funds generated internally, our revolving credit facility and from the exercise of Warrants and Options, however, no assurances can be made that we will be able to do so.

Our Tulsa, Oklahoma subsidiary, which has a permit to treat and store hazardous waste in certain areas of its facility, had been improperly accepting and storing a substantial amount of hazardous and non-hazardous waste in violation of certain environmental laws in areas not permitted to accept and/or to store hazardous and non-hazardous waste. We voluntarily reported this matter to the appropriate Oklahoma authorities and have removed this waste to permitted treated, storage and/or disposal facilities. We have received a notice of violation ("NOV") and are currently working with the Oklahoma authorities to provide the information they requested and resolve this matter. Although no fines or penalties were assessed under the NOV, our Oklahoma subsidiary will be required to make modifications to the existing facility.

In October 2004, Perma-Fix of South Georgia, Inc. ("PFSG") and Perma-Fix of Orlando, Inc. ("PFO") were notified that they are PRPs at the Malone Service Company Superfund site in Texas City, Texas ("Site"). The EPA designated both PFSG and PFO as de minimis parties, which is determined as a generator that contributed less than 0.6% of the total hazardous materials at the Site. The EPA

has made a settlement offer to all de minimis parties, that requires response within 45 days of receipt of the notice. If we accept the settlement offer our liability could be \$229,000. We are in the process of reviewing this claim and our potential exposure in connection with this Site.

In connection with our acquisitions discussed above, we have accrued long-term environmental liabilities of \$391,000 and \$100,000, respectively. As part of our acquisition due diligence process we completed environmental assessments of each facility and determined a best estimate of the cost to remediate the hazardous and/or non-hazardous contamination on certain of the properties owned by PFMD and a property leased by PFP. These facilities are currently under no obligation to clean up the contamination, and we do not intend in the immediate future to begin remediation. If environmental regulations change, we could be forced to clean up the contamination.

At September 30, 2004, we had accrued environmental liabilities totaling \$3,489,000, which reflects an increase of \$914,000 from the December 31, 2003, balance of \$2,575,000. The increase represents the additional environmental liability accrued for PFMD and PFP of \$491,000, additional environmental liability for our discontinued operation, PFMI, of \$653,000, partially offset by payments made on remediation projects. The September 30, 2004, current and long-term accrued environmental balance is recorded as follows:

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<TABLE>

	PFD	PFM	PFSG	PFMI	PFMD	PFP	Total
<\$>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>
Current Accrual	\$ 50,000	\$ 150,000	\$ 195,000	\$ 660,000	\$	\$	\$1,055,000
Long-term accrual	680,000	629,000	634,000		391,000	100,000	2,434,000
Total	\$ 730,000 ======	\$ 779,000	\$ 829,000 =====	\$ 660,000	\$ 391,000	\$ 100,000	\$3,489,000

</TABLE>

Interest Rate Swap

We entered into an interest rate swap agreement effective December 22, 2000, to modify the interest characteristics of our outstanding debt from a floating basis to a fixed rate, thus reducing the impact of interest rate changes on future income. This agreement involves the receipt of floating rate amounts in exchange for fixed rate interest payments over the life of the agreement without an exchange of the underlying principal amount. The differential to be paid or received is accrued as interest rates change and recognized as an adjustment to interest expense related to the debt. The related amount payable to or receivable from counter parties is included in other assets or liabilities. At September 30, 2004, the market value of the interest rate swap was in an unfavorable value position of \$62,000 and was recorded as a liability. During the nine months ended September 30, 2004, we recorded a gain on the interest rate swap of \$68,000 that offset other comprehensive loss in the Statement of Stockholders' Equity.

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PERMA-FIX ENVIRONMENTAL SERVICES, INC. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

PART I, ITEM 3

We are exposed to certain market risks arising from adverse changes in interest rates, primarily due to the potential effect of such changes on our variable rate loan arrangements with PNC. We entered into an interest rate swap agreement to modify the interest characteristics of \$3,500,000 of its \$7,000,000 term loan with PNC Bank, from a floating rate basis to a fixed rate, thus reducing the impact of interest rate changes on this portion of the debt.

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PERMA-FIX ENVIRONMENTAL SERVICES, INC. CONTROLS AND PROCEDURES

PART 1, ITEM 4

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in the periodic reports filed by us with the Securities and Exchange Commission (the "SEC") is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC and that such information is accumulated and communicated to our management. Based on the most recent evaluation, which was completed as of the end of the period covered by this Quarterly Report on Form 10-Q, our Chief Executive Officer and Chief Financial Officer believe that our disclosure controls and procedures (as defined in Rules 13a-14 and 15d-14 of the Securities Exchange Act of 1934, as amended) are effective. There were no significant changes in our internal controls or in other factors that could significantly affect these internal controls subsequent to the date of the most recent evaluation.

Item 1. Legal Proceedings

There are no additional 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, 2003 and the Form 10-Q for the quarters ended March 31, 2004 and June 30, 2004, which are incorporated herein by reference, except as follows:

We previously disclosed that during January 2004, the U.S. Environmental Protection Agency ("EPA") issued to Perma-Fix of Dayton, Inc. ("PFD"), our wholly owned subsidiary, a Notice of Findings of Violations ("Findings") alleging that PFD committed numerous violations of the Clean Air Act (the "Act") or regulations thereunder, and, although EPA did not assert any penalties or fines in the Findings, they did, however, specify that EPA had several enforcement options, including issuing an administrative penalty order or bringing judicial action against PFD. PFD has had numerous meetings with EPA regarding this matter. On September 28, 2004, PFD received an Administrative Compliance Order ("Order"), dated September 21, 2004, from EPA alleging that PFD was a "major source" of hazardous air pollutants and, as a major source, PFD was required to have obtained a Title V air permit, and thereby was not in compliance with provisions of the Act and/or regulations thereunder applicable to a major source. The Order further provides that PFD has six months from the effective date of the Order, to develop, submit, obtain and comply with numerous costly and burdensome compliance initiatives applicable to one that is a major source of hazardous air pollutants and to submit an application to the State of Ohio for a Title V Air permit. The Order does not assert any penalties or fines but provides that PFD is not absolved of any liabilities, including liability for penalties, for the alleged violations cited in the Order, and that failure to comply with the Order may subject PFD to penalties up to \$32,500 per day for each violation. PFD had 10 days from the receipt of the Order to request a conference with EPA regarding the Order and PFD timely scheduled such a conference for the first week of November. The conference subsequently postponed indefinitely by the EPA, and the EPA and PFD are exchanging information in an effort to resolve this matter. We have retained environmental consultants who have advised us that, based on the tests that they have performed, the environmental consultants do not believe that PFD is a major source of hazardous air pollutants. We have been further advised by counsel that if PFD is not a major source of hazardous air PFD would not be required to obtain a Title V air permit, would not have violated the provisions of the Act alleged in the Order and would not be required to comply with the costly and burdensome compliance initiatives contained in the Order. Also, we have been further advised that the Order may be in violation of certain constitutional issues involving due process based on a recent decision by the United States Court of Appeals, 11th Circuit. A determination that PFD was a major source of hazardous air pollutants and required to comply with the Order, such could have a material $% \left(1\right) =\left(1\right) +\left(1\right)$ PFD will vigorously defend itself in connection with this matter.

In October 2004, Perma-Fix of South Georgia, Inc. ("PFSG") and Perma-Fix of Orlando, Inc. ("PFO") were notified that they are PRPs at the Malone Service Company Superfund site in Texas City, Texas ("Site"). The EPA designated both PFSG and PFO as de minimis parties, which is determined as a generator that contributed less than 0.6% of the total hazardous materials at the Site. The EPA has made a settlement offer to all de minimis parties, that requires response within 45 days of receipt of the notice. If we accept the settlement offer our

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liability could be \$229,000. We are in the process of reviewing this claim and our potential exposure in connection with this Site.

During September 2004, PFMI received a letter alleging that PFMI owed Reliance Insurance Company, in liquidation, the sum of \$525,000 as a result of retrospective premiums under a retroactive premium agreement. Our counsel responded and advised that PFMI had numerous defenses to the demand, including, but not limited to, that the policy expired almost eight years ago and failure to adjust the premiums in a timely manner violated the agreement between the Company and Reliance and that under Michigan law it is deemed to be an unfair and deceptive act or practice in the business of insurance for an insurer to fail to complete a final audit within 120 days after termination of the policy. The Company and PFMI intend to vigorously defend this matter. However, we have accrued approximately \$217,000 for this contingent liability.

Item 4. Submission of Matters to a Vote of Security Holders

The Company's annual meeting of stockholders ("Annual Meeting") was held on July 28, 2004. At the Annual Meeting, the following matters were voted on and approved by the stockholders.

 The election of seven directors to serve until the next annual meeting of stockholders or until their respective successors are duly elected and qualified.

- 2. Approval of the Company's 2004 Stock Option Plan.
- Ratification of the appointment of BDO Seidman, LLP as the independent auditors of the Company for fiscal 2004.

The Directors elected at the Annual Meeting and the votes cast for and withheld authority for each director are as follows:

Directors	For	Withhold Authority
Dr. Louis F. Centofanti	27,562,366	381,710
Jon Colin	27,523,734	420,342
Jack Lahav	27,518,583	425,493
Joe R. Reeder	27,517,634	426,442
Alfred C. Warrington, IV	27,555,686	388,390
Dr. Charles E. Young	26,981,348	962,728
Mark A. Zwecker	27,511,483	432,593

Also, at the Annual Meeting the stockholders approved the 2004 Stock Option Plan and ratified the appointment of BDO Seidman, LLP as the independent auditors of the Company for fiscal 2004. The votes for, against, abstentions and broker non-votes are as follows:

	For	Against	Abstentions And Broker Non-votes
Approval of 2004 Stock Option Plan	12,310,084	2,565,505	13,068,487
Ratification of the Appointment of BDO Seidman,			
LLP as the Independent Auditors	27,830,518	99,695	13,863

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Item 6. Exhibits and Reports on Form 8-K

(a) Exhibits

- 10.1 Agreement between Perma-Fix Environmental Services, Inc. and Fluor Hanford, dated October 11, 2004. Certain information within this exhibit has been omitted as it is the subject of a request by the Company for confidential treatment by the Securities and Exchange Commission under the Freedom of Information Act. The omitted information has been filed separately with the Secretary of the Securities and Exchange Commission for purpose of such request.
- 31.1 Certification by Dr. Louis F. Centofanti, Chief Executive Officer of the Company pursuant to Rule 13a-14(a) or 15d-14(a).
- 31.2 Certification by Richard T. Kelecy, Chief Financial Officer of the Company pursuant to Rule 13a-14(a) or 15d-14(a).
- 32.1 Certification by Dr. Louis F. Centofanti, Chief Executive Officer of the Company furnished pursuant to 18 U.S.C. Section 1350.
- 32.2 Certification by Richard T. Kelecy, Chief Financial Officer of the Company furnished pursuant to 18 U.S.C. Section 1350.

Reports on Form 8-K

A current report on Form 8-K (Item 5 - Other Events and Item 12 - Results of Operations and Financial Condition) was filed by the Company on August 2, 2004, to announce the financial results and conference call for the three and six months ended June 30, 2004.

