

**HAMPDEN ENVIRONMENTAL TRUST  
COMMITTEE MEETING**

**Wednesday, December 17, 2025**

**10:30 A.M.  
HAMPDEN TOWN OFFICE**

**A G E N D A**

1. Call to Order
2. Approval of Meeting Minutes – September 11, 2025
3. Review of financial statements from Institutional Trustee (First National Bank).
4. Review of proposed FY26 costs for reimbursement or payment from Environmental Trust, Income.
  - a. General Fund payments for Stormwater Management total \$21,555.18.
5. Other Business
  - a. Update on the residential well testing program
6. Set a date for the next meeting.
7. Adjourn

**HAMPDEN ENVIRONMENTAL TRUST  
COMMITTEE MEETING**

**Thursday, September 11, 2025**

**1:30 P.M.**

**HAMPDEN TOWN OFFICE**

**Minutes**

1. Call to Order

Chair White opened the meeting at 1:30 p.m.

2. Approval of Meeting Minutes – June 12, 2025

Trustee Lippincott moved to approve the meeting minutes from June 12, 2025, and Chair White seconded the motion. Unanimous vote 2/0/0.

3. Review of financial statements from Institutional Trustee (First National Bank).

There was no discussion on financial statements.

4. Review of proposed FY25 costs for reimbursement or payment from Environmental Trust, Income

- a. General Fund payments for Stormwater Management total \$16,131.82.

Trustee Lippincott made a motion to approve the Town's General Fund from the FY25 Environmental Trust, Income to \$16,131.82, Chair White seconded the motion. Unanimous vote 2/0/0.

5. Review of proposed FY26 costs for reimbursement or payment from Environmental Trust, Income.

- a. General Fund payments for Stormwater Management total \$5,589.25.

Trustee Lippincott made a motion to approve the Town's General Fund from the FY26 Environmental Trust, Income to \$5,589.25, Chair White seconded the motion. Unanimous vote 2/0/0.

6. Other Business

- a. Follow up regarding PFAS sampling in residential wells

Committee members and the Town Manager reviewed the letter received from Wayne Boyd of Casella Waste Systems in reference to the new requirements of LD 1604 and their compliance (See attached exhibit A) .

7. Set a date for the next meeting.

The Environmental Trust Committee agreed that the next meeting will be held on December 11, 2025, at 1:00 p.m.

8. Adjourn

Chair White moved, and Trustee Lippincott seconded to adjourn the meeting at 1:38 p.m.





ACCOUNT NUMBER: 40310000219  
STATEMENT PERIOD: SEPTEMBER 01, 2025 THROUGH SEPTEMBER 30, 2025

FIRST NATIONAL WEALTH MANAGEMENT  
P O BOX 940  
DAMARISCOTTA, ME 04543

HAMPDEN ENVIRONMENTAL TRUST  
TOWN OF HAMPDEN  
106 WESTERN AVE  
HAMPDEN, ME 04444

ACCOUNT NAME: HAMPDEN ENVIRONMENTAL TRUST

ADMINISTRATIVE OFFICER: LORRAINE OUELLETTE  
207-669-6368  
LORRAINE.OUELLETTE@THEFIRST.COM

INVESTMENT OFFICER: MATT WEAVER  
866-563-1900  
MATTHEW.WEAVER@THEFIRST.COM

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**Proprietary Money Market Disclosure**

Please be advised that First National Wealth Management may use a First National Bank money market deposit account as a sweep investment vehicle. First National Wealth Management does not receive any compensation from First National Bank for the placement of funds in this account, nor does First National Bank receive any fees from First National Wealth Management for the use of the account. The rate on the account is set by First National Bank. First National Wealth Management reviews its use of the First National Bank money market deposit account on a regular basis to ensure that it is the most appropriate investment for First National Wealth Management client funds.

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**PORTFOLIO SUMMARY**

	TAX COST	MARKET VALUE	PERCENT
 CASH AND EQUIVALENTS	345,100.14	345,100.14	9.8%
 EQUITIES	1,206,699.91	1,543,535.61	43.7%
 FIXED INCOME	1,674,188.15	1,640,520.30	46.5%
<b>TOTAL ASSETS</b>	<b>3,225,988.20</b>	<b>3,529,156.05</b>	<b>100.0%</b>
ACCRUED INCOME OTHER	6,292.86	6,292.86	
<b>TOTAL ACCRUED INCOME</b>	<b>6,292.86</b>	<b>6,292.86</b>	
<b>TOTAL ASSETS &amp; ACCRUALS</b>	<b>3,232,281.06</b>	<b>3,535,448.91</b>	
<b>BEGINNING MARKET VALUE</b>	<b>3,506,265.60</b>		
<b>ENDING MARKET VALUE</b>	<b>3,535,448.91</b>		



**ACTIVITY SUMMARY**

	THIS PERIOD	YEAR TO DATE	REALIZED CAPITAL GAINS / LOSSES	
			THIS PERIOD	YEAR TO DATE
<b>BEGINNING MARKET VALUE</b>	<b>3,501,346.30</b>	<b>3,297,807.26</b>		
DIVIDENDS AND INTEREST	19,391.63	53,217.20		
DISBURSEMENTS	21,721.07-	71,563.31-	LONG TERM	8,674.76
FEEs	1,449.01-	12,617.29-	<b>TOTAL GAINS / LOSSES</b>	<b>8,674.76</b>
NET CASH SALES/PURCHASES	4,594.50	31,779.45		<b>35,430.13</b>
CHANGE IN MARKET VALUE	26,993.70	230,532.74		
<b>ENDING MARKET VALUE</b>	<b>3,529,156.05</b>	<b>3,529,156.05</b>		
			INVESTMENT PERFORMANCE	
			THIS PERIOD	YEAR TO DATE
			<b>RATE OF RETURN</b>	<b>1.46%</b>
				<b>9.57%</b>

ACCOUNT NUMBER: 40310000219

STATEMENT PERIOD: SEPTEMBER 01, 2025 THROUGH SEPTEMBER 30, 2025

**PORTFOLIO DETAIL**

DESCRIPTION	MARKET VALUE/PRICE	TAX COST/UNREALIZED GAIN/LOSS	EST ANNUAL INCOME/ACCRUED INC	CURRENT YIELD
<b>CASH AND EQUIVALENTS</b>				
FNWM MONEY MARKET	344,284.09 1.00	344,284.09 0.00	14,253.37 1,187.79	4.14
CASH	816.05	816.05 0.00		
<b>TOTAL CASH AND EQUIVALENTS</b>	<b>345,100.14</b>	<b>345,100.14 0.00</b>	<b>14,253.37 1,187.79</b>	<b>4.13</b>

DESCRIPTION	TICKER	SHARES	MARKET VALUE/PRICE	TAX COST/UNREALIZED GAIN/LOSS	EST ANNUAL INCOME/ACCRUED INC	CURRENT YIELD
<b>EQUITIES</b>						
DFA INTERNATIONAL SMALL COMPANY I	DFISX	3,107.692	77,319.38 24.88	55,999.08 21,320.30	2,274.83	2.94
DFA DIMENSIONAL EMERGING CORE EQUITY MARKET ETF	DFAE	4,791.000	151,060.23 31.53	124,306.61 26,753.62	3,166.85	2.10
DODGE & COX INTERNATIONAL STOCK I	DODFX	5,083.132	334,470.09 65.80	234,483.00 99,987.09	5,713.44	1.71
DODGE & COX STOCK I	DODGX	1,217.905	339,210.90 278.52	283,650.82 55,560.08	4,754.70	1.40
FIDELITY GROWTH COMPANY FUND	FDGRX	6,692.387	320,230.72 47.85	201,611.86 118,618.86	622.39	0.19
FIDELITY LOW-PRICED STOCK #316	FLPSX	2,419.572	100,968.74 41.73	107,468.40 6,499.66-	2,151.00	2.13
MFS MID CAP GROWTH FUND CLASS I	OTCIX	3,106.513	105,093.33 33.83	98,615.74 6,477.59		
NEUBERGER BERMAN GENESIS INSTL	NBGIX	863.572	54,785.01 63.44	51,877.29 2,907.72	82.90	0.15
VANGUARD SMALL CAP VALUE ADMIRAL	VSIAX	673.700	60,397.21 89.65	48,687.11 11,710.10	1,207.94	2.00
<b>TOTAL EQUITIES</b>			<b>1,543,535.61</b>	<b>1,206,699.91 336,835.70</b>	<b>19,974.05 0.00</b>	<b>1.29</b>

**PORTFOLIO DETAIL ( CONTINUED )**

**BOND QUALITY SUMMARY**



DESCRIPTION	RATING	PAR VALUE	MARKET VALUE/ PRICE	TAX COST/ UNREALIZED GAIN/LOSS	EST ANNUAL INCOME/ ACCRUED INC	CURRENT YIELD
<b>FIXED INCOME</b>						
FHLB CONS BD DTD 08/01/2016 1.875% 09/11/2026	AA+	200,000.000	196,650.00 98.33	201,584.41 4,934.41-	3,750.00 208.33	1.91
FHLB CONS BD DTD 07/01/2021 .875% 06/12/2026	AA+	150,000.000	147,036.00 98.02	150,332.96 3,296.96-	1,312.50 397.40	0.89
MAINE FIN AUTH REV BDS DTD 07/25/2024 5% 07/01/2028	AA	55,000.000	58,695.45 106.72	59,364.25 668.80-	2,750.00 687.50	4.69
MAINE FIN AUTH REV BDS DTD 07/25/2024 5% 07/01/2033	AA	50,000.000	57,483.50 114.97	58,252.00 768.50-	2,500.00 625.00	4.35
MAINE HEALTH & HIGHER EDL FACS AUTH REV BDS DTD 06/28/2016 5% 07/01/2026		75,000.000	76,197.75 101.60	76,003.88 193.87	3,750.00 937.50	4.92
MAINE HEALTH & HIGHER EDL FACS AUTH REV BDS DTD 11/06/2019 4% 07/01/2035-2029	AA	65,000.000	66,325.35 102.04	66,865.50 540.15-	2,600.00 650.00	3.92
MAINE REGIONAL SCH UNIT NO 26 GO BDS DTD 09/11/2025 5% 09/01/2031	A+	50,000.000	56,254.50 112.51	56,845.00 590.50-	2,500.00 138.89	4.44
US TREASURY NTS DTD 10/22/2020 .25% 10/31/2025		100,000.000	99,684.00 99.68	96,973.16 2,710.84	250.00 104.62	0.25
US TREASURY NTS DTD 02/03/2021 1.125% 02/15/2031		200,000.000	174,796.00 87.40	189,904.40 15,108.40-	2,250.00 287.36	1.29
US TREASURY NTS DTD 06/17/2021 .875% 06/30/2026		200,000.000	195,762.00 97.88	200,479.01 4,717.01-	1,750.00 442.26	0.89
US TREASURY NTS DTD 08/19/2021 .75% 08/31/2026		225,000.000	218,994.75 97.33	224,567.95 5,573.20-	1,687.50 144.51	0.77

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STATEMENT PERIOD: SEPTEMBER 01, 2025 THROUGH SEPTEMBER 30, 2025

**PORTFOLIO DETAIL ( CONTINUED )**

DESCRIPTION	RATING	PAR VALUE	MARKET VALUE/ PRICE	TAX COST/ UNREALIZED GAIN/LOSS	EST ANNUAL INCOME/ ACCRUED INC	CURRENT YIELD
<b>FIXED INCOME</b>						
US TREASURY NTS DTD 02/17/2022 1.875% 02/28/2027		300,000.000	292,641.00 97.55	293,015.63 374.63-	5,625.00 481.70	1.92
<b>TOTAL FIXED INCOME</b>			1,640,520.30	1,674,188.15 33,667.85-	30,725.00 5,105.07	1.87
<b>TOTAL ASSETS</b>			3,529,156.05	3,225,988.20 303,167.85	64,952.42 6,292.86	1.84
<b>TOTAL ACCRUED INC</b>			6,292.86	6,292.86		
<b>GRAND TOTAL ASSETS</b>			3,535,448.91	3,232,281.06 303,167.85	64,952.42 6,292.86	1.84

**TRANSACTION DETAIL**

DATE	QUANTITY	DESCRIPTION	TRANSACTION TYPE	CASH	COST BASIS
09/01/25		<b>BEGINNING BALANCE</b>		0.00	3,229,997.68
<b>DIVIDENDS</b>					
09/02/25		MM0000099 DIVIDEND ON FNWM MONEY MARKET PAYABLE 08/31/2025 EFFECTIVE 08/31/2025 316345305	DIVIDEND	1,437.49	
09/15/25		DIVIDEND ON 2,225.993 SHS FIDELITY LOW-PRICED STOCK #316 AT .658 PER SHARE PAYABLE 09/15/2025 EX DATE 09/12/2025 316345305	DIVIDEND	1,464.70	
09/15/25		LONG TERM CAPITAL GAINS DIVIDEND ON 2,225.993 SHS FIDELITY LOW-PRICED STOCK #316 AT 3.642 PER SHARE PAYABLE 09/15/2025 EX DATE 09/12/2025 25434V302	DIVIDEND	8,107.07	
09/25/25		DIVIDEND ON 4,791 SHS DFA DIMENSIONAL EMERGING CORE EQUITY MARKET ETF AT .229772 PER SHARE PAYABLE 09/25/2025 EX DATE 09/23/2025 256219106	DIVIDEND	1,100.84	
09/26/25		DIVIDEND ON 1,217.905 SHS DODGE & COX STOCK I AT .915 PER SHARE PAYABLE 09/26/2025 EX DATE 09/25/2025 921937686	DIVIDEND	1,114.38	
09/30/25		DIVIDEND ON 673.7 SHS VANGUARD SMALL CAP VALUE ADMIRAL AT .3987 PER SHARE PAYABLE 09/30/2025 EX DATE 09/29/2025 233203629	DIVIDEND	268.60	
09/30/25		DIVIDEND ON 3,107.692 SHS DFA INTERNATIONAL SMALL COMPANY I AT .17616 PER SHARE PAYABLE 09/30/2025 EX DATE 09/29/2025	DIVIDEND	547.45	
<b>TOTAL DIVIDENDS</b>				<b>14,040.53</b>	<b>0.00</b>
<b>INTEREST</b>					
09/02/25		9128284Z0 INTEREST ON 100,000 UNITS US TREASURY NOTES DTD 08/23/2018 2.75% 08/31/2025 PAYABLE 08/31/2025 EFFECTIVE 08/31/2025 91282CCW9	INTEREST RCVD	1,375.00	
09/02/25		INTEREST ON 225,000 UNITS US TREASURY NTS DTD 08/19/2021 .75% 08/31/2026 PAYABLE 08/31/2025 EFFECTIVE 08/31/2025 91282CEC1	INTEREST RCVD	843.75	
09/02/25		INTEREST ON 300,000 UNITS US TREASURY NTS DTD 02/17/2022 1.875% 02/28/2027 PAYABLE 08/31/2025 EFFECTIVE 08/31/2025 3130A8XY4	INTEREST RCVD	2,812.50	
09/11/25		INTEREST ON 200,000 UNITS FHLB CONS BD DTD 08/01/2016 1.875% 09/11/2026 PAYABLE 09/11/2025	INTEREST RCVD	1,875.00	

**TRANSACTION DETAIL ( CONTINUED )**

DATE	QUANTITY	DESCRIPTION	TRANSACTION TYPE	CASH	COST BASIS
09/12/25		56042BBX4 ACCRUED INTEREST PAID 55,000 UNITS MAINE FIN AUTH REV BDS DTD 07/25/2024 5% 07/01/2028	ACCRUED INT	542.36-	
09/12/25		75915LBG3 ACCRUED INTEREST PAID 50,000 UNITS MAINE REGIONAL SCH UNIT NO 26 GO BDS DTD 09/11/2025 5% 09/01/2031	ACCRUED INT	6.95-	
09/12/25		56042BCC9 ACCRUED INTEREST PAID 50,000 UNITS MAINE FIN AUTH REV BDS DTD 07/25/2024 5% 07/01/2033	ACCRUED INT	493.06-	
09/12/25		56042SCB4 ACCRUED INTEREST PAID 65,000 UNITS MAINE HEALTH & HIGHER EDL FACS AUTH REV BDS DTD 11/06/2019 4% 07/01/2035-2029	ACCRUED INT	512.78-	
<b>TOTAL INTEREST</b>				<b>5,351.10</b>	<b>0.00</b>
<b>PURCHASES</b>					
09/12/25	55,000.000	56042BBX4 PURCHASED 55,000 UNITS MAINE FIN AUTH REV BDS DTD 07/25/2024 5% 07/01/2028 ON 09/11/2025 AT 107.935 THRU H AND R BLOCK FINANCIAL ADVISORS	BUY	59,364.25-	59,364.25
09/12/25	50,000.000	75915LBG3 PURCHASED 50,000 UNITS MAINE REGIONAL SCH UNIT NO 26 GO BDS DTD 09/11/2025 5% 09/01/2031 ON 09/11/2025 AT 113.69 THRU H AND R BLOCK FINANCIAL ADVISORS	BUY	56,845.00-	56,845.00
09/12/25	50,000.000	56042BCC9 PURCHASED 50,000 UNITS MAINE FIN AUTH REV BDS DTD 07/25/2024 5% 07/01/2033 ON 09/11/2025 AT 116.504 THRU H AND R BLOCK FINANCIAL ADVISORS	BUY	58,252.00-	58,252.00
09/12/25	65,000.000	56042SCB4 PURCHASED 65,000 UNITS MAINE HEALTH & HIGHER EDL FACS AUTH REV BDS DTD 11/06/2019 4% 07/01/2035-2029 ON 09/11/2025 AT 102.87 THRU H AND R BLOCK FINANCIAL ADVISORS	BUY	66,865.50-	66,865.50
09/15/25	193.579	316345305 PURCHASED 193.579 SHS FIDELITY LOW-PRICED STOCK #316 ON 09/15/2025 AT 41.88 FOR REINVESTMENT	BUY	8,107.07-	8,107.07
<b>TOTAL PURCHASES</b>				<b>249,433.82-</b>	<b>249,433.82</b>