A current report on Form 8-K (Item 1.02 - Termination of a Material Definitive Agreement and Item 2.04 - Triggering Events That Accelerate or Increase a Direct Financial Obligation or an Obligation under an Off-Balance Sheat Arrangement) was filed by the Company on August 26, 2004, to report the prepayment of the 13.5% Senior Subordinated Notes.

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SIGNATURES

Pursuant to the requirements of the Securities 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, INC.

Date: November 8, 2004 By: /s/ Dr. Louis F. Centofanti

Dr. Louis F. Centofanti Chairman of the Board Chief Executive Officer Date: November 8, 2004 By: /s/ Richard T. Kelecy

Richard T. Kelecy Chief Financial Officer

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Fluor Hanford P.O. Box 1000

Richland, Washington 99352

Richland	l, Washington 99	352					
			FL	UOR			
		CONTRAC	T COVER PAGE				
Contract	Number:	25003					
Contract	or:	Perma-Fix Envi	ronmental Services, Inc.				
		663 Emory Vall	ey Road				
		Oak Ridge, Ten	nessee 37830				
Title:		TREATMENT OF H	ANFORD'S MLLW-03 MIXED LOW-LEVEL WASTE				
Period c	f Performance:	October 11, 20	04 - September 30, 2006				
Option P	eriod:	October 1, 200	6 - September 30, 2007				
Contract	Value:	\$23,389,000.00	(Not to Exceed)				
Descript	ion:	Contract Attac	shall perform the services described in hment A, Statement of Work. Pages 1 Attachments B and C are part of this	n			
Signatur	es:						
	enee Echols		/s/ Jane R. Kirkendall				
Contractor Authorized Signature							
C. Renee Echols / Vice President			Jane R. Kirkendall, Director, Procurem				
Printed	Name/Title		Print Name/Title				
10/11/04	: :		10/6/04				
Date			Date				
Fluor Ha							
CONTINUA	TION PAGE		CONTRACT NO: 25	003			
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1.0				3			
			ntractchedule	3			
	2.3 Retur	n of Waste		4			
3.0				4			
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				4			
4.0			ess	5 5			
	_	-	ess	5			
	_		bility	6 7			
		-	on, Fixed Price Contracts	7			
E 0	4.6 Contr	actor Submittal	s - Contract	7			
5.0 6.0			esentative Invoice Payments	8			
7.0	Special Provis	sions		8			
8.0			ork	9			
	Attachment B -	- Integrated Con	tractor Procurement Team (ICPT)	9			

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Fluor Hanford

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CONTINUATION PAGE

CONTRACT NO: 25003

1.0 Statement of Work (SOW)

The attached Statement of Work "Treatment of Hanford's Mixed Low-Level Waste

- -03, Dated: August 26, 2004, Revision: 1", identifies the scope and performance expectations of the contract. The SOW is incorporated into and made a part of this contract in Attachment A along with all of the other clauses and terms identified herein.

2.0 Award

2.1 Estimated Cost of Contract

The estimated value for this Contract is \$23,389,000.00. The Contractor shall not exceed this amount without specific written authorization from the Buyer. The Contractor shall notify the cognizant Buyer in writing when the Contractor reaches 85% of the current estimated value.

2.2 Waste Quantity and Schedule.

The Contract is comprised of a Base Contract with an Option to extend the contract in 1-year increments. Below specifies the waste quantity applicable to each Contract performance period:

Base Contract (October 11, 2004 to September 30, 2006): The Buyer commits to shipping the listed Minimum Quantity and the Contractor is required to treat the Minimum Quantity of waste specified below over the term of the Base Contract. The Buyer may ship additional quantities of waste up to the Maximum Quantities specified.

Treatability Group	Minimum	Quantity	Maximum Quantity
MLLW-03 (Organic Non-Debris):	60	m3	200 m3
LLW/MLLW-Oils (On-Spec/Off-spec):	0	m3	100 m3

Contract Option (October 1, 2006 to September 30, 2007): The Buyer may ship waste quantities up to the Maximum Quantity specified.

Treatability Group	Minimum Quanti	ty Maximum Quantity
MLLW-03 (Organic Non-Debris):	0 m3	400 m3
LLW/MLLW-Oils (On-Spec/Off-spec):	0 m3	100 m3

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CONTRACT NO: 25003

2.3 Return of Waste

The Buyer understands and acknowledges that Perma-Fix must, in accordance with its Radioactive Materials License, retain the right to return Radioactive Waste, whether processed or unprocessed, to the generator; provided, however, that a) any such return of the Buyer's waste that otherwise meets the Perma-Fix waste acceptance guidelines will occur only in the event the State (Tennessee) exercises its regulatory authority under the Perma-Fix Radioactive Material License requiring such return, or b) any such return of Non-Conforming waste from the Buyer may be accomplished without regard to any such exercise of regulatory authority. Therefore, the Buyer hereby represents, warrants, and promises that it has the legal right and ability to accept, and will accept, the return of radioactive waste ,whether processed or unprocessed, to the generating facility, in the event the exercise of regulatory authority by the State requires such return or in the event Perma-Fix exercises its right to return non-conforming waste.

2.4 Award Notification

The Contractor is hereby notified that effective on October 11, 2004, the Contractor is awarded a firm fixed unit price type Contract for the delivery/performance of the item(s) above in accordance with all the requirements and conditions set forth or by reference attached herein.

3.0 Delivery/Performance

3.1 Term of Contract

The term of this Contract shall commence on the date of award and shall end on September 30, 2007, unless extended by the parties or unless terminated by other provisions of this Contract.

3.2 Terms and Conditions

The terms and conditions set forth in the Integrated Contractor Procurement Team (ICPT), Blanket Ordering Agreement, in Attachment B together with Special Provisions contained herein apply.

3.3 Authorized Personnel

Only the following named Contract individuals are authorized to make changes to this document:

Contract Specialist, Arthur T. Broady Contracts Manager, Michael Brubaker

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CONTINUATION PAGE CONTRACT NO: 25003

4.0 Contract Administration

4.1 Buyer's Mailing Address

Address all correspondence to:

Attn: Arthur T. Broady Mail Stop H7-10 Fluor Hanford P.O. Box 1000 Richland, Washington 99352

4.2 Estimated Billing

It is mandatory for continued acceptable performance that the Contractor provide monthly, to Fluor Hanford Accounts Payable, the best estimate of the total billable cost (invoiced plus invoiceable) from inception of the contract through the current calendar month end. This information must be provided in writing by email (preferred), fax, or mail by the 15th of each month. This data must be provided for each contract release until all payments are received and the contract is complete.

Email: ap accruals@rl.gov

Fax: (509) 373-6264

Mailing Address:

Fluor Hanford Inc. 2430 Stevens Drive PO Box 1000 Richland, WA 99352 Attn: Accruals MSIN G1-80

Monthly Contract-to-Date Cost Estimate Form can be obtained at the following Internet Address:

http://www.hanford.gov/pmm/downloads/download.htm

The following process shall be used on Invoices submitted to Fluor Hanford. Failure to do so may result in Delayed Payment or Returned Invoices.

General Requirements (Contracts)

o Submittal of an invoice constitutes Contractor's certification that materials, work and/or services have been provided, and invoiced amounts are, in accordance with the contract provisions and as provided in Attachment C.

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Fluor Hanford

CONTINUATION PAGE

CONTRACT NO: 25003

- o $\,$ Invoices may be submitted electronically in a format acceptable to Buyer (this is preferred).
 - NOTE when electronic invoices are to be used, contact the Contract Specialist for the proper format and submittal information (reference clause H098)
- o The invoice must clearly & legibly identify the Contractor's Name and Invoice Number as well as the Contract Number (#25003) and Release Number when assigned.
- o Each invoice should include the name and telephone number of a company representative available to respond to invoice questions.
- o Remittance will only be made to the remittance address on file for the contractor. Invoices from third parties or with different remittance instructions or addresses will not be processed.
- o $\,$ Questions or requests for exceptions should be addressed to the Contract Specialist.
- o The Contractor shall submit an original invoice and supporting documentation to the Buyer's Accounts Payable organization at the address below (unless otherwise directed in the contract):

Fluor Hanford Accounts Payable Mail Stop: G1-80 P.O. Box 1000 Richland, WA 99352

4.3 Payment Terms

The Contractor may submit requests for milestone progress payments of 50% of the fixed unit price for each unit of waste for which the Contractor has completed acceptance into the Contractor's facility. Documentation required by the Contractor for validation that subject milestone has been completed is returned of the Uniform Hazardous Waste Manifest (UHWM) signed by the waste receiver, and a letter depicting that the subject waste has been formally accepted for treatment at the Contractor's facility.

The Contractor may submit request for milestone progress payments of 40% of the fixed unit price for each unit of waste for which the Contractor has successfully treated to meet disposal requirements at Hanford's Mixed Waste Disposal Unit. Documentation required by the Contractor for validation that subject milestone has been completed is Buyer approval of the

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Fluor Hanford

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CONTINUATION PAGE

CONTRACT NO: 25003

treated waste acceptance documentation and issuance of the Buyer's R356 to the Contractor for each shipment of treated waste.

Exception: For waste treated through the Contractor's DSSI unit, the Contractor may submit request for final milestone progress payments of 50% of the fixed unit price for each unit of waste for which the Contractor has successfully treated through the unit. Documentation required by the Contractor for validation that subject milestone has been completed is the submittal of the Certificate of Destruction (CD) for the waste to the Buver.

The Contractor may submit request for milestone progress payments of 10% of the fixed unit price for each unit of waste for which the Contractor has shipped and accepted for disposal at the disposal facility.

4.4 Electronic Mail Capability

The Contractor shall provide and maintain Internet and electronic mail capability for the duration of the Contract. The Contractor email account shall be able to send and receive attached documents of up to 1/2 megabyte in size. Correspondence and Administrative messages concerning this contract will be conducted via email in current versions of Microsoft Office applications, ASCII text, RTF, PDF, ZIP and other commonly used file formats. In addition, information, data and forms may be posted on the Buyer's Internet web site for downloading by the contractor.

4.5 Closeout Certification, Fixed Price Contracts

Contractor shall properly execute and mail to the Buyer, the attached Final Release, within five working days from the last date services are provided hereunder and/or the date of the last shipment made hereunder. Final payment will not be made until this form is properly executed and received by the Buyer.

4.6 Contractor Submittals - Contract

The Contractor submittals identified herein on the Submittal Register shall be submitted by the Contractor using the Supplier Document Submittal Form (SDSF) (available at www.hanford.gov/pmm/downloads/download.htm). Instructions for completion of the SDSF are included with the form. The quantity, frequency and type of submittal shall agree with the requirements set forth on the Submittal Register. A Submittal Number, entered on the SDSF by the Contractor in accordance with the submittal register, shall be used to identify each submittal. Engineering controlled Vendor Information (VI) content shall be identified on the SDSF when indicated on the Submittal Register. SDSF forms may be copied for submittals with different

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submittal dates. When any submission is returned to the Contractor with a request for resubmission (i.e., marked as: "B" and "Resubmit - Yes"; or "C" Revise and Resubmit) the Contractor shall resubmit all corrected documents within the time specified on the resubmission notice or if no time is specified therein within ten (10) working days from the disposition date. New submittals shall require the Contractor to contact the Buyer if additional Submittal Numbers are required.