**TRANSACTION DETAIL ( CONTINUED )**

DATE	QUANTITY	DESCRIPTION	TRANSACTION TYPE	CASH	COST BASIS
<b>DISTRIBUTIONS</b>					
09/25/25		DISTRIBUTION TO TOWN OF HAMPDEN DISTRIBUTION PER REQUEST OF INDIVIDUAL TRUSTEES DTD 9/15/25	DISBURSEMENT	16,131.82-	
09/25/25		REQUEST 1 OF 2 DISTRIBUTION TO TOWN OF HAMPDEN DISTRIBUTION PER REQUEST OF INDIVIDUAL TRUSTEES DTD 9/15/25	DISBURSEMENT	5,589.25-	
		REQUEST 2 OF 2			
<b>TOTAL DISTRIBUTIONS</b>				<b>21,721.07-</b>	<b>0.00</b>
<b>FEES</b>					
09/09/25		FEE TO FIRST NATIONAL WEALTH MANAGEMENT FOR THE PERIOD ENDING 08/31/2025 BASED ON AVERAGE MARKET VALUE___1,811.27	DISBURSEMENT	724.51-	
09/09/25		DISCOUNT_____1,086.76 FEE TO FIRST NATIONAL WEALTH MANAGEMENT FOR THE PERIOD ENDING 08/31/2025 BASED ON AVERAGE MARKET VALUE___1,811.27	DISBURSEMENT	724.50-	
		DISCOUNT_____1,086.75			
<b>TOTAL FEES</b>				<b>1,449.01-</b>	<b>0.00</b>
<b>OTHER DISBURSEMENTS</b>					
09/11/25		3130A8XY4 AMORTIZATION ON 200,000 UNITS FHLB CONS BD DTD 08/01/2016 1.875% 09/11/2026 TO ADJUST TAX LOT, AMORTIZATION = 798.72-	AMORTIZATION		798.72-
<b>TOTAL OTHER DISBURSEMENTS</b>				<b>0.00</b>	<b>798.72-</b>
<b>SALES AND MATURITIES</b>					
09/02/25	100,000.000-	9128284Z0 MATURED 100,000 UNITS US TREASURY NOTES DTD 08/23/2018 2.75% 08/31/2025 EFFECTIVE 08/31/2025	MATURITY	100,000.00	99,432.31-
09/30/25	154,028.320-	MIM0000099 NET WITHDRAWALFNWM MONEY MARKET	NET CASH MGMT	154,028.32	154,028.32-
<b>TOTAL SALES AND MATURITIES</b>				<b>254,028.32</b>	<b>253,460.63-</b>
09/30/25		<b>ENDING BALANCE</b>		<b>816.05</b>	<b>3,225,172.15</b>

Oct-25						
amount carried forward			\$3,529,156.05			
Withdrawals			\$0.00			
Income Div. & Cap Gains			\$1,637.32			
Fees			-\$1,469.98			
other receipts & disbursements						
net cash sales/purchases			-\$983.39			
Change in Mkt Value			\$18,729.98			
			G4-110-19		G4-610-18 total	MAX AVAILABLE SPEND FOR FY26 4%
Balance			\$3,547,069.98		\$3,547,069.98	\$141,882.80
		difference	\$17,913.93		\$17,913.93	fund balance +/-
		Oct posting				
		+				
		debit		credit		
prin	G4-110-19	\$17,913.93		\$0.00		
fund bal	G4-610-18	\$0.00		\$17,913.93		



ACCOUNT NUMBER: 40310000219  
STATEMENT PERIOD: OCTOBER 01, 2025 THROUGH OCTOBER 31, 2025

FIRST NATIONAL WEALTH MANAGEMENT  
P O BOX 940  
DAMARISCOTTA, ME 04543

HAMPDEN ENVIRONMENTAL TRUST  
TOWN OF HAMPDEN  
106 WESTERN AVE  
HAMPDEN, ME 04444

ACCOUNT NAME:	HAMPDEN ENVIRONMENTAL TRUST
ADMINISTRATIVE OFFICER:	LORRAINE OUELLETTE 207-669-6368 LORRAINE.OUELLETTE@THEFIRST.COM
INVESTMENT OFFICER:	MATT WEAVER 866-563-1900 MATTHEW.WEAVER@THEFIRST.COM

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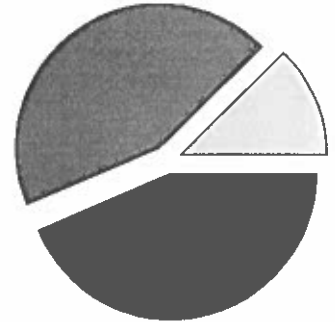
Though the established client base of First National Wealth Management knows well that excellent service is the bedrock of our business model, referrals are the foundation of our growth. We would be grateful if you could spread the word to friends and associates who may also benefit from our individualized approach to wealth management.

ACCOUNT NUMBER: 40310000219

STATEMENT PERIOD: OCTOBER 01, 2025 THROUGH OCTOBER 31, 2025

**PORTFOLIO SUMMARY**

	TAX COST	MARKET VALUE	PERCENT
 CASH AND EQUIVALENTS	445,267.48	445,267.48	12.6%
 EQUITIES	1,206,699.91	1,558,170.60	43.9%
 FIXED INCOME	1,577,214.99	1,543,631.90	43.5%
<b>TOTAL ASSETS</b>	<b>3,229,182.38</b>	<b>3,547,069.98</b>	<b>100.0%</b>
ACCRUED INCOME OTHER	9,041.00	9,041.00	
<b>TOTAL ACCRUED INCOME</b>	<b>9,041.00</b>	<b>9,041.00</b>	
<b>TOTAL ASSETS &amp; ACCRUALS</b>	<b>3,238,223.38</b>	<b>3,556,110.98</b>	
<b>BEGINNING MARKET VALUE</b>	<b>3,535,448.91</b>		
<b>ENDING MARKET VALUE</b>	<b>3,556,110.98</b>		



**ACTIVITY SUMMARY**

	THIS PERIOD	YEAR TO DATE	REALIZED CAPITAL GAINS / LOSSES	
			THIS PERIOD	YEAR TO DATE
<b>BEGINNING MARKET VALUE</b>	<b>3,529,156.05</b>	<b>3,297,807.26</b>		
DIVIDENDS AND INTEREST	1,637.32	54,854.52		
DISBURSEMENTS	0.00	71,563.31		
FEES	1,469.98	14,087.27	LONG TERM	3,026.84
NET CASH SALES/PURCHASES	983.39	30,796.06	<b>TOTAL GAINS / LOSSES</b>	<b>38,456.97</b>
CHANGE IN MARKET VALUE	18,729.98	249,262.72		
<b>ENDING MARKET VALUE</b>	<b>3,547,069.98</b>	<b>3,547,069.98</b>		
			INVESTMENT PERFORMANCE	
			THIS PERIOD	YEAR TO DATE
			<b>RATE OF RETURN</b>	
			0.55%	10.16%

ACCOUNT NUMBER: 40310000219

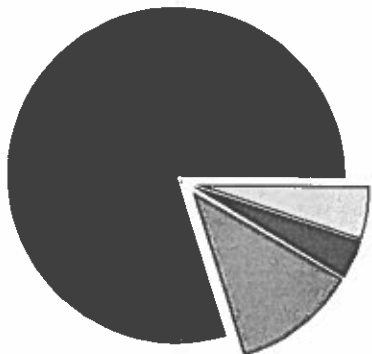
STATEMENT PERIOD: OCTOBER 01, 2025 THROUGH OCTOBER 31, 2025

**PORTFOLIO DETAIL**

DESCRIPTION	MARKET VALUE/ PRICE	TAX COST/ UNREALIZED GAIN/LOSS	EST ANNUAL INCOME/ ACCRUED INC	CURRENT YIELD
<b>CASH AND EQUIVALENTS</b>				
FNWM MONEY MARKET	445,267.48 1.00	445,267.48 0.00	17,766.18 1,480.52	3.99
<b>TOTAL CASH AND EQUIVALENTS</b>	<b>445,267.48</b>	<b>445,267.48</b> 0.00	<b>17,766.18</b> 1,480.52	<b>3.99</b>

DESCRIPTION	TICKER	SHARES	MARKET VALUE/ PRICE	TAX COST/ UNREALIZED GAIN/LOSS	EST ANNUAL INCOME/ ACCRUED INC	CURRENT YIELD
<b>EQUITIES</b>						
DFA INTERNATIONAL SMALL COMPANY I	DFISX	3,107.692	76,666.76 24.67	55,999.08 20,667.68	2,274.83	2.97
DFA DIMENSIONAL EMERGING CORE EQUITY MARKET ETF	DFAE	4,791.000	156,426.15 32.65	124,306.61 32,119.54	3,166.85	2.02
DODGE & COX INTERNATIONAL STOCK I	DODFX	20,332.528	334,266.76 16.44	234,483.00 99,783.76	5,713.44	1.71
DODGE & COX STOCK I	DODGX	19,486.480	337,116.10 17.30	283,650.82 53,465.28	4,754.70	1.41
FIDELITY GROWTH COMPANY FUND	FDGRX	6,692.387	338,099.39 50.52	201,611.86 136,487.53	622.39	0.18
FIDELITY LOW-PRICED STOCK #316	FLPSX	2,419.572	98,984.69 40.91	107,468.40 8,483.71-	2,151.00	2.17
MFS MID CAP GROWTH FUND CLASS I	OTCIX	3,106.513	103,074.10 33.18	98,615.74 4,458.36		
NEUBERGER BERMAN GENESIS INSTITUTIONAL	NBGIX	863.572	53,765.99 62.26	51,877.29 1,888.70	82.90	0.15
VANGUARD SMALL CAP VALUE INDEX ADMIRAL	VSIAX	673.700	59,770.66 88.72	48,687.11 11,083.55	1,207.94	2.02
<b>TOTAL EQUITIES</b>			<b>1,558,170.60</b>	<b>1,206,699.91</b> 351,470.69	<b>19,974.05</b> 0.00	<b>1.28</b>

**BOND QUALITY SUMMARY**



S & P QUALITY RATING	MARKET VALUE	PERCENT
TREASURY / AGENCY	1,228,532.00	79.6%
AA	183,027.65	11.8%
A+	56,111.50	3.7%
NOT RATED	75,960.75	4.9%
<b>Total</b>	<b>1,543,631.90</b>	<b>100.0%</b>

ACCOUNT NUMBER: 40310000219

STATEMENT PERIOD: OCTOBER 01, 2025 THROUGH OCTOBER 31, 2025

**PORTFOLIO DETAIL ( CONTINUED )**

DESCRIPTION	RATING	PAR VALUE	MARKET VALUE/ PRICE	TAX COST/ UNREALIZED GAIN/LOSS	EST ANNUAL INCOME/ ACCRUED INC	CURRENT YIELD
<b>FIXED INCOME</b>						
FHLB CONS BD DTD 08/01/2016 1.875% 09/11/2026	AA+	200,000.000	196,824.00 98.41	201,584.41 4,760.41-	3,750.00 520.83	1.91
FHLB CONS BD DTD 07/01/2021 .875% 06/12/2026	AA+	150,000.000	147,415.50 98.28	150,332.96 2,917.46-	1,312.50 506.77	0.89
MAINE FIN AUTH REV BDS DTD 07/25/2024 5% 07/01/2028	AA	55,000.000	58,317.60 106.03	59,364.25 1,046.65-	2,750.00 916.67	4.72
MAINE FIN AUTH REV BDS DTD 07/25/2024 5% 07/01/2033	AA	50,000.000	57,833.50 115.67	58,252.00 418.50-	2,500.00 833.33	4.32
MAINE HEALTH & HIGHER EDL FACS AUTH REV BDS DTD 06/28/2016 5% 07/01/2026		75,000.000	75,960.75 101.28	76,003.88 43.13-	3,750.00 1,250.00	4.94
MAINE HEALTH & HIGHER EDL FACS AUTH REV BDS DTD 11/06/2019 4% 07/01/2035-2029	AA	65,000.000	66,876.55 102.89	66,865.50 11.05	2,600.00 866.67	3.89
MAINE REGIONAL SCH UNIT NO 26 GO BDS DTD 09/11/2025 5% 09/01/2031	A+	50,000.000	56,111.50 112.22	56,845.00 733.50-	2,500.00 347.22	4.46
US TREASURY NTS DTD 02/03/2021 1.125% 02/15/2031		200,000.000	175,476.00 87.74	189,904.40 14,428.40-	2,250.00 476.90	1.28
US TREASURY NTS DTD 06/17/2021 .875% 06/30/2026		200,000.000	196,214.00 98.11	200,479.01 4,265.01-	1,750.00 589.67	0.89
US TREASURY NTS DTD 08/19/2021 .75% 08/31/2026		225,000.000	219,550.50 97.58	224,567.95 5,017.45-	1,687.50 289.02	0.77
US TREASURY NTS DTD 02/17/2022 1.875% 02/28/2027		300,000.000	293,052.00 97.68	293,015.63 36.37	5,625.00 963.40	1.92
<b>TOTAL FIXED INCOME</b>			<b>1,543,631.90</b>	<b>1,577,214.99</b> 33,583.09-	<b>30,475.00</b> 7,560.48	<b>1.97</b>
<b>TOTAL ASSETS</b>			<b>3,547,069.98</b>	<b>3,229,182.38</b> 317,887.60	<b>68,215.23</b> 9,041.00	<b>1.92</b>
<b>TOTAL ACCRUED INC</b>			<b>9,041.00</b>	<b>9,041.00</b>		
<b>GRAND TOTAL ASSETS</b>			<b>3,556,110.98</b>	<b>3,238,223.38</b> 317,887.60	<b>68,215.23</b> 9,041.00	<b>1.92</b>

**TRANSACTION DETAIL**

DATE	QUANTITY	DESCRIPTION	TRANSACTION TYPE	CASH	COST BASIS
10/01/25		BEGINNING BALANCE		816.05	3,225,172.15
<b>DIVIDENDS</b>					
10/01/25		MM0000099 DIVIDEND ON FNWM MONEY MARKET PAYABLE 09/30/2025 EFFECTIVE 09/30/2025	DIVIDEND	1,512.32	
<b>TOTAL DIVIDENDS</b>				1,512.32	0.00
<b>INTEREST</b>					
10/31/25		91282CAT8 INTEREST ON 100,000 UNITS US TREASURY NTS DTD 10/22/2020 .25% 10/31/2025 PAYABLE 10/31/2025	INTEREST RCVD	125.00	
<b>TOTAL INTEREST</b>				125.00	0.00
<b>PURCHASES</b>					
10/31/25	100,983.390	MM0000099 NET DEPOSIT FNWM MONEY MARKET	NET CASH MGMT	100,983.39-	100,983.39
<b>TOTAL PURCHASES</b>				100,983.39-	100,983.39
<b>FEES</b>					
10/07/25		FEE TO FIRST NATIONAL WEALTH MANAGEMENT FOR THE PERIOD ENDING 09/30/2025 BASED ON AVERAGE MARKET VALUE 1,837.47 DISCOUNT 1,102.48	DISBURSEMENT	734.99-	
10/07/25		FEE TO FIRST NATIONAL WEALTH MANAGEMENT FOR THE PERIOD ENDING 09/30/2025 BASED ON AVERAGE MARKET VALUE 1,837.47 DISCOUNT 1,102.48	DISBURSEMENT	734.99-	
<b>TOTAL FEES</b>				1,469.98-	0.00
<b>SALES AND MATURITIES</b>					
10/31/25	100,000.000-	91282CAT8 MATURED 100,000 UNITS US TREASURY NTS DTD 10/22/2020 .25% 10/31/2025	MATURITY	100,000.00	96,973.16-
<b>TOTAL SALES AND MATURITIES</b>				100,000.00	96,973.16-
<b>NON CASH ACTIVITY</b>					
10/27/25	15,249.396	256206103 RECEIVED 4-FOR-1 STK SPLIT 15,249.396 SHS DODGE & COX INTERNATIONAL STOCK I FORWARD SPLIT AT 4:1	STOCK DIVIDEND		
10/27/25	18,268.575	256219106 RECEIVED 16-FOR-1 STK SPLIT 18,268.575 SHS DODGE & COX STOCK I FORWARD SPLIT AT 16:1	STOCK DIVIDEND		
<b>TOTAL NON CASH ACTIVITY</b>				0.00	0.00
10/31/25		ENDING BALANCE		0.00	3,229,182.38



FIRST NATIONAL WEALTH MANAGEMENT  
P O BOX 940  
DAMARISCOTTA, ME 04543

HAMPDEN ENVIRONMENTAL TRUST  
TOWN OF HAMPDEN  
106 WESTERN AVE  
HAMPDEN, ME 04444

ACCOUNT NAME: **HAMPDEN ENVIRONMENTAL TRUST**

ADMINISTRATIVE OFFICER: **LORRAINE OUELLETTE**  
**207-669-6368**  
**LORRAINE.OUELLETTE**  
**@THEFIRST.COM**

INVESTMENT OFFICER: **MATT WEAVER**  
**866-563-1900**  
**MATTHEW.WEAVER**  
**@THEFIRST.COM**

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**Proprietary Money Market Disclosure**

Please be advised that First National Wealth Management may use a First National Bank money market deposit account as a sweep investment vehicle. First National Wealth Management does not receive any compensation from First National Bank for the placement of funds in this account, nor does First National Bank receive any fees from First National Wealth Management for the use of the account. The rate on the account is set by First National Bank. First National Wealth Management reviews its use of the First National Bank money market deposit account on a regular basis to ensure that it is the most appropriate investment for First National Wealth Management client funds.