Changes to a Contractor's deliverables, that have not been accepted by FH as complete shall be re-submitted using the SDSF form and in accordance with a Contractor's FH approved Quality Assurance and/or Engineering Program.

5.0 Designation of Technical Representative

The Buyer hereby designates the following as the Buyer's Technical Representative, (BTR) for this Contract: Name/phone/mail stop: Dean Nester (509) 373-4155/T4-05.

The BTR is responsible for monitoring and providing technical guidance for this Contract and should be contacted regarding questions or problems of a technical nature. The BTR is also responsible for appropriate surveillance of the Contractors representative while on site. In no event, however, will an understanding or agreement, modification, change order, or any deviation from the terms of this Contract be effective or binding upon the Buyer unless formalized by proper Contract documents executed by the Contract Specialist prior to completion of this Contract. On all matters that pertain to Contract terms, the Contractor shall contact the Contract Specialist specified within this Contract. When in the opinion of the Contractor, the BTR requests or directs efforts outside the existing scope of the Contract, the Contractor shall

promptly notify the Contract Specialist in writing. The BTR does not possess any explicit, apparent or implied authority to modify the contract. No action should be taken until the Contract Specialist makes a determination and/or modifies the contract.

6.0 Electronic Funds Transfer of Invoice Payments

Electronic funds transfer of invoice payments is an available optional method of invoice payment by the Buyer. An "Authorization for Electronic Funds Transfer of Invoice Payments" form must be completed and returned before payments can be made. A copy of the form is available for downloading from the Buyer's Acquisition Internet Web page or from the Buyer.

7.0 Special Provisions

The provisions and attachments listed below are hereby incorporated into and made a part of this contract.

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Where appropriate, hyperlinks are provided for downloading the referenced document. Software for reading PDF files is available from a link provided on the Download page. [Download Provisions and Forms: http://www.hanford.gov/pmm/downloads/download.htm]

Special Provisions - The Service Contract Act of 1965 SP-6 Rev. 1, 1/29/2003 http://www.hanford.gov/pmm/downloads/Provisions/sp-6.pdf

8.0 List of Attachments

Attachment A - Statement of Work

Attachment B - Integrated Contractor Procurement Team (ICPT) Blanket Ordering

Agreement

Attachment C - Perma-Fix Price Schedule 2005-2007

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ATTACHMENT A

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

STATEMENT OF WORK
FOR
TREATMENT OF HANFORD'S MLLW-03
MIXED LOW LEVEL WASTE

FOR CONTRACT 25003

Attachment A
August 26, 2004
Statement of Work. Rev. 1

Statement of Work for Treatment of Hanford's MLLW-03 Mixed Low-Level Waste

Contract No. 25003

APPROVALS	PRINT NAME	SIGNATURE
Writer:	Dean Nester	Signature on file
Contract Specialist:	Art Broady	Signature on file

 $\label{eq:Attachment A} \mbox{ Attachment A Statement of Work. Rev. 1}$

STATEMENT OF WORK Rev. 1

1.0 OBJECTIVE

The purpose of this contract between Fluor Hanford (FH) [the Buyer] and the Contractor is to provide for the treatment of mixed low-level waste (MLLW) contaminated with various amounts and types of Resource Conservation and Recovery Act (RCRA) and/or Toxic Substance Control Act (TSCA) regulated waste constituents and radioactive isotopes. The Contractor shall treat MLLW at the Contractor's facility using treatment technologies capable of making the waste compliant for disposal. The

Contractor may choose the treatment method based on the physical and chemical constituents of the waste, applied waste codes, and as specified in the Land Disposal Restriction (LDR) notifications. The Contractor shall assure that the treated waste meets LDR standards and is acceptable for land disposal at the appropriate disposal site.

2.0 INTRODUCTION

MLLW has been generated at the Hanford Site and from some offsite facilities since the early 1980s. This waste inventory resides in RCRA and/or Toxic Substance Control Act (TSCA) compliant storage units at the Hanford Site. Additionally, MLLW will be routinely generated at Hanford as a result of the on-going cleanup mission. Various Hanford Site generators are forecasted to generate additional waste that will be shipped to a Hanford storage unit or will be sent directly to the Contractor's treatment unit.

3.0 SCOPE

3.1 Waste Description

Waste to be treated under this contract is designated as MLLW as determined by the Hanford Site Solid Waste Acceptance Criteria (HSSWAC) (Ref: HNF-EP-0063 Latest Revision). The MLLW is regulated primarily by RCRA, TSCA, Washington Dangerous Waste and/or CERCLA regulations. The Hanford Site identifier for the specific waste Treatability Group being offered under this contract is MLLW-03 (Organic Non-Debris) and is described in the Hanford Site Mixed Waste Land Disposal Restriction Report (ref: DOE/RL-2004-07, Rev-0). The common attribute for this Treatability Group is that the waste contains organic constituents that require destruction before the waste can be disposed. The waste may also contain non-organic constituents in with the organic constituents that may require treatment.

Additionally, on-specification and/or off-specification LLW oils meeting 40-CFR Part 279 are offered as waste to be treated under this contract.

The following is a basic summary of the waste to be treated:

3.1.1 Chemical/Ha:zardous Waste Characteristics

The constituents in the waste are regulated by RCRA (Title 40 CFR), TSCA (Title 40 CFR), and the Washington Dangerous Waste regulations (WAC 173-303). The waste can contain many different waste constituents. The waste constituent types and the concentration of the constituents vary greatly between individual waste packages. Waste shipped for treatment under this Contract will have one or more of the following waste codes:

RCRA Waste Code Groups: D001-D043 F001-F012, F039 P### & U### Coded Waste F020-F023 and F026-F028 (optional)*

TSCA:

PCBs (various concentrations and sources) Washington State Waste Codes: $\mbox{W001 (changing to WPCB)} \label{eq:wpcb}$

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WP01-03 WT01-02

 * Some of Hanford's stored MLLW is designated with F020-F023 and F026-F028 listed waste codes. Because of the treatment restrictions for this type of waste, treatment of waste containing these codes are optional in this Contract.

3.1.2 Physical Waste Characteristics

The physical characteristics of the waste to be provided under this contract consist of non-bulk liquids (i.e., labpacks), particulates, absorbed liquids, sludges, resins and soil matrices. The waste may also include debris waste items (e.g., plastic sheeting, gloves, metal, wood, etc.) packaged in with the non-debris waste; however, the quantity of debris waste items will be less than 50% by volume. Most of the waste packages will have some adsorbent materials (e.g., particulate, conweb-pads, pigs, etc) placed in with the waste. It is expected that some of the adsorbent material will have been in direct contact with the waste.

Since the packages of non-bulk liquids (labpacks) have been residing in non-climate controlled storage, it is probable that some of the inner waste receptacles have leaked and/or lost integrity. In these cases, the liquids would have come into contact with the absorbents or other waste items in the package. In these cases the absorbents or other waste items will need to be managed appropriately. Additionally, the majority of the non-bulk liquid packages do not have specific inventory sheets (package slips) depicting inner

container ID numbers; or if there are inventory sheets, it is probable that the ID numbers on the inner containers are illegible do to being in storage in some cases over ten years.

3.1.3 Radiological Waste Characteristics

The DOE, as authorized by the Atomic Energy Act (AEA), manages the radioactive constituents in the waste. Some or all of the radiological constituents tabulated in the HSSWAC Appendix A may be present in the waste, including alpha emitting radionuclides.

The activity concentration in individual waste packages will not exceed Category 3 limits as defined in the HSSWAC. Transuranic radionuclides in the waste matrix will not exceed 100 nCi/g (i.e., no "TRU" waste is in the scope of this Contract) as defined in the HSSWAC.

Radiological dose rates: for waste packages shipped under this Contract, the maximum exterior surface dose rate will not exceed 100 mrem/hr. However, the dose rate of the waste inside some of these waste packages may exceed 100 mrem/hr after the waste is removed from the containers. The Contractor shall have the capability to accept and handle these wastes. If waste in a container is suspected of exceeding 200 mrem/hr, the Buyer will notify the Contractor in advance of the actual waste shipment. :For waste packages that exceed 100 mrem/hr exterior surface dose rate, the Buyer will submit a request to the Contractor for approval to ship such waste.

3.1.4 Waste Packaging

The waste is packaged in various sized drums ranging from 5-gal to 110-gal with 55-gal being predominate, and a few boxes up to 9.5'(0 x 5.5'(w) x 5.5'(h) in size. The waste has been packaged for storage in Hanford's Central Waste Complex (CWC). Some of the waste packages will be overpacked into larger containers due to either inner container integrity issues or to meet DOT packaging requirements. Package gross weights for drums will normally not exceed 1,000 lbs but a few may exceed this weight. Boxes can weight up to 12,000 lbs.

3.1.5 LLW/MLLW Oils (On-Spec/Off-spec)

Hanford has generated various types of oils (engine oils, hydraulic fluids, turbine oils, etc.) that either have measurable radioactivity or were generated in a radioactive contamination area and cannot be free released (i.e., no measurable radioactivity but due to a DOE moratorium the waste cannot be managed as non-radioactive). These oils will meet on-specification or off-specification used oil requirements per 40-CFR Part 279, and can be burned for energy recovery.

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 $\begin{array}{c} \text{Attachment A} \\ \text{Statement of Work. Rev. 1} \end{array}$

3.2 Contractor Responsibilities

The Contractor shall provide all treatment services (e.g., personnel, facilities, equipment, permits and licenses) necessary for proper treatment of the waste specified in Section 3.1 above.

3.2.1 General Requirements

The Contractor has specified the M&EC Facility located in Oak Ridge, Tennessee as being the primary receiving/treatment facility for the waste to be received under this contract. Subject facility shall be RCRA permitted by the EPA or an appropriately authorized state agency (or be operating under interim status). In addition, the Contractor's facility shall possess the necessary permits and/or authorizations to receive and treat TSCA-PCB wastes, and they shall have a Radioactive Material License from the Nuclear Regulatory Commission (or from an authorized state agency). The Contractor's facility shall be approved by the EPA to receive Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) waste which has been authorized to be managed off-unit by a CERCLA determination from the Buyer. The receiving/treatment facility shall be owned or operated by the Contractor, and the facility shall be located within the United States borders. The Contractor's treatment services shall be operated in accordance with all applicable local, state, and federal laws and regulations.

All facilities (other than the one designated receiving/treatment facility) used during the management of the Buyer's waste will be considered a subcontractor to the Contractor (even if it is a subdivision of the primary contractor).

- o The Contractor is responsible for ensuring that subcontractors meet all requirements of this Contract.
- o The Contractor shall be responsible for manifesting and dispersing the waste to the final disposal facilities (if necessary).
- o The Contractor or their subcontractors shall sign as the generator on the new manifest.
- o $\,\,\,\,\,\,\,$ The Contractor shall ensure that CERCLA waste is shipped to

EPA approved CERCLA facilities.

o Subcontractors utilized under the performance of this Contract shall meet all applicable Terms and Conditions and the limitations of this Statement of Work.