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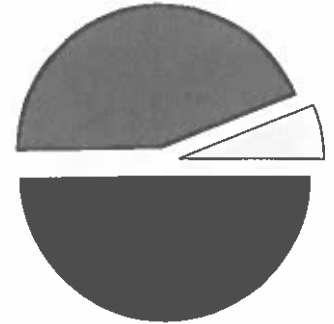
Though the established client base of First National Wealth Management knows well that excellent service is the bedrock of our business model, referrals are the foundation of our growth. We would be grateful if you could spread the word to friends and associates who may also benefit from our individualized approach to wealth management.

ACCOUNT NUMBER: 40310000219

STATEMENT PERIOD: NOVEMBER 01, 2025 THROUGH NOVEMBER 30, 2025

**PORTFOLIO SUMMARY**

	TAX COST	MARKET VALUE	PERCENT
 CASH AND EQUIVALENTS	220,909.86	220,909.86	6.2%
 EQUITIES	1,206,699.91	1,564,078.32	44.0%
 FIXED INCOME	1,798,648.49	1,767,211.80	49.8%
<b>TOTAL ASSETS</b>	<b>3,226,258.26</b>	<b>3,552,199.98</b>	<b>100.0%</b>
ACCRUED INCOME			
OTHER	14,100.95	14,100.95	
<b>TOTAL ACCRUED INCOME</b>	<b>14,100.95</b>	<b>14,100.95</b>	
<b>TOTAL ASSETS &amp; ACCRUALS</b>	<b>3,240,359.21</b>	<b>3,566,300.93</b>	
<b>BEGINNING MARKET VALUE</b>	<b>3,556,110.98</b>		
<b>ENDING MARKET VALUE</b>	<b>3,566,300.93</b>		



**ACTIVITY SUMMARY**

	THIS PERIOD	YEAR TO DATE	REALIZED CAPITAL GAINS / LOSSES	
			THIS PERIOD	YEAR TO DATE
<b>BEGINNING MARKET VALUE</b>	<b>3,547,069.98</b>	<b>3,297,807.26</b>		
DIVIDENDS AND INTEREST	1,450.44	53,404.08		
DISBURSEMENTS	0.00	71,563.31	LONG TERM	0.00
FEES	1,473.68	15,560.95	<b>TOTAL GAINS / LOSSES</b>	<b>0.00</b>
NET CASH SALES/PURCHASES	2,924.12	33,720.18		<b>38,456.97</b>
CHANGE IN MARKET VALUE	5,130.00	254,392.72		
<b>ENDING MARKET VALUE</b>	<b>3,552,199.98</b>	<b>3,552,199.98</b>		
			INVESTMENT PERFORMANCE	
			THIS PERIOD	YEAR TO DATE
			<b>RATE OF RETURN</b>	0.19%
				10.36%

ACCOUNT NUMBER: 40310000219

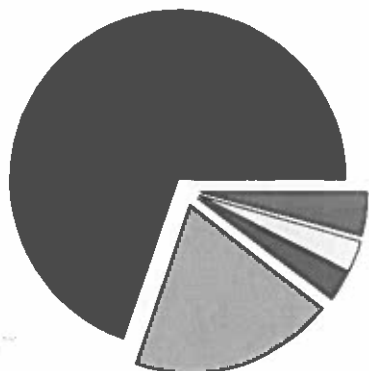
STATEMENT PERIOD: NOVEMBER 01, 2025 THROUGH NOVEMBER 30, 2025

**PORTFOLIO DETAIL**

DESCRIPTION	MARKET VALUE/ PRICE	TAX COST/ UNREALIZED GAIN/LOSS	EST ANNUAL INCOME/ ACCRUED INC	CURRENT YIELD
<b>CASH AND EQUIVALENTS</b>				
FNWM MONEY MARKET	220,909.86 1.00	220,909.86 0.00	8,637.58 719.80	3.91
<b>TOTAL CASH AND EQUIVALENTS</b>	<b>220,909.86</b>	<b>220,909.86</b> 0.00	<b>8,637.58</b> 719.80	<b>3.91</b>

DESCRIPTION	TICKER	SHARES	MARKET VALUE/ PRICE	TAX COST/ UNREALIZED GAIN/LOSS	EST ANNUAL INCOME/ ACCRUED INC	CURRENT YIELD
<b>EQUITIES</b>						
DFA INTERNATIONAL SMALL COMPANY I	DFISX	3,107.692	78,407.07 25.23	55,999.08 22,407.99	2,274.83	2.90
DFA DIMENSIONAL EMERGING CORE EQUITY MARKET ETF	DFAE	4,791.000	154,030.65 32.15	124,306.61 29,724.04	3,166.85	2.06
DODGE & COX INTERNATIONAL STOCK I	DODFX	20,332.528	340,163.19 16.73	234,483.00 105,680.19	5,713.44	1.68
DODGE & COX STOCK I	DODGX	19,486.480	341,403.13 17.52	283,650.82 57,752.31	4,754.70	1.39
FIDELITY GROWTH COMPANY FUND	FDGRX	6,692.387	331,741.62 49.57	201,611.86 130,129.76	622.39	0.19
FIDELITY LOW-PRICED STOCK	FLPSX	2,419.572	100,992.94 41.74	107,468.40 6,475.46-	2,151.00	2.13
MFS MID CAP GROWTH FUND CLASS I	OTCIX	3,106.513	101,427.65 32.65	98,615.74 2,811.91		
NEUBERGER BERMAN GENESIS INSTITUTIONAL	NBGIX	863.572	54,672.74 63.31	51,877.29 2,795.45	82.90	0.15
VANGUARD SMALL CAP VALUE INDEX ADMIRAL	VSIAX	673.700	61,239.33 90.90	48,687.11 12,552.22	1,207.94	1.97
<b>TOTAL EQUITIES</b>			<b>1,564,078.32</b>	<b>1,206,699.91</b> 367,378.41	<b>19,974.06</b> 0.00	<b>1.28</b>

**BOND QUALITY SUMMARY**



S & P QUALITY RATING	MARKET VALUE	PERCENT
TREASURY / AGENCY	1,232,423.25	69.7%
AA	350,840.30	19.9%
AA-	52,023.00	2.9%
A+	56,024.50	3.2%
NOT RATED	75,900.75	4.3%
<b>Total</b>	<b>1,767,211.80</b>	<b>100.0%</b>

ACCOUNT NUMBER: 40310000219

STATEMENT PERIOD: NOVEMBER 01, 2025 THROUGH NOVEMBER 30, 2025

**PORTFOLIO DETAIL ( CONTINUED )**

DESCRIPTION	RATING	PAR VALUE	MARKET VALUE/ PRICE	TAX COST/ UNREALIZED GAIN/LOSS	EST ANNUAL INCOME/ ACCRUED INC	CURRENT YIELD
<b>FIXED INCOME</b>						
AUBURN ME GO BDS DTD 05/03/2021 4% 11/01/2028	AA-	50,000.00	52,023.00 104.05	52,365.50 342.50-	2,000.00 166.67	3.84
FHLB CONS BD DTD 08/01/2016 1.875% 09/11/2026	AA+	200,000.00	197,220.00 98.61	201,584.41 4,364.41-	3,750.00 833.33	1.90
FHLB CONS BD DTD 07/01/2021 .875% 06/12/2026	AA+	150,000.00	147,769.50 98.51	150,332.96 2,563.46-	1,312.50 616.15	0.89
MAINE FIN AUTH REV BDS DTD 07/25/2024 5% 07/01/2028	AA	55,000.00	58,230.15 105.87	59,364.25 1,134.10-	2,750.00 1,145.83	4.72
MAINE FIN AUTH REV BDS DTD 07/25/2024 5% 07/01/2033	AA	50,000.00	57,650.00 115.30	58,252.00 602.00-	2,500.00 1,041.67	4.34
MAINE HEALTH & HIGHER EDL FACS AUTH REV BDS DTD 06/02/2022 5% 07/01/2032	AA	50,000.00	56,615.00 113.23	56,875.00 260.00-	2,500.00 1,041.67	4.42
MAINE HEALTH & HIGHER EDL FACS AUTH REV BDS DTD 06/28/2016 5% 07/01/2026		75,000.00	75,900.75 101.20	76,003.88 103.13-	3,750.00 1,562.50	4.94
MAINE HEALTH & HIGHER EDL FACS AUTH REV BDS DTD 07/25/2023 5% 07/01/2029	AA	50,000.00	53,913.50 107.83	54,115.50 202.00-	2,500.00 1,041.67	4.64
MAINE HEALTH & HIGHER EDL FACS AUTH REV BDS DTD 11/06/2019 4% 07/01/2035-2029	AA	65,000.00	66,827.15 102.81	66,865.50 38.35-	2,600.00 1,083.33	3.89
MAINE HEALTH & HIGHER EDL FACS AUTH REV BDS DTD 09/10/2024 5% 07/01/2034	AA	50,000.00	57,604.50 115.21	58,077.50 473.00-	2,500.00 1,041.67	4.34
MAINE REGIONAL SCH UNIT NO 26 GO BDS DTD 09/11/2025 5% 09/01/2031	A+	50,000.00	56,024.50 112.05	56,845.00 820.50-	2,500.00 555.56	4.46
US TREASURY NTS DTD 02/03/2021 1.125% 02/15/2031		200,000.00	176,782.00 88.39	189,904.40 13,122.40-	2,250.00 660.33	1.27
US TREASURY NTS DTD 06/17/2021 .875% 06/30/2026		200,000.00	196,724.00 98.36	200,479.01 3,755.01-	1,750.00 732.34	0.89
US TREASURY NTS DTD 08/19/2021 .75% 08/31/2026		225,000.00	220,137.75 97.84	224,567.95 4,430.20-	1,687.50 428.87	0.77
US TREASURY NTS DTD 02/17/2022 1.875% 02/28/2027		300,000.00	293,790.00 97.93	293,015.63 774.37	5,625.00 1,429.56	1.91
<b>TOTAL FIXED INCOME</b>			<b>1,767,211.80</b>	<b>1,798,648.49</b> <b>31,436.69-</b>	<b>39,975.00</b> <b>13,381.15</b>	<b>2.26</b>
<b>TOTAL ASSETS</b>			<b>3,552,199.98</b>	<b>3,226,268.26</b> <b>325,941.72</b>	<b>68,586.63</b> <b>14,100.95</b>	<b>1.93</b>
<b>TOTAL ACCRUED INC</b>			<b>14,100.95</b>	<b>14,100.95</b>		
<b>GRAND TOTAL ASSETS</b>			<b>3,566,300.93</b>	<b>3,240,369.21</b> <b>325,941.72</b>	<b>68,586.63</b> <b>14,100.95</b>	<b>1.93</b>

**TRANSACTION DETAIL**

DATE	QUANTITY	DESCRIPTION	TRANSACTION TYPE	CASH	COST BASIS
11/01/25		BEGINNING BALANCE		0.00	3,229,182.38
<b>DIVIDENDS</b>					
11/03/25		MM0000099 DIVIDEND ON FNWM MONEY MARKET PAYABLE 10/31/2025 EFFECTIVE 10/31/2025	DIVIDEND	1,181.52	
<b>TOTAL DIVIDENDS</b>				1,181.52	0.00
<b>INTEREST</b>					
11/06/25		56042R5D0 ACCRUED INTEREST PAID 50,000 UNITS MAINE HEALTH & HIGHER EDL FACS AUTH REV BDS DTD 06/02/2022 5% 07/01/2032	ACCRUED INT	868.06-	
11/06/25		050375UK8 ACCRUED INTEREST PAID 50,000 UNITS AUBURN ME GO BDS DTD 05/03/2021 4% 11/01/2028	ACCRUED INT	27.78-	
11/06/25		56042SBF6 ACCRUED INTEREST PAID 50,000 UNITS MAINE HEALTH & HIGHER EDL FACS AUTH REV BDS DTD 07/25/2023 5% 07/01/2029	ACCRUED INT	868.06-	
11/06/25		56042SDL1 ACCRUED INTEREST PAID 50,000 UNITS MAINE HEALTH & HIGHER EDL FACS AUTH REV BDS DTD 09/10/2024 5% 07/01/2034	ACCRUED INT	868.06-	
<b>TOTAL INTEREST</b>				2,631.96-	0.00
<b>PURCHASES</b>					
11/06/25	50,000.000	56042R5D0 PURCHASED 50,000 UNITS MAINE HEALTH & HIGHER EDL FACS AUTH REV BDS DTD 06/02/2022 5% 07/01/2032 ON 11/05/2025 AT 113.75 THRU H AND R BLOCK FINANCIAL ADVISORS	BUY	56,875.00-	56,875.00
11/06/25	50,000.000	050375UK8 PURCHASED 50,000 UNITS AUBURN ME GO BDS DTD 05/03/2021 4% 11/01/2028 ON 11/05/2025 AT 104.731 THRU H AND R BLOCK FINANCIAL ADVISORS	BUY	52,365.50-	52,365.50
11/06/25	50,000.000	56042SBF6 PURCHASED 50,000 UNITS MAINE HEALTH & HIGHER EDL FACS AUTH REV BDS DTD 07/25/2023 5% 07/01/2029 ON 11/05/2025 AT 108.231 THRU H AND R BLOCK FINANCIAL ADVISORS	BUY	54,115.50-	54,115.50
11/06/25	50,000.000	56042SDL1 PURCHASED 50,000 UNITS MAINE HEALTH & HIGHER EDL FACS AUTH REV BDS DTD 09/10/2024 5% 07/01/2034 ON 11/05/2025 AT 116.155 THRU H AND R BLOCK FINANCIAL ADVISORS	BUY	58,077.50-	58,077.50
<b>TOTAL PURCHASES</b>				221,433.50-	221,433.50

ACCOUNT NUMBER: 40310000219

STATEMENT PERIOD: NOVEMBER 01, 2025 THROUGH NOVEMBER 30, 2025

**TRANSACTION DETAIL ( CONTINUED )**

DATE	QUANTITY	DESCRIPTION	TRANSACTION TYPE	CASH	COST BASIS
<b>FEES</b>					
11/07/25		FEE TO FIRST NATIONAL WEALTH MANAGEMENT FOR THE PERIOD ENDING 10/31/2025 BASED ON AVERAGE MARKET VALUE___1,842.11 DISCOUNT_____1,105.27	DISBURSEMENT	736.84-	
11/07/25		FEE TO FIRST NATIONAL WEALTH MANAGEMENT FOR THE PERIOD ENDING 10/31/2025 BASED ON AVERAGE MARKET VALUE___1,842.11 DISCOUNT_____1,105.27	DISBURSEMENT	736.84-	
<b>TOTAL FEES</b>				<b>1,473.68-</b>	<b>0.00</b>
<b>SALES AND MATURITIES</b>					
11/30/25	224,357.620-	MM0000099 NET WITHDRAWAL FNWM MONEY MARKET	NET CASH MGMT	224,357.62	224,357.62-
<b>TOTAL SALES AND MATURITIES</b>				<b>224,357.62</b>	<b>224,357.62-</b>
11/30/25		<b>ENDING BALANCE</b>		<b>0.00</b>	<b>3,226,258.26</b>

Eligible Costs Incurred, Proposed for Environmental Trust Reimbursement for FY26

Source of Proposed Reimbursement

Date	Invoice #	Paid	Vendor	Purpose	Expense	Category of Stormwater Management Cost						Receipt	Date to Env. Trust	Account #	
						Maintenance	Compliance Documentation	Supplies	Contracted Services	Training/Travel	Principal				Income
7/10/25	18352	7/16/25	Allen's Environmental	Culvert - Kennebec Rd	\$ 426.50	\$ 426.50						\$ 426.50	Y	9/11/25	10-10-22-01
8/12/25		8/13/25	Dudley Patterson	120 bales of hay	\$ 600.00			\$ 600.00				\$ 600.00	Y	9/11/25	10-10-22-01
8/4/25	654744	8/28/25	Hughes Bros, Inc.	Kennebec Rd. Flowable Fill	\$ 322.00			\$ 322.00				\$ 322.00	Y	9/11/25	10-10-22-01
9/30/25	2025-1830	9/10/25	SEE, Inc.	Sucker Brook	\$ 4,240.75				\$4,240.75			\$ 4,240.75	Y	9/11/25	10-10-22-05
9/9/25	655462	10/1/25	Hughes Bros, Inc.	Canan Rd	\$ 490.00			\$ 490.00				\$ 490.00	Y	12/17/25	10-10-22-01
10/2/25	109713	10/13/25	Hampden Hardware	Shop Supplies	\$ 524.95			\$ 524.95				\$ 524.95	Y	12/17/25	10-10-22-01
10/2/25	109729	10/13/25	Hampden Hardware	Shop Supplies	\$ 260.00			\$ 260.00				\$ 260.00	Y	12/17/25	10-10-22-01
10/3/25	109774	10/13/25	Hampden Hardware	Repair	\$ 238.94			\$ 238.94				\$ 238.94	Y	12/17/25	10-10-22-01
10/3/25	109805	10/13/25	Hampden Hardware	Repair	\$ (39.00)			\$ (39.00)				\$ (39.00)	Y	12/17/25	10-10-22-01
10/14/25	34398	10/29/25	Plymouth Engineering, Inc.	Muni Bldg Stormwater Design	\$ 816.80				\$816.80			\$ 816.80	Y	12/17/25	10-10-22-05
10/16/25	2025-1828	10/16/25	SEE, Inc.	MS4-Compliance	\$ 10,984.36				\$10,984.36			\$ 10,984.36	Y	12/17/25	10-10-22-05
10/16/25	2025-1829	10/16/25	SEE, Inc.	Sucker Brook WSMP	\$ 3,570.60				\$3,570.60			\$ 3,570.60	Y	12/17/25	10-10-22-05
10/22/25			Town of Hampden	Water Well Monitoring Letter Postage	\$ 174.64			\$ 174.64				\$ 174.64	Y	12/17/25	10-10-22-10
10/17/25	92986753	10/29/25	F.W. Webb Co.	Pool Playground drain	\$ 91.81			\$ 91.81				\$ 91.81	Y	12/17/25	10-10-22-01
10/27/25	96698	11/13/25	American Concrete	Yard Drainage	\$ 651.47			\$ 651.47				\$ 651.47	Y	12/17/25	10-10-22-01
10/27/25	96699	11/13/25	American Concrete	Yard Drainage	\$ 839.71			\$ 839.71				\$ 839.71	Y	12/17/25	10-10-22-01
10/28/25		11/13/25	Dudley Patterson	100 bales of hay	\$ 600.00			\$ 600.00				\$ 600.00	Y	12/17/25	10-10-22-01
10/28/25	2026		Pizza Gourmet	Food for Stormwater Mtg	\$ 196.00			\$ 196.00				\$ 196.00	Y	12/17/25	10-10-22-05
11/11/25	34519	11/26/25	Plymouth Engineering, Inc.	Muni Bldg Stormwater	\$ 1,218.50				\$1,218.50			\$ 1,218.50	Y	12/17/25	10-10-22-05
11/13/25	369098	11/26/25	Bangor Daily News	Ad for soil filter project RFP	\$ 195.00			\$ 195.00				\$ 195.00	Y	12/17/25	10-10-22-10
11/17/25	27	11/26/25	Dept. of Environmental Protection	2026 AnnualDues	\$ 375.00			\$375.00				\$ 375.00	Y	12/17/25	10-10-22-05
12/4/25	34624		Plymouth Engineering, Inc.	Muni Bldg Stormwater	\$ 366.40				\$366.40			\$ 366.40	Y	12/17/25	10-10-22-05
					<b>\$ 27,144.43</b>							<b>1-351-00</b>	<b>R 01-48</b>		
												<b>\$ 27,144.43</b>			