If the Contractor revises their RCRA Treatment and Storage permit(s), Radioactive Material License(s), and/or TSCA authorizations; the Contractor shall submit these revisions to the Buyer within 15 days after the revisions occurred.

Along with the treatment equipment and facility, the Contractor shall provide technical expertise and processes needed to successfully perform waste treatment. Required technical expertise and processes include, but are not limited to: pre-treatment waste batching, waste sorting and aggregation, size reduction, treated waste form testing, immobilization agent formulations (as applicable), sampling protocols, and process control parameters to meet treatment requirements of this contract. The Buyer will not perform pre-treatment activities to make the waste more amenable for acceptance into the Contractor's facility.

The Contractor shall utilize treatment technologies recognized as applicable to meeting the treatment requirements/standards as specified in 40 CFR 268.40 (RCRA), 40 CFR 761 (TSCA), and WAC 173-303-140 (for waste to be disposed of in the State of Washington). Alternative and/or equivalent treatment technologies such as alternative treatment standards for hazardous debris (40 CFR 268.45), alternative LDR treatment standards for contaminated soil (40 CFR 268.49), or alternative treatment methods approved by the applicable state per RCRA 40 CFR 268.42(b) may be utilized where authorized.

The Contractor shall receive the MLLW on an "as needed" schedule to be determined by the Buyer's Technical Representative (BTR).

After accepting the Buyer's waste for treatment, the Contractor shall provide a final treated waste to the Buyer and/or approved disposal unit that meets the requirements of this contract.

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- o The Contractor shall control, document and evaluate all treated waste that does not meet the requirements of this contract and provide proper corrective action at no additional cost to the Buyer.
- o The Contractor is responsible to obtain additional waste characterization information that is specific/unique to acceptance and treatment of the waste at the Contractor's facility.

Secondary waste generated by the Contractor from the treatment of the Buyer's waste can be managed either as the Contractor's waste (Contractor responsible for disposal), processed appropriately and incorporated in with the Buyer's treated waste, or processed and packaged as its own waste stream for acceptance back at the Buyer's disposal units provided it meets the HSSWAC disposal requirements. Secondary waste that is authorized for inclusion shall be limited to step-off-pad waste, contaminated sampling equipment, treatment consumables, and radioactively contaminated packaging materials that cannot be reused/recycled. Facility generated waste such as HEPA filters, bag-house residues/equipment, mixing and size-reducing equipment, sump wastes, or other equipment which has inventories of chemical and/or radiological constituents from other then the Buyer's waste is not acceptable for disposal back at the Buyer' facilities. Other secondary waste may be included upon approval by the Buyer.

Empty waste packages from the treatment of the Buyer's waste under this Contract shall be managed appropriately.

- o If the containers are in good condition and meet DOT transportation requirements, the Contractor may render containers RCRA "empty," and then reuse the containers for disposal of Hanford Site treated waste residues. At a minimum, all packages shall be made "empty" per RCRA 40- CFR 261.7, WAC 173-303-160 and/or 40 CFR 761.79(c) as applicable.
- o If the containers are not reused for Hanford Site treated waste residues, they can be managed either as the Contractor's waste (Contractor responsible for disposal), processed appropriately and incorporated in with the Buyer's treated waste, or processed and packaged as its own waste stream for acceptance back at the Buyer's disposal units provided it meets the HSSWAC disposal requirements.

The Contractor shall notify the Buyer immediately if the Contractor discovers any significant manifest or shipping discrepancies upon receipt of the waste. The Contractor and Buyer must attempt to reconcile the discrepancy within ten (10) calendar days after the Contractor receives the waste. If the discrepancy cannot be resolved within this period, the Contractor shall return the waste to the

Hanford Site without delay.

The Contractor shall be responsible for all spills or leaks of waste during the performance of this Contract that occurs as a result of negligence on the part of the Contractor or the Contractor's representative. The Contractor shall notify the Buyer of all spills or leaks of the Buyer's waste to the BTR within eight (8) hours of their discovery. A written follow-up report shall be submitted to the BTR not later than seven (7) days after the initial report. The written report shall be in narrative form and, as a minimum, shall include the following:

- o Cause of spill
- Description of item spilled (including identity, chemical and radiological composition, profile sheet number, manifest number, etc).
- O Quantity spilled (indicate whether or not it was a Reportable Ouantity Spill)
- o Exact time and location of spill, including a description of the area involved.
- o Description of containment and cleanup procedures
- o Level of decontamination achieved in the clean-up
- Description of any reports made to regulatory/emergency response agencies (identify agency, contact, time of report, and content of report)
- Description of any reports/information given to news media organizations
- Discussion of possible long-term cleanup actions or environmental effects
- o Certification of clean-up per 40 CFR 761 (for PCB waste)

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3.2.2 Hanford Site Treated Waste Acceptance and Disposal Requirements

For treated waste that will be disposed at the Hanford Site, the Contractor shall produce treated waste meeting the Hanford Site disposal acceptance requirements for MLLW and/or LLW; this includes meeting the radiological stabilization and burial ground subsidence requirements. The Hanford Site disposal acceptance requirements are specified in the Hanford Site Solid Waste Acceptance Criteria (HSSWAC). This document can be found at http://ww\v.hanford.govAvastemqt/wac/.

The Contractor shall characterize treated waste with sufficient accuracy to permit proper handling, storage, and disposal at the Buyer's site. The Contractor shall ensure that the characterization accurately documents the actual physical and chemical characteristics and radionuclide content of the treated waste during all stages of the waste management process.

The Contractor shall have a documented methodology for meeting the applicable treatment requirements specified in this Contract. This methodology can be specified in the Contractor's RCRA treatment Permit, or by documented acknowledgement from the Washington Department of Ecology (for waste to be disposed of at Hanford), and/or the EPA; that the Contractor's treatment methodology meets the intended treatment and performance objectives. This methodology can be communicated to the Buyer in the Waste Profile submittals to the Buyer for each treated waste stream being returned to the Buyer. Radiological Disposal Requirements

- O The Contractor shall maintain the integrity of the Hanford Site's radionuclide inventory during all phases of waste shipment, storage, treatment, analysis, and treated waste return. At a minimum, the Contractor shall segregate subject waste from other clients' waste, and decontaminate treatment equipment prior to and after treating subject waste.
- o If treatment of waste by the Contractor could result in the concentration of radionuclides because the waste contains radionuclides including transuranic constituents, the Contractor shall administratively control the waste feed so that no TRU waste (i.e., greater than 100 nCi/g of . transuranic) is generated.
- Treated waste to be disposed of at Hanford shall meet the Hanford Site radiological disposal requirements. At a minimum, Category 3 (CAT3) waste and waste exceeding mobile radionuclide trigger limits shall qualify as a stabilized waste form per HSSWAC Section 3.4.1 prior to being received by the Buyer. Greater Than Category 3 (GTC3) shall require a special analysis by the Buyer to demonstrate that the LLBG performance criteria are met.

- o Waste package dose rates shall be maintained ALARA. For treated waste packages being returned for disposal, radiological "hot spots" on the external surfaces of the waste packages shall not exceed 1000 mrem/hr on contact.
- o The concentration of radionuclides in the treated waste may be determined by either direct methods (waste analysis, non-destructive analysis) or by radionuclide material accountability (mass balance).

Waste Sampling & Analysis

- O The Contractor shall perform waste analysis for treated waste being certified as meeting LDR concentration-based standards. The Contractor shall perform the analysis on samples of the actual treated waste being disposed. The Contractor shall specify the sampling methodology and frequency that is used when sampling and analysis is used to determine if a waste meets LDR requirements. The sampling criteria shall meet the Contractor's Waste Analysis Plan (WAP) for waste treatment and the disposal facility's WAP for waste disposal.
- o The Contractor shall perform sampling and analysis activities in compliance with the Contractor's permits and licenses, 40 CFR 268.7 (RCRA), 40 CFR 761 Subparts M through R (TSCA), WAC 173-303 and test methods defined in EPA SW-846, Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods.
- o The Contractor shall have established a "chain of custody" procedure for laboratory analysis samples in accordance with SW-846 methods. Sample analysis reports shall be clearly traceable back to specific waste packages, shipments and manifests. An authorized representative of the Contractor shall sign and certify reports documenting laboratory analyses.

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- o The Buyer reserves the right to be present during sampling and analysis activities. Arrangements for having the Buyer present during sampling and analysis activities shall be determined during the Contractor's treatment planning stage.
- o For waste that has been treated to one of the Technology Based treatment standards specified in 40 CFR 268.40 or Alternative Treatment Standards for Hazardous Debris specified in 40 CFR 268.45, analysis of the treated waste is not required. However, the Contractor shall provide supportive evidence that the performance and/or design and operating standards have been met as a basis for LDR certification.

Waste Verifications

- o As part of the treated waste acceptance process for waste being disposed at the Hanford Site, a percentage of the Contractor's treated waste will be physically verified prior to acceptance back for disposal. The verification rate is based on the treatment Contractor's waste acceptance performance. The initial verification rate will be established upon the Contractor's submittal of each treated waste Profile. This rate can decrease or increase depending on the Contractor's evaluated performance.
- O The Contractor shall provide assistance to the Buyer with verification of container contents prior to processing the waste in an "unverifiable waste form" (e.g., grouting, packaging into shield containers...etc). TheTh Contractor shall provide a one (1) month notice prior to verification activities to ensure availability of verification personnel. Notification less than one (1) month may result in a delay of work due to scheduling conflicts.
- The Buyer's personnel will strictly comply with all applicable Contractor safety requirements while performing work at the Contractor's facility. The Buyer and the Contractor shall both have the authority to "stop work" whenever a significant safety concern is identified. Should this occur, a job hazard analysis shall be performed to identify and mitigate hazards specific to the verification work activity. A copy of the job hazard analysis report shall be provided to the BTR before waste verification work begins.

Final Treated Waste Certification

The Contractor shall certify that each batch or lot of treated waste meets the requirements set-forth in this Contract. The Contractor shall submit to the Buyer a treated waste certification shipment package for each shipment of treated. At a minimum, the shipment package shall include the Container Data Sheets (CDSs), LDR Notification/Certification, waste designation sheets/rationale, analysis data (as applicable), and acceptable knowledge information supporting LDR Certifications. The Buyer will accept or reject the waste

certification shipment package within fifteen (15) working days from the time the waste documentation package is received by the Buyer. Upon approval of the waste certification shipment package, the Buyer will issue the Contractor a shipment authorization (referred to as the R356 Form).