YTD reimbursed to General Fund: \$ 5,589.25

**Total Proposed for Reimbursement to General Fund 12/11/2025 \$ 21,555.18**

**Total Proposed in Current Fiscal Year for Reimbursement to General Fund: \$ 27,144.43**

FY26 Invoices as of 12/11/2025 - \$27,144.43  
 As of November 2025 the max spending for FY26 is \$142,088.00 or 4% of \$3,552,199.98

YTD Deposit to:  
 Total from Principal 1-351-00 HCB  
 Total from Income \$ 27,144.43 R 01-48 Env Tr Rev

Budgeted revenue \$ 133,000.00 FY26 Town Budget  
 Remaining budgeted revenue (FY26) \$ 105,855.57



Hughes Bros, Inc.  
 719 Main Road North  
 Hampden, Maine 04444-1901



# Invoice

Date	Invoice #
9/9/2025	655462

<b>Bill To</b>
Hampden Public Works 106 Western Ave. Hampden, ME 04444

<b>Ship To</b>
355 CANAN RD Hampden ME

P.O. No.	Terms	Due Date	Ship Via	FOB
	Net 30	10/9/2025	Pick Up	

Qty	Description	Price Each	Amount
2.5	3000 PSI SAND	150.00	375.00
1	MINIMUM LOAD CHARGE	115.00	115.00
	Tickets 43784		
	?		
	Acct. No. <u>10-10-22-01</u>		
	Date <u>9.16.25</u>		
	Initials <u>JL</u>		
	Description <u>Stormwater repairs</u>		

Invoice #
655462

<b>Total</b>	\$490.00
<b>Payments/Credits</b>	\$0.00
<b>Balance Due</b>	\$490.00

# INVOICE

STILLWATER ENVIRONMENTAL  
ENGINEERING, INC.  
PO Box 426  
Orono, ME 04473

pruck@stillwaterenv.com  
+1 (207) 949-0074  
http://www.stillwaterenv.com



**Bill to**  
Victor Smith P.E., Town Engineer  
Town of Hampden  
106 Western Avenue  
Hampden, ME 04444

## Invoice details

P.O. Number: MS4 - Q3

Invoice no.: 2025-1828  
Terms: Due on receipt  
Invoice date: 10/01/2025

#	Date	Product or service	Description	Qty	Rate	Amount
1.	09/30/2025	Senior Project Manager/Senior Environmental Engineer	Tasks: * Client Correspondence * Review IDDE Sample Results with Staff * Review MDEP PY3 Annual Report and Submit to MDEP on Client's Behalf * Review PY4 action items with CB * Discuss PW MOA with staff	2	\$150.00	\$300.00
2.	09/30/2025	Senior Project Manager	Tasks: * 2025 PC Inspection Report Review * Final LID Language Review * MOA Site Plan Review * Chapter 500 Review	5.5	\$130.00	\$715.00
3.	09/30/2025	Project Manager II	Tasks: * Client Correspondence * MS4 Outfall Inspection Oversight * MOA Application * Sewer Mapping Oversight * Mapping Meeting and Follow Up * MS4 PY3 Annual Report Preparation	32.5	\$110.00	\$3,575.00
	09/30/2025	Project Manager I	Tasks: * Public Works MOA Application Assistance * Public Works Site Visit * Outfall Inspection Sampling Oversight * PW MOA Site Plan & Correspondence	7	\$100.00	\$700.00

5.	09/30/2025	Assistant Project Scientist II	Tasks: * Assist with PY3 MS4 Annual Report Preparation	11.5	\$85.00	\$977.50
	09/30/2025	Assistant Environmental Engineer	Tasks: * MS4 PC Inspection Report Preparation * Update Public Works Site Plan	8	\$85.00	\$680.00
7.	09/30/2025	Assistant Project Scientist I	Tasks: * Sewer GIS Map Updates	18	\$75.00	\$1,350.00
8.	09/30/2025	Intern	Tasks: * Sewer Mapping * MS4 PY4 Outfall Inspections	115.5	\$60.00	\$6,930.00
9.	09/30/2025	Technology Fee	Monthly Fulcrum App Charge (July, August, September)	3	\$75.00	\$225.00
10.	09/30/2025	Reimbursable Expenses	Reimbursable Expenses: * Bangor Daily Advertising Expense (567.84) * E. Coli Sampling (9 @ 55=\$495) * Human Bacteroides Sampling (1 @ 150=\$150)	1	\$1,212.84	\$1,212.84
11.	09/30/2025	Travel Expenses	Mileage	409	\$0.78	\$319.02

Total

**\$16,984.36**

Note to customer

For professional services provided by SEE through the period of July 1 to September 30, 2025.

\$6,000.00  
60-10-60-22  
VJS 10/14/25  
SEWER MAPPING

\$10,984.36  
10-10-22-05  
VJS 10/14/25  
MS4-COMPLIANCE

# INVOICE

STILLWATER ENVIRONMENTAL  
ENGINEERING, INC.  
Box 426  
Orono, ME 04473

pruck@stillwaterenv.com  
+1 (207) 949-0074  
http://www.stillwaterenv.com



## Bill to

Victor Smith P.E., Town Engineer  
Town of Hampden  
106 Western Avenue  
Hampden, ME 04444

## Invoice details

P.O. Number: 2025 Sucker Brook WBMP

Invoice no.: 2025-1829

Terms: Due on receipt

Invoice date: 10/01/2025

#	Date	Product or service	Description	Qty	Rate	Amount
1.	09/30/2025	Senior Project Manager/Senior Environmental Engineer	Task: * Review WBMP Progress with Staff	1	\$150.00	\$150.00
2.	09/30/2025	Senior Project Manager	Tasks: * WBMP Stream Crossing Assessments	8	\$130.00	\$1,040.00
3.	09/30/2025	Project Manager II	Tasks: * WBMP Project Management * WBMP Stakeholder Process * WBMP Internal Meetings	9.5	\$110.00	\$1,045.00
4.	09/30/2025	Project Manager I	Tasks: * WBMP Literature and Data Review	3	\$100.00	\$300.00
5.	09/30/2025	Assistant Environmental Engineer	Tasks: * Internal WBMP Meeting 7/8 * WBMP Plan Writing * Stream Crossing Assessment	6.5	\$85.00	\$552.50
6.	09/30/2025	Assistant Project Scientist II	Tasks: * Assist with WBMP Meeting 7/8 * WBMP Presentation Preparation for Meeting	5.5	\$85.00	\$467.50
7.	09/30/2025	Travel Expenses	Mileage	20	\$0.78	\$15.60

Total

\$3,570.60

Note to customer

For professional services provided by SEE through the period of July 1 to September 30, 2025.

10-10-22-05

VSS 10/14/25

SUCKER BROOK WAMP

Received By:

OCT 03 2025

COPY

Hampden Hardware  
6 Western Ave.  
PO Box 336, Hampden, ME, 04444, 862-3200

Hampden Hardware  
6 Western Ave.  
PO Box 336, Hampden, ME, 04444, 862-3200

SKU	Qty	Price	Total
214566	3	130.00	390.00
Grass Seed Mix BG Bag			
101010fert50	1	26.99	26.99
10 10 10 FERT 50LB			
1030004	4	26.99	107.96
5-10-10 FERTILIZER 50#			

Sub Total 524.95  
 TAX .00  
**Total 524.95**

Account Charge 524.95  
 By: PAUL  
 PO #: SHOP  
 Cust: HAMPT  
 Town of Hampden  
 (207) 862-3034

10-01-10-20

X

10/02/25 @ 9:32am Trans#: 109713  
 Employee: Nick Register: POS1



SKU	Qty	Price	Total
214566	2	130.00	260.00
Grass Seed Mix BG Bag			

Sub Total 260.00  
 TAX .00  
**Total 260.00**

Account Charge 260.00  
 By: PAUL  
 PO #: SHOP  
 Cust: HAMPT  
 Town of Hampden  
 (207) 862-3034

10-01-10-20

X

10/02/25 @ 11:09am Trans#: 109729  
 Employee: Nick Register: POS1



Acci. No. 10-10-22-01  
 Date 10.3.25  
 Initials  
 Description Shop Supplies

Acci. No. 10-10-22-01  
 Date 10.3.25  
 Initials  
 Description Shop Supplies

Krystal this is stormwater  
per Jon

Received by.