Treated Waste Transportation

- o The Contractor is responsible for the transportation of the treated waste. This includes waste packaging, preparing shipping documentation, arraigning for a shipping transporter, loading the waste, and authorizing the shipment.
- o Shipments shall be in full compliance with DOT requirements.
- o Shipping containers shall be in good condition free of scaling rust, dents, creases, loose lid fastener components, and meet radiological acceptance requirements for the Hanford Site.
- every waste package shall be at least 90% full and be properly closed. Treated waste packages shall be of size, shape and weight that can be readily/safely lifted and moved by means of conventional forklift type vehicles. The maximum gross weight of a package shall not exceed 16,000 pounds.
- The Buyer requires a minimum thirty (30) days notice from the Contractor to schedule the shipment into the Buyer's facilities. Shipments cannot be scheduled into Hanford until the Buyer has approved the Contractor's shipment documentation. The Buyer's facilities are open to ship and receive waste between the hours of 8:00 am to 3:00 pm Monday through Thursday and on

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Fridays on a limited basis. To allow for enough time to offload inbound waste shipments, the latest time that a shipment will be allowed to enter the Hanford Site is 2:00 pm. The Contractor may request to make treated waste shipments at other times upon Buyer approval.

The Buyer will notify the Contractor immediately if upon receipt inspection of the treated waste the Buyer discovers any significant manifest or shipping paper discrepancy. The Contractor and Buyer must attempt to reconcile the discrepancy within ten (10) calendar days after receiving the treated waste. If the discrepancy cannot be resolved within this period, the Buyer has the right to return the waste back to the Contractor.

3.3 Buyer (FH) Responsibilities

The Buyer will furnish or cause to be furnished to the Contractor, without cost, the following services:

- The Buyer will prepare shipment documentation for each shipment of waste sent to the Contractor. The Contractor may review and approve shipment documentation prepared by the Buyer as necessary with in one week of submittal to the Contractor, and prior to the waste leaving the Hanford Site.
- The Buyer will arrange the transportation for waste being shipped to the Contractor's treatment unit(s). Loading and securing the waste will be done at the Hanford Site utilizing Site personnel (Operators, Radiation Control Technicians, craft, Shipper, etc.) in accordance with all local, state, and federal transportation regulations. The Contractor shall identify to the Buyer all-applicable transportation permits for receipt of the waste into the Contractor's treatment unit(s).
- O The Buyer will review the waste designation/characterization information of each waste package prior to shipping the waste to the Contractor. The Buyer is responsible for providing waste characterization information needed to meet Department of Transportation (DOT), RCRA, TSCA, and Washington State Dangerous Waste Regulation requirements.
- The Buyer may ship waste to the Contractor from various locations at the Hanford Site. Shipments would be full tractor-trailer loads to the extent possible. The Contractor shall be capable of receiving all the various waste types specified in this contract on a regular basis in order to accommodate waste that needs to be shipped from less-than-90-day accumulation areas at the Hanford Site. The Buyer will ship waste with the same or similar treatment requirements together when it is possible to do so. The Buyer will use waste shipment campaigns for larger waste streams that originate from the Hanford Site TSDs. The Contractor and the Buyer will jointly establish and maintain the treatment schedules.
- o The Buyer will provide LDR Notifications/Certifications,
 Uniform Hazardous Waste Manifest and Radioactive Waste
 Manifest (NRC 540/541) for each waste shipment. The Buyer may
 also provide additional shipment documentation required for
 unit specific acceptance requirements in the Contractor's

RCRA/TSCA Permit(s) and/or Radioactive Material License (RML). The Buyer will submit an electronic copy of the NRC 541, and electronic data files covering basic physical, chemical, radiological and packaging attributes of the waste on a shipment. The electronic data files will be in Microsoft Excel and be submitted via internet email.

The Buyer will provide the Contractor with the estimated invoicable pre-treatment waste volume (m3) of each waste package offered for treatment. For this Contract, waste volumes to be treated will be based on the nominal capacity of the primary waste containers at the time waste is consigned to the treatment Contractor. Volumes will be specified on the applicable shipping or pre-notification paperwork. Overpacked containers used solely to meet shipping requirements are not considered to be the primary container. See the following examples for typical container waste volumes (not all inclusive):

 55-Gal Drum:
 0.208 cubic meters

 85-Gal Drum:
 0.322 cubic meters

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Attachment A Statement of Work. Rev. 1

- o If waste in a container is suspected of exceeding 200 mrem/hr, the Buyer will notify the Contractor in advance of the actual waste shipment. For waste packages that exceed 100 mrem/hr exterior surface dose rate, the Buyer will submit a request to the Contractor for approval to ship such waste.
- o The Buyer will properly package, mark, and label all wastes covered by the Contract prior to waste pickup by the Contractor. DOT compliance is rigidly enforced and is expected of the Contractor and all transporters.
- The Buyer's Transportation Department will inspect and validate all waste shipments and sign the manifest.
- 3.4 Buyer Provided Equipment or Materials

None

3.5 Critical Assumptions

The tasks and deliverables described in this Statement of Work are based on the following assumptions:

- o The Contractor shall provide all treatment services necessary for the proper treatment of the waste as described in Sections 3.1.
- o The Buyer will not perform pre-treatment or additional waste analysis activities to make the waste more amenable for acceptance into Contractor's facility.
- Non-bulk liquid packages may not have specific inner container inventory sheets; however, overall waste package inventory summaries will be provided to the Contractor.
- o The Buyer will provide the Contractor with a very broad mix of physical and chemical waste types for treatment.
- The treated waste will be returned to the Buyer in accordance with Section 3.2.2 (exception: treatment residues from the Contractor's DSSI unit will be disposed of per the Contractor's commercial disposal contracts.
- o Transportation of the waste to the Contractor's facility is the responsibility of the Buyer.
- o Transportation of the treated waste to the disposal unit is the responsibility of the Contractor.
- 3.6 DOE Requirements, National Consensus Codes and Standards
 - o 10 CFR 830.122, Nuclear Safety Management, Subpart A, General Provisions, Section 830.122, Quality Assurance Criteria.
 - o 10 CFR 1021 Department of Energy, National Environmental Policy Act Implementing Procedures.
 - o 40 CFR, U.S. Environmental Protection Agency Regulations.
 - o 49 CFR Subchapter C, Sections 171-180, U.S. Department of Transportation, Hazardous Materials Regulation.
 - o $\,$ AEA, Atomic Energy Act of 1954, as amended, 42 USC 2011, et

- o EPA, SW-846 Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods, U.S. Environmental Protection Agency, Most Current Version.
- o RCRA, Resource Conservation and Recovery Act of 1976, 42 USC 6901 et seq.
- o WAC 173-303, State of Washington Administrative Code "Dangerous Waste Regulations," as amended.
- o CERCLA, Comprehensive Environmental Response, Compensation and Liability Act. (40 CFR 300).
- o TSCA, Toxic Substance Control Act. (40 CFR 761)

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 $\begin{array}{c} \text{Attachment A} \\ \text{Statement of Work. Rev. 1} \end{array}$

- o RCRA, Resource Conservation and Recovery Act of 1976, 42 USC 6901 et seg.
- o WAC 173-303, State of Washington Administrative Code "Dangerous Waste Regulations," as amended.
- o CERCLA, Comprehensive Environmental Response, Compensation and Liability Act. (40 CFR 300).
- o TSCA, Toxic Substance Control Act. (40 CFR 761)
- 3.1 Fluor Hanford Documents and Project Specific Specifications

Fluor Hanford, HNF-EP-0063, Revision 10, Hanford Site Solid Waste Acceptance Criteria, Fluor Hanford, Richland, Washington, February 2004, or most recent revision applies (available on the Internet at http://www.hanford.gov/wastemgt/wac).

3.2 Configuration Management Requirements

Changes and/or modifications to this SOW are controlled through Fluor Procurement Department and internal procedures.

3.3 Work Control Requirements

 $\ensuremath{\mathrm{N/A}}$ - Offsite work activity. Onsite interfaces are controlled by existing internal FH Procedures.

3.4 Site Requirements

If the Contractor needs to visit the Hanford Site, the Buyer will provide Hanford Site specific training (e.g., HGET, FEHIC) to representatives of the Contractor to allow access to the Hanford Site and specific Buyer's facilities that are utilized in Contract performance. Access to the Hanford Site requires a Site access badge. The Buyer will arrange for temporary access badges for Contractor representatives when required.

3.5 Contractor Personnel Requirements

The Contractor shall provide technical expertise and processes needed to successfully perform waste treatment. Technical expertise and processes include, but are not limited to:

- o Pre-treatment waste batching,
- o Treated waste form testing,
- o Immobilization agent formulations (as applicable),
- o Sampling protocols, and
- o Process control parameters.

The Contractor's transportation personnel shall be trained in proper waste handling procedures, personal protection, regulatory compliance, and spill emergency response. The Contractor personnel shall be responsible for properly securing and transporting the waste in accordance with all State and Federal transportation regulations.

The Contractor shall develop, implement, and maintain a written Training Plan that complies with 40 CFR 260-279 and the Contractor's governing permits and license. The Contractor shall maintain adequate staff that is trained to the requirements of the training plan to accomplish the requirements of this Contract.

The Contractor shall provide facility specific training to representatives of the Buyer to allow access to the Contractor's facility where the treatment services are being performed (on an as needed basis, e.g., Waste Verifiers).

3.12.3 Radiological Requirements

Radiological controls for the Onsite interfaces are implemented by existing internal procedures. The Contractor shall implement their radiological controls through their Radioactive Material License and internal procedures.

3.12.4 Quality Requirements

The Contractor shall develop, implement, and maintain a written Quality Assurance Program (QAP) that complies with 10 CFR 830.122, Quality Assurance Criteria. The Contractor shall submit a copy of their Quality Assurance Program Plan (QAPP) to the Buyer upon proposal submittal to the Buyer.

- The Contractor shall require sub-tier contractors, if any, to meet Ouality Assurance Program requirements specified above that are applicable to the scope of subcontracted work. This "flow down" of requirements shall be documented in procurement documents between the Contractor and sub-tier contractor.
- Laboratories utilized by the Contractor for waste analysis under this Contract shall have a fully documented and implemented Quality Assurance Program Plan (QAPP) as specified under the requirements of SW-846. The Buyer may request a copy of the laboratory's QAPP from the Contractor for review.
- For treated waste disposed at Hanford, the laboratory (ies) utilized for treated waste analysis under this Contract shall be Washington State certified. The Contractor shall submit a copy of the laboratory(ies) Washington State certification to the Buyer when submitting laboratory analysis data for treated waste shipments (as applicable).
- Non-Conformance Reports shall be developed that details the control, evaluation, and corrective action for treated waste that is found to not meet the requirements of this Contract after initial treatment. The Contractor shall generate a non-conformance report within fifteen (15) working days for each container, lot or batch that is determined to not comply with the requirements of the Contract. The Contractor shall describe methods to disposition the non-conforming material and prevent repeated incidents of non-conformance in the report. A copy of the non-conformance reports, and the results of the follow-up actions, will be transmitted to the Buyer $% \left(1\right) =\left(1\right) +\left(1\right)$ within five (5) working days of the completion of the report. The Buyer's concurrence with the disposition of the non-conforming material is required prior to shipment of the treated waste to the Buyer.

4.0 DELIVERABLES, REPORTING REQUIREMENTS, and COORDINATION MEETINGS

4.1 Deliverables and Acceptance Requirements

The treated waste residues shall be returned back to the Buyer in full compliance with the Hanford Site waste acceptance disposal and/or storage requirements (as applicable). As an alternative, if the agreed upon disposal facility for the treated waste is another DOE-approved facility, the Contractor shall meet the waste acceptance criteria for the alternative disposal facility.

4.2 Coordination Meetings and Reporting Requirements

The Buyer and Contractor shall meet (in person or via telecom) at a minimum once a month to discuss technical and contractual issues. During subject meeting, the Contractor shall update the Buyer on the treatment schedule and when they anticipate needing Buyer verifications to be performed and the submittal of treated waste shipment documentation to the Buyer for approval. Other data submission may be required which are mutually agreed upon between the Buyer and Contractor as the performance of the work is progressing.

The performance periods for this Contract are as follows:

Base Contract: October 1, 2004 through September 30, 2006.

Attachment A Statement of Work. Rev. 1

FY2007 Option Year: October 2006 through September 30, 2007.

The Contractor shall treat and return the treated waste residues back to the Buyer within nine (9) months of initial receipt of the waste at the Contractor's facility. For waste treated at the Contractor's DSSI unit, the Contractor shall have treated and submitted the corresponding Certificate of Destruction to the Buyer within nine (9) months of initial receipt of the waste at the Contractor's facility.

The Contractor shall work with the Buyer to establish and maintain a monthly treatment schedule that accommodates the Buyer's waste treatment requirements for the Contract performing periods. The treatment schedule shall depict, at a minimum, when treatment of the Buyer's waste is expected to take place, when treated waste verifications by the Buyer will be needed, and when treated waste shipment documentation submittals will take place. The Contractor shall submit an updated schedule to the Buyer during the first week of each month.

The Buyer participates in the Department of Energy's Consolidated Audit Program (DOECAP) audit process and relies on DOECAP audits to establish approved TSDFs for the DOE Complex to utilize. Currently, the Contractor is qualified as a treatment provider under DOECAP. However, the Buyer reserves the right to inspect and/or audit the Contractor's and subcontractor's facilities should a safety or regulatory incident(s) occur that affects the Buyer's waste. The Contractor shall allow the Buyer access to their facilities and personnel to support the inspection and/or audit. Resulting inspection and audit reports may be shared with the DOE. Depending on the nature of the safety or regulatory incident(s), the inspection and/or audit may invoke corrective actions which could force a work stoppage on the Buyer's waste. The Contractor could be required to perform corrective actions before additional waste from the Buyer is treated or returned back to the Hanford Site for disposal. Should the safety or regulatory incident(s) be of a significant level or severity, the Buyer reserves the right to terminate this Contract, in whole or in part, for convenience or default pursuant to the Termination provisions in the Contract.

Records and Reports

- O The Contractor shall maintain all records associated with the Buyer's wastes (including but not limited to Contractor's sample analysis results) using a method compliant with the requirements specified in 40 CFR 260-279, and all other applicable federal, state, or local regulations. All documents, procedures, and applicable requirements for record keeping are subject to audit by the Buyer.
- The Contractor shall establish and maintain a historical record of waste received, generated, treated, stored, and shipped at the facilities under its cognizance. The data maintained shall include all data necessary to show that the waste was properly classified, treated, stored, and shipped. The data maintained in the system shall be based on the data recorded on waste manifests. At a minimum, the following data will be included for each container of waste:
 - > Waste physical and chemical characteristics;
 - > Weight of the waste (total of waste and any solidification or absorbent media);
 - Other data necessary to demonstrate compliance with waste acceptance criteria;
 - > Major radionuclides and their concentrations;
 - > Packaging date, package gross weight, and nominal package
 volume;
 - > All analytical and test data needed to verify treated waste performance for certification and disposal.
- o The Contractor shall maintain waste manifest records for waste received by the Contractor and for treated waste returned back to the Buyer and/or approved disposal unit. The Contractor shall keep waste manifests as permanent records.

12

Submittal Register: Treatment of Hanford's MLL W-03 Mixed Low-Level Waste, FH Contract #25003

The Contractor shall meet the required schedule and provide the documents specified in accordance with the following submittals.

<TABLE>

<c> 1. Submittal</c>	<c> 2. No. of Copies*</c>	<c> 3. Submittal Type</c>	<c> 4. Format</c>	<c> 5. Document Family(ies)</c>	<c> 6. Description / Document Title</c>
1	Е	ACC	Gen	PROJ	The Contractor shall notify the Buyer immediately if the Contractor discovers any significant manifest or shipping discrepancies upon receipt of the waste.
2	E	ACC	Gen	PROJ	The Contractor shall notify the Buyer of all spills or leaks of the Buyer's waste within eight (8) hours of discovery. A written follow-up report shall be submitted to the BTR not later than seven (7) days after the initial report.
3	E	APP	PDF	PROJ	The Contractor shall certify that each batch or lot of treated waste

each shipment of treated waste. At a minimum, the shipment package shall include the Container Data Sheets (CDSs), LDR Notification/Certification, waste designation sheets/rationale, analysis data (as applicable), and acceptable knowledge information supporting

4	Е	APP	Gen	PROJ	Within fifteen (15) days after the treated waste has been disposed, the Contractor shall submit to the Buyer a Certificate of Treatment, Disposal, or Destruction (CT/D) signed by an authorized officer of the company.
5	1	ACC	Gen	QAC	The Contractor shall submit a copy of the laboratory(ies) Washington State certification to the Buyer when submitting laboratory analysis data for treated waste shipments (as applicable).
6	Е	АРР	Gen	QAC	The Contractor shall generate a non-conformance report within fifteen (15) working days for each container, lot or batch that is determined to not comply with the requirements of the Contract. The Contractor shall describe methods to disposition the non-conforming material and prevent repeated incidents of non-conformance in the report. A copy of the non-conformance report, and the results of the follow-up actions, will be transmitted to the Buyer within five (5) working days of the completion of the report. The Buyer's concurrence with the disposition of the non-conforming material is required prior to shipment of the treated waste to the Buyer.
7	E	ACC	PDF	PROJ	The Contractor shall submit a monthly treatment schedule to the Buyer.

LDR Certifications.

< /	I ADPF>

<TABLE> <CAPTION>

waste shipment

 <S>
 <C>
 <C>

 7.
 8.
 9.

 Submittal
 Buyer Review
 SOW

 Date
 Time (Work
 Paragraph or Req.

 C(calendar
 Days)
 Reference

As Required

As Required

As 10 days 3.3.1

Specified in the SOW

For each 15 days 3.3.2

treated

1 5 days n/a 3.3.3
after waste
has been
disposed

For each 15 days 3.14.4
treated
waste
shipment

For each 5 days 3.14.4
treated

waste-non-conformance

Monthly 5 days 6.0
during the
Contract
performance
periods.
</TABLE>

ATTACHMENT B

INTEGRATED CONTRACTOR PROCUREMENT TEAM (ICPT) PROVISIONS

FOR CONTRACT 25003

Contract No. 25003

Perma-Fix Environmental Services, Inc.
August 24, 2004

ATTACHMENT B

BASIC ORDERING AGREEMENT
GENERAL TERMS AND CONDITIONS FOR COMMERCIAL ITEMS AND SERVICES
DOE CONTRACTORS (05/01)

1. DEFINITIONS

The following terms shall have the meanings below:

- (a) Government means the United States of America and includes the U.S. Department of Energy (DOE) or any duly authorized representative thereof.
- (b) Seller means the person or organization that has entered into this Basic Ordering Agreement (BOA).
- (c) Company means any DOE Contractor and authorized Subcontractor utilizing the $\ensuremath{\mathsf{BOA}}\xspace$.
- (d) Item means "commercial items or services" and "commercial component", as defined in FAR 52.202-1.
- (e) Order means individual requests for Items or Services (hereinafter referred to as "Item") issued under this BOA.
- (f) Authorized Subcontractor means a subcontractor holding an active subcontract issued by a DOE Contractor.
- (g) BOA Procurement Representative means the person responsible for negotiating and administrating the BOA
- (h) Order Procurement Representative means the person responsible for negotiating and administration of the respective Order.
- (i) Site Specific Terms and Conditions means those unique requirements of the Company issuing Orders under this BOA which will supplement these general terms and conditions.

2. ORDER OF PRECEDENCE

Any inconsistencies shall be resolved in accordance with the following descending order of precedence: (1) item description, (2) face of the Order, (3) Site Specific Terms and Conditions, (4) face of the BOA, and (5) the BOA general terms and conditions.

3. TITLE AND ADMINISTRATION

All property rights and interests resulting from this BOA and Orders shall pass directly from Seller to the Government. Company shall make payments under Orders from funds advanced by the Government and agreed to be advanced by DOE, and not from its own assets. The Company may assign the BOA and Orders to DOE or its designee, and in case of such transfer and notice thereof to Seller, Company shall have no further responsibilities hereunder.

4. ACCEPTANCE OF TERMS AND CONDITIONS

Seller, by signing the BOA or Orders or delivering the items identified therein, agrees to comply with all the terms and conditions, all specifications and all other documents that this BOA or Order incorporates by reference or attachment. Company hereby objects to any terms and conditions contained in any acknowledgment of the BOA or Order that are different from or in addition to those

Contract No. 25003

Perma-Fix Environmental Services, Inc. August 24, 2004

mentioned in this document. Failure of Company to enforce any of the provisions of the BOA or Order shall not be construed as evidence to interpret the requirements of the BOA or Order, nor a waiver of any requirement, nor of the right of Company to enforce each and every provision. All rights and obligations shall survive final performance of the BOA or any Order thereunder.

5. WARRANTY

Seller expressly warrants that items delivered under the Orders shall be in accordance with Seller's affirmation, description, sample, or model and compliant with all requirements of the BOA and Order. The warranty shall begin upon acceptance and extend for a period of (1) the manufacturer's warranty period or six months, whichever is longer, if Seller is not the manufacturer and has not modified the item or (2) one year or the manufacturer's warranty period, whichever is longer, if Seller is the manufacturer, of the item or has modified it. If any nonconformity with

the item appears within that time, Seller shall promptly repair or replace such items or reperform services. Transportation of replacement items and return of nonconforming items and repeat performance of services shall be at Seller's expense. If repair or replacement or reperformance of services is not timely, Company may elect to return the nonconforming items or repair or replace them or reprocure the services at Seller's expense. Any implied warranty of merchantability or fitness for a particular purpose is hereby disclaimed.

6. ASSIGNMENT

Seller shall not assign rights or obligations to third parties without the prior written consent of Company. However, Seller may assign rights to be paid amounts due or to become due to a financing institution if Company is promptly furnished written notice and a signed copy of such assignment. Payments to an assignee shall be subject to set off or recoupment for any present or future claims of Company against Seller.

7. NEW MATERIALS

Unless otherwise specified in the BOA or Order, all items delivered shall consist of new materials. New is defined as previously unused which may include residual inventory or unused former Government surplus property. This does not include the use of recycled or recovered material as defined by the Environmental Protection Agency in 40 CFR 247.

8. TRANSPORTATION

Transportation shall be "FOB Origin" unless specified otherwise in the Order and no insurance cost shall be allowed unless authorized in writing on the specific Order. The bill of lading shall indicate that the transportation is for the Government and is subject to the standard Government bill of lading terms and any special rates or charges.

9. RISK OF LOSS

Where Company is liable to Seller for loss of conforming items occurring after the risk of loss has passed to Company, Company shall pay Seller the lesser of (1) the agreed price of such items, or (2) Seller's cost of replacing such items. Such loss shall entitle Seller to an equitable extension in delivery schedule obligations.

10. PAYMENT

Unless otherwise provided, terms of payment shall be Net 30 days from the latter of (1) receipt of Seller's proper invoice, if required, or (2) delivery (and acceptance, if required by the Order) of items/completion of work. Any offered discount shall be taken if payment is made within the discount period that Seller indicates. Payments may be made either by check, purchase card or electronic funds transfer, at the option of Company. Payment shall be deemed to have been made as of the date of mailing or the date on which an electronic funds transfer was made. Not withstanding anything

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Perma-Fix Environmental Services, Inc.
August 24, 2004

therein, the Company shall be entitled at any and all times to set off against any amounts payable by the Company hereunder any amount owing from Seller to the Company under Orders or any subcontracts with Seller.

11. COMPLIANCE WITH LAWS

- (a) Seller shall comply with all applicable federal, state, and local laws and ordinances and all pertinent orders, DOE directives, rules, and regulations (including DOE regulations) and such compliance shall be a material requirement of this BOA and resulting Orders. Seller warrants that each chemical substance constituting or contained in items furnished under this BOA is on the list of substances published by the Administrator of the Environmental Protection Agency pursuant to the Emergency Preparedness and Community Right-to-Know Act and Toxic Substances Control Act as amended. With each delivery Seller shall provide Company any applicable Material Safety Data Sheet as required by the Occupational Safety and Health Act and applicable regulations including, without exception, 29 CFR 1910.1200.
- (b) Seller shall include this clause in all subcontracts, at any tier, involving the performance of this $\ensuremath{\mathsf{BOA}}.$

12. TERMINATION FOR CAUSE

- (a) Only the Company issuing the BOA may terminate the BOA for cause, in whole or in part, if the Seller fails to comply with any of the terms of the BOA, or fails to provide adequate assurance of future performance. Only the Company issuing any Order may terminate the Order for cause, in whole or in part, if Seller fails to comply with any of the terms of the Order or fails to provide adequate assurance of future performance. In either event, the Company shall not be liable for any amount for items not accepted.
- (b) If the BOA or any Order is terminated for cause, the Company may require Seller to deliver to the Company any supplies and materials, manufacturing materials, and manufacturing drawings that Seller has specifically produced or acquired for the terminated portion of the BOA or Order. The Company shall pay the agreed-upon price for completed items delivered and accepted. The Company and Seller shall agree on the amount

of payment for all other deliverables.

- (c) Seller shall not be liable to Company for delays in performance occasioned by causes beyond Seller's reasonable control and without its fault or negligence.
- (d) The rights and remedies of the Company in this clause are in addition to any other rights and remedies provided by law or under the BOA or resulting Order.

13. BANKRUPTCY

If Seller enters into any proceeding relating to bankruptcy, it shall give written notice via certified mail to the BOA Procurement Representative within five days of initiation of the proceedings. The notification shall include the date on which the proceeding was filed, the identity and location of the court and a listing of the BOA and Order numbers for which final payment has not been made.

14. TAXES

Taxes shall be collected and paid in accordance with the Site Specific Terms and Conditions of the respective Order.

15. CHANGES

(a) The Company issuing the BOA reserves the right to make changes within the general scope of the BOA by issuance of a unilateral change order, or by a bilateral modification to the BOA. The Company issuing the Order reserves the right to make changes within the general scope of the Order by issuance of a unilateral change order or by a bilateral modification to the Order. Such changes may

Contract No. 25003

Perma-Fix Environmental Services, Inc.
August 24, 2004

include, without limitation, changes in (1) the description of the item, (2) the quantities of items ordered, (3) the method of shipment or packaging, and (4) the time or place of delivery, inspection, or acceptance. The Seller shall promptly comply with any such change made by the Company. If any change affects the cost of or the time required for performance, an equitable adjustment to the price and/or delivery requirements and other affected provisions of the BOA or any Order shall be made by the parties in a bilateral modification. Any claim for adjustment by Seller must be made within 30 days from the date of receipt of Company's change notice, although Company in its sole discretion may receive and act upon any claim for adjustment at any time before final payment.

(b) Only the BOA Procurement Representative is authorized on behalf of Company to issue changes whether formal or informal to the BOA. Only the Order Procurement Representative is authorized on behalf of Company to issue changes whether formal or informal to the respective Order. If Seller considers that any direction or instruction by Company personnel constitutes such a change Seller shall not rely upon such instruction or direction without written confirmation from the BOA Procurement Representative or the Order Procurement Representative, as the case may be. Nothing in this clause, including any disagreement with Company about the equitable adjustment, shall excuse Seller from proceeding with the agreement as changed.

16. TERMINATION FOR CONVENIENCE

The Company issuing the BOA may, in its sole discretion, terminate the BOA, or may terminate the fabrication of all or any portion of the items not then completed, at any time, by giving the Seller a written notice of termination. The Company issuing the Order may, in its sole discretion, terminate the order, or may terminate the fabrication of all or any portion of the items not then completed, at any time, by giving the Seller written notice of termination. Upon receipt of a notice of termination, the Seller shall, unless the notice requires otherwise, discontinue all performance on the date and to the extent specified in the notice, and shall otherwise minimize costs to the Company. Payment for items already completed or in the process of completion, shall be adjusted between the Seller and the Company in a fair and reasonable manner, but such payment shall exclude any allowance for the uncompleted portion of the items, or any anticipated profits thereon. Such payment for items already completed or in the process of completion shall be the total compensation due to the Seller for termination at will by the Company.

17. SUSPENSION

The Company issuing the BOA may, for any reason, direct the Seller to suspend performance of any part of or all of the performance of the BOA for an indefinite period of time. The Company issuing the Order may, for any reason, direct the Seller to suspend performance of any part of or all of the performance of the Order. If any such suspension significantly delays the progress of or causes the Seller additional direct expenses in the performance of the BOA or any Order, not due to the fault or negligence of the Seller, the compensation to the Seller shall be adjusted by a modification to the BOA or any Order and the time of performance shall be extended by the actual duration of the suspension. Any claim by the Seller for compensation of a schedule extension must be supported by an appropriate document asserted within ten (10) days from the date an order is given to the Seller to resume the performance of the BOA or any Order.

18. INCORPORATION BY REFERENCE

The BOA incorporates certain clauses by reference. These clauses apply as if they were incorporated in their entirety. For Federal Acquisition Regulation (FAR) provisions incorporated by reference, "Contractor" means Seller and "Contracting Officer" means the Company BOA Procurement Representative. The FAR clauses may be obtained from the Company upon request

Contract No. 25003

Perma-Fix Environmental Services, Inc. August 24, 2004

The following clauses are incorporated by reference:

FAR 52.219-8 Utilization of Small Business Concerns (OCT 200)

FAR 52.222-26 Equal Opportunity (Feb 1999), (The required poster is available at: http://vwvw.dol.gov/dol/esa/public/regs/compliance/posters/eeo.htm)

FAR 52.222-35 Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era (APR 1998), and

FAR 52.222-36 Affirmative Action for Workers with Disabilities (June 1998)

FAR 52.227-3 Patent Indemnity FAR 52.227-9 Commercial Computer Software

FAR 52.222-21 Prohibition of Segregated Facilities (Feb 1999)

END OF DOCUMENT

ATTACHMENT C

PERMA-FIX ENVIRONMENTAL SERVICES, INC.
PRICE SCHEDULE FOR 2005-2007
FOR
CONTRACT 25003

<TABLE>

Attachment C Fluor Contract 25003

		FIGOI CC	DIICIACE 25005			
			od Pricing Sheet			
MLLW-03 Mixed Low-Le	evel Waste					
-	Base Price (\$/m3)	Sub-Type	Surcharge (\$/m3)	Total Unit Cost (\$/m3)	Waste Vol (m3)	Total Cost (\$)
<s></s>	<c></c>	<c> None</c>	<c></c>	<c> ***</c>	<c></c>	<c></c>
		TSCA	* * *	* * *		
		Oxidizers	***	* * *		
		Reactives	***	***		
		TSCA-Ox	***	***		
		TSCA-Re	* * *	***		
		Ox-Re	* * *	***		
		TSCA-Ox-Re	***	***		
Solids	***	None	***	***		
		TSCA	***	***		
		Osidizers	***	***		
		Reactives	* * *	* * *		
		TSCA-Ox	* * *	***		
		TSCA-Re	* * *	* * *		·
		Ox-Re	* * *	* * *		
		TSCA-Ox-Re	***	***		

Physical State	Base Price (\$/m3)	Sub-Type	(\$/m3)	Total Unit Cost (\$/m3)	Waste Vol (m3)	Total Cost (\$
ılk and Non-Bulk Liquids	* * *	None	***	***		
ther Waste Treatment						
Physical State	Base Price (\$/Kg)	Sub-Type	Surcharge (\$/Kg)	Total Unit Cost (\$/Kg)	Waste Weight (Kg)	Total Cost (\$
lemental Mercury		None	***	***		
urcharges						
			Activity Tier		Isotope	
Radioactivity Sur	charges[1]	Isotope	(Ci)		Activity (Ci)	
		Tritium (S/Ci per package)		***		
			1 to 10			
			11 to 54	***		
			>54	***		
		Carbon-14 (\$/Ci per package)	<1	***		
			1 to 10	***		
			11 to 54	***		
			>54	***		
High Me	rcury (Hg) Surc		Hg Concentration Tier (mg/kg)	Surcharge (\$/kg)	Waste Weight (Kg)	Total Cost (\$)
			260 - 2000	***		
			2001 - 4000	***		
			4001 - 6000	***		
			6001 - 8000	***		
			8001 - 10000			
			10001 - 15000	* * *		
			15001 - 20000	***		
			20001 - 25000	* * *		
			25001 - 35000	***		
			35001 - 50000	***		
			50001 - 65000	***		
			65001 - 80000	***		
			80001 - 100000	***		
			100001 - 150000	***		
			150001 - 200000	***		
mpty Container Handl	ing Surcharges	Container Size	Surcharge (p	er container)	No. of	Total Cost (\$)
		85-Gal Drum		 * *		
		110-Gal Drum		 * *		
		B-25 Box (4x4x6)		 * *		
		B-25 Box (4x4x8)		 * *		
		Metal Box (9x5.5x5.5)		**		
		>12,500 lbs	*	* *		
Transportation Sur	charges[2]	Activity		narge	Quantity	Total Cost (\$)
		Transportation (\$/m3)		**		

Brokerage Fee ***
(\$/Trip)

Detention, 3hrs unloading free (\$/hr)

tion, 3hrs *:

- [1] For waste packages with a curie content above 1Ci, round to the nearest whole integer (e.g., 1.46CIi round to 1Ci, 1.56 Ci round to 2Ci, 10.60 Ci round to 11Ci, etc.)
- [2] The Buyer will provide the transportation of the waste to the Contractor's treatment facility, and the Contractor will provide the transportation of the treated waste back to the Buyer and will be compensated at the rate specified in the Pricing Table based on the actual treated waste volume on the shipment. The Brokerage Fee only applies to waste shipments originating from the Buyer's facilities where the Contractor provides the Tennessee Radioactive Waste License-for-Delivery brokerage service. The Detention charges only apply to the treated waste shipments being returned back to Hanford for disposal and if actual demurrage charges are incurred by the Contractor.
- *** DENOTES INFORMATION IN THIS DOCUMENT THAT HAS BEEN OMITTED FROM THIS PUBLIC FILING PURSUANT TO A REQUEST BY THE COMPANY FOR CONFIDENTIAL TREATMENT BY THE SECURITIES AND EXCHANGE COMMISSION. THE OMITTED INFORMATION HAS BEEN FILED SEPARATELY WITH THE SECRETARY OF THE SECURITIES AND EXCHANGE COMMISSION FOR PURPOSES OF SUCH REQUEST.

</TABLE>

<TABLE>

<caption></caption>		Attachment Fluor Contract				
		FY2007 Option Period	d Pricing She			
LLW-03 Mixed Low-Le						
Physical State	Base Price (\$/m3)	Sub-Type	Surcharge (\$/m3)	(\$/m3)		Total Cost (\$)
S> Non-Bulk Liquids	<c></c>	<c> <c> <c< td=""><td>* * *</td><td><c> ***</c></td><td><c></c></td><td><c></c></td></c<></c></c>	* * *	<c> ***</c>	<c></c>	<c></c>
		TSCA	***	* * *		
		Oxidizers	***	***		
		Reactives	***	***		
		TSCA-Ox	***	* * *		
		TSCA-Re	* * *	* * *		
		Ox-Re	***	***		
		TSCA-Ox-Re	***	***		
Solids	***	None	***	* * *		
		TSCA	***	***		
		Osidizers	***	***		
		Reactives	***	***		
		TSCA-Ox	***	***		
		TSCA-Re	***	***		
		Ox-Re	***	***		
		TSCA-Ox-Re	***	* * *		
LLW/LLW Oils						
Physical State	Base Price (\$/m3)	Sub-Type	Surcharge (\$/m3)	Total Unit Cost (\$/m3)	Waste Vol (m3)	Total Cost (\$)
ulk and Non-Bulk Liquids	***	None	***	***		
ther Waste Treatmen						
Physical State	Base Price (\$/Kg)	Sub-Type	Surcharge (\$/Kg)	Total Unit Cost (\$/Kg)	(Kg)	Total Cost (\$)
lemental Mercury	***	None	***	***		
urcharges						
Radioactivity Su		Isotope	ctivity Tier (Ci)	Surcharge (\$/m3)	Isotope	Total Cost (\$)
		Tritium (S/Ci per package)	<1	***		
			1 to 10	***		

		11 to 54	* * *		
		>54	***		
	Carbon-14 (\$/Ci per package)	<1	***		
		1 to 10	* * *		
		11 to 54	***		
		>54	***		
High Mercury (Hg) Surc	harges	Hg Concentration Tier (mg/kg)	Surcharge (\$/kg)	Waste Weight (Kg)	Total Cost (\$)
		260 - 2000	***		
		2001 - 4000	***		
		4001 - 6000	***		
		6001 - 8000	***		
		8001 - 10000	***		
		10001 - 15000	***		
		15001 - 20000	* * *		
		20001 - 25000	***		
		25001 - 35000	***		
		35001 - 50000	***		
		50001 - 65000	***		
		65001 - 80000	***		
		80001 - 100000	***		
		100001 - 150000	***		
		150001 - 200000	***		
Empty Container Handling Surcharges	Container Size	Surcharge (p	er container)	No. of	Total Cost (\$)
	<=55 Gal Drum		** 		
	85-Gal Drum	*	** 		
	110-Gal Drum	*	**		
	B-25 Box (4x4x6)		** 		
	B-25 Box (4x4x8)		**		
	Metal Box (9x5.5x5.5)		**		
	>12,500 lbs		**		
Transportation Surcharges[2]	Activity	Surc	harge	Quantity	Total Cost (\$)
	Transportation (\$/m3)	*			
	Brokerage Fee (\$/Trip)	*			
	Detention, 3hrs unloading free (\$/hr)	*	**		
[1] For waste packages with a curic round to 2Ci, 10.60 Ci round to	e content above 1Ci, o 11Ci, etc.)	round to the near	est whole integer	(e.g., 1.46CIi r	
[2] The Buyer will provide the train provide the transportation of Pricing Table based on the actioniginating from the Buyer's for brokerage service. The Detention disposal and if actual demurrant	nsportation of the wathe treated waste baual treated waste voacilities where the con charges only apply	aste to the Contra ck to the Buyer an lume on the shipme Contractor provide y to the treated w	ctor's treatment f d will be compensa nt. The Brokerage s the Tennessee Ra aste shipments bei	acility, and the ted at the rate Fee only applies dioactive Waste	Contractor will specified in the to waste shipments License-for-Delivery

</TABLE>

DENOTES INFORMATION IN THIS DOCUMENT THAT HAS BEEN OMITTED FROM THIS PUBLIC FILING PURSUANT TO A REQUEST BY THE COMPANY FOR CONFIDENTIAL TREATMENT BY THE SECURITIES AND EXCHANGE COMMISSION. THE OMITTED INFORMATION HAS BEEN FILED SEPARATELY WITH THE SECRETARY OF THE SECURITIES AND EXCHANGE COMMISSION FOR PURPOSES OF SUCH REQUEST.

These examples serve as a guide to utilizing the Base Period pricing tables
Note: Pricing in examples utilize the "Base Period" pricing

Example 1 85-gal drum containing 320Kg of MLLW-03 soils (solid) designated with the F001-5, D001 (oxidizer), D009 (mercury concentration 6020ppm), TSCA-PCBs (>50ppm), and containing 0.8Ci of Tritium. Fluor transports the waste to PermaFix utilizing their own "Brokerage" license, and PermaFix transports the treated waste back to Hanford assuming a 1:1 treated waste volume reduction.

Pricing Attribute	Unit Price	Number of Units	Waste Package Treatment Cost (\$)
<\$>	<c></c>	<c></c>	<c></c>
Physical State (Solids), Sub-Type (TSCA-Ox): (\$/m3)	***	0.322	***
Radioactivity Surcharge (\$/Ci), <1 Tier	***	0.8	* * *
High Mercury (Hg) Surcharge (\$/Kg), 6001 to 8000 ppm Tier	***	320	***
Empty Container Handling Surcharge (\$/Container), 85-gal drum	***	1	***
Transportation Surcharges (\$/m3)	***	0.322	***
Brokerage (\$/Trip)	***	0	***

Example 2 85-gal overpacking containing a 55-gal drum with 44Kg of MLLW-03 non-bulk liquids (aka: Labpack) designated with the D003 (reactive), D004 through D011 mercury concentration 620ppm), D030, and containing 1.7Ci of C-14.

Fluor transports the waste to PermaFix utilizing their own "Brokerage" license, and PermaFix transports the treated waste back to Hanford assuming a 1:0.5 treated waste volume reduction. Note: the overpack was utilized

Total treatment cost for waste package=

Fluor transports the waste to PermaFix utilizing their own "Brokerage" license, and PermaFix transports the treated waste back to Hanford assuming a 1:0.5 treated waste volume reduction. Note: the overpack was utilized to meet DOT transportation requirements.

Number Waste Package

Pricing Attribute Unit Price of Units Treatment Cost (\$)

vsical State (Non-Bulk Liquids), Sub-Type (Reactive): (\$/m3)

*** 0.208

Physical State (Non-Bulk Liquids), Sub-Type (Reactive): (\$/m3) 0.208 Radioactivity Surcharge (\$/Ci), 1-10 Curie Tier * * * 2 * * * High Mercury (Hg) Surcharge (\$/Kg), 260 to 2000 ppm Tier 44 Empty Container Handling Surcharge (\$/Container), 55-gal drum 1 Empty Container Handing Surcharge (\$/Container), 85-gal drum * * * 1 * * * Transportation Surcharges (\$/m3) 0 104 Brokerage Fee (\$/Trip) * * * Total treatment cost for waste package=

Example 3 55-gal drum containing 120Kg of LLW non-bulk oils, and containing 0.23Ci of C-14. Fluor transports the waste to PermaFix utilizing their own "Brokerage" license, and PermaFix transports the treated waste back to Hanford assuming a 1:0.5 treated waste volume reduction.

Pricing Attribute	Unit Price	Number of Units	Waste Package Treatment Cost (\$)
Physical State (Bulk & Non-Bulk Liquids), Sub-Type (none): (\$/m3)	***	0.208	***
Radioactivity Surcharge (\$/Ci), <1 Tier	***	0.23	***
High Mercury (Hg) Surcharge (\$/Kg), <260ppm	***	0	***
Empty Container Handling Surcharge (\$/Container), 55-gal drum	***	1	***
Transportation Surcharges (\$/m3)	* * *	0.104	***
Brokerage Fee (\$/Trip)	***	0	***

Example 4 55-gal drum containing 75Kg of Elemental Mercury, and containing 0.1Ci of Tritium. Fluor transports the waste to PermaFix utilizing their own "Brokerage" license, and PermaFix transports the treated waste back to Hanford

assuming a 1:1 treated waste volume reduction.

Pricing Attribute	Unit Price	Number of Units	Waste Package Treatment Cost (\$)
Physical State (Elemental Mercury), Sub-Type (none): (\$/Kg)	***	75	***
Radioactivity Surcharge (\$/Ci), <1 Tier	***	0.1	***
High Mercury (Hg) Surcharge (\$/Kg), <260ppm	***	n/a	***
Empty Container Handling Surcharge (\$/Container), 55-gal drum	***	1	***
Transportation Surcharges (\$/m3)	***	0.208	***
Brokerage Fee (\$/Trip)	***	0	***

Total treatment cost for waste package=

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</TABLE>

CERTIFICATIONS

- I, Louis F. Centofanti, 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)) 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) (Intentionally omitted);
 - 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: November 8, 2004

/s/ Dr. Louis F. Centofanti

Dr. Louis F. Centofanti Chairman of the Board Chief Executive Officer

CERTIFICATIONS

I, Richard T. Kelecy, 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)) 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) (Intentionally omitted);
 - 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: November 8, 2004

/s/ Richard T. Kelecy

Richard T. Kelecy

Chief 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 period ended September 30, 2004 as filed with the Securities and Exchange Commission on the date hereof (the "Form 10-Q"), I Dr. Louis F. Centofanti, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. ss.1350, as adopted pursuant to ss.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. ss.78m or ss.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: November 8, 2004

/s/ Dr. Louis F. Centofanti

Dr. Louis F. Centofanti
President and
Chief Executive Officer

This certification is furnished to the Securities and Exchange Commission solely for purpose of 18 U.S.C. ss.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 period ended September 30, 2004 as filed with the Securities and Exchange Commission on the date hereof (the "Form 10-Q"), I Richard T. Kelecy, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. ss.1350, as adopted pursuant to ss.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. ss.78m or ss.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: November 8, 2004

/s/ Richard T. Kelecy

Richard T. Kelecy Chief Financial Officer

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