OCT 14 2025

COPY

Hampden Hardware  
6 Western Ave.  
PO Box 336, Hampden, ME, 04444, 862-3200

Hampden Hardware  
6 Western Ave.  
PO Box 336, Hampden, ME, 04444, 862-3200

SKU	Qty	Price	Total
7683527	1	13.99	13.99
Y SHUTOFF BRASS MALE			
7677354	3	64.99	194.97
GARDEN HOSE 5/8"X100'			
7006025	2	14.99	29.98
SPRINKLR OSC 3000SQFT			
Sub Total			238.94
TAX			.00
<b>Total</b>			<b>238.94</b>

SKU	Qty	Price	Total
7677354	1-	64.99	64.99-
GARDEN HOSE 5/8"X100'			
7676661	1	25.99	25.99
FIREMANS NOZZLE ADJ			
Sub Total			39.00-
TAX			.00
<b>Total</b>			<b>39.00-</b>

Account Charge 238.94  
By: PAUL  
PO #: SHOP  
Cust: HAMPT Town of Hampden  
(207) 862-3034

Account Charge 39.00-  
By: PAUL  
PO #: PUB WORKS  
Cust: HAMPT Town of Hampden  
(207) 862-3034

10-10-22-01

10-10-22-01

10/03/25 @ 8:45am Trans#: 109774  
Employee: Nick Register: POS1

10/03/25 @ 12:33pm Trans#: 109805  
Employee: Frank Register: POS1



Acct. No. 10-10-22-01  
Date 10.14.25  
Initials SC  
Description Repair

Acct. No. 10-10-22-01  
Date 10.14.25  
Initials SC  
Description Repair

238.94  
- 39.00  
-----  
199.94

# Plymouth Engineering, Inc.

8 Main St., Suite C  
Newport, ME 04953

# Invoice

Date	Invoice #
10/14/2025	34398

Bill To
Town of Hampden Attn: Victor Smith, Engineer 106 Western Avenue Hampden, ME 04444

Ship to:

PO Number	Terms	Project
	Net 30	18234 Hampden Rec Parking

Quantity	Description	Rate	Amount
3.5	Aimee S. Young, Project Engineer	90.00	315.00
3	Scott E. Braley, PE, Principal-in-Charge	150.00	450.00
22	2025 Mileage Rate	0.70	15.40
	Mileage	36.40	36.40
	For site visit and U.S.F. bid package progress.		
	16-10-22-05 VJS 10/21/25 MULTI BUILDING STORMWATER DESIGN		
For services through September, 28, 2025.		<b>Total</b>	<b>\$816.80</b>

SEB

Telephone: (207) 257-2071

www.plymouthengineering.com

**Town of Hampden**  
106 Western Avenue  
Hampden, Maine 04444



**Phone:** (207) 862-3034  
**Fax:** (207) 862-5067  
**email:** info@hampdenmaine.gov

October 22, 2025

To: Environmental Trust Committee  
From: Tammy Ewing, Finance Director  
Re: Reimbursement request

On October 20, 2025, the Town of Hampden sent 236 letters to abutters of the Pine Tree Land Fill regarding water well monitoring. The Town is requesting reimbursement in the amount of \$174.64 for postage associated with these letters from the Environmental Trust account.

Respectfully submitted,

Tammy Ewing  
Finance Director  
Town of Hampden

*10/22/2025*  
*E 10-10-22-10*  
*Water Well Monitoring Letter Postage*



F.W. Webb Company  
Hampden, ME 04444  
207-947-6905

**ORIGINAL INVOICE**

Customer P.O. Number POOL/PLAYGROUND			Invoice No. 92986753
Customer No. 24233	Ship Via SELF-SERVE	Date Shipped 10/16/25	Invoice Date 10/17/25

THANK YOU FOR SUPPORTING LOCAL.  
FEEDBACK/FEEDBACK12@FWWEBB.COM

Ship To			
SAME			
20 Webb Drive			
HAMPDEN, ME 04444			

TOWN OF HAMPDEN

106 WESTERN AVE  
HAMPDEN ME 04444-1436

BRENT

Ordered	Shipped	B.O.	Description	Line #	Net Price	Extension
1	1	0	TEE 4 N12 MLD SOIL TGT 0460ST ADS4TST 580131	(1)	36.69	36.69
1	1	0	NH CPLG 6BND BLU 5 SS 5/16 BLT PRO5CLAMP 765842	(2)	37.09	37.09
1	1	0	NH CPLG 4BND BLU 4 SS 5/16 BLT PRO4CLAMP 765841	(3)	18.03	18.03
<p>Acct. No. <u>10-10-22-01</u>  Date <u>10/27/2025</u>  Initials <u>SL</u>  Description <u>Pool Playground Drain</u>  Amount _____</p>						
Materials purchased hereon are subject to terms and conditions on back hereof. OP-002-1, REV.0				Freight/Handling	Tax	Subtotal
				0.00	0.00	91.81
						<b>91.81</b>

**REMITTANCE SLIP**

Please detach at the perforation and remit this section with your payment.

Payment Terms 2% 10TH, 30 NET
----------------------------------

Invoice Date 10/17/25	Invoice No. 92986753	Invoice Amount 91.81	Amount Remitted \$
Customer No. 24233	BR# 12	Customer Name TOWN OF HAMPDEN	Mail all remittances to: 160 Middlesex Turnpike Bedford MA 01730

# Invoice



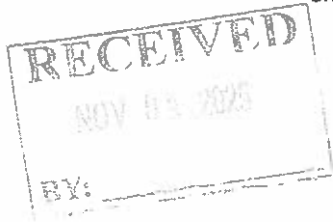
American Concrete Industries, Inc.  
 1717 Stillwater Ave  
 Veazie ME 04401  
 Phone: (207) 947-8334 Ext. 0000  
 Fax: (866) 414-9083 Ext. 0000

Page 1/1  
 Invoice 0000096698  
 Date 10/27/2025



Bill To: Hampden, Town Of  
 Western Avenue  
 Hampden ME 04444

Ship To: Hampden, Town Of  
 355 Canaan Rd  
 Hampden ME 04444



Purchase Order No.		Customer ID		Salesperson ID		Shipping Method		Payment Terms		Req Ship Date		Master No.	
		862-3337				OUR TRUCK		Net 30		10/13/2025		307,534	
Ordered	Shipped	B/O	Item Number	Description				Unit Price	Ext. Price				
1	1	0	110100	S106-16 Boot for Pipe OD 13.00 - 14.00				\$77.62	\$77.62				
1	1	0	110420	I-242 SS Boot Band				\$10.62	\$10.62				
1	1	0	200270	CS-102 1" x 14.5' Long Manhole Sealant				\$12.23	\$12.23				
1	1	0	254520	4' Diameter x 2' High Eccentric Cone				\$156.00	\$156.00				
1	1	0	264140	4' Diameter x 4' High Base (Special)				\$395.00	\$395.00				

CB 1  
 355 Canaan Rd Hampden  
 Victor Smith

*New Office*  
 Acct. No. 10-10-22-01  
 Date 11/5/2025  
 Initials SL  
 Description yard drainage  
 Amount \_\_\_\_\_

Subtotal \$651.47  
 Misc \$0.00  
 Tax \$0.00  
 Total \$651.47  
 Payments Received \$0.00  
 Amount Due \$651.47

For a complete listing of updated prices, please visit [https://precast.americanconcrete.com/price\\_list.aspx](https://precast.americanconcrete.com/price_list.aspx).

**Please Take Note of Our Return Policy:**

All Returned Products are subject to a 20% restocking fee. Returned Precast Concrete Retaining Walls, Curbing and Installed Manhole Boots are subject to a 50% restocking fee.  
 Custom Items are NOT returnable. Road and Filter Fabrics are NOT returnable  
 All Products MUST be in resalable condition in order to be Returned.  
 All Products MUST be returned within 30 Days of original delivery.  
 You MUST have your original Invoice or Proof of Delivery in order to Return Products.

Check out our latest projects on Facebook

# Invoice



American Concrete Industries, Inc.  
 1717 Stillwater Ave  
 Veazie ME 04401  
 Phone: (207) 947-8334 Ext. 0000  
 Fax: (866) 414-9083 Ext. 0000

Page 1/1  
 Invoice 0000096699  
 Date 10/27/2025



Bill To: Hampden, Town Of  
 Western Avenue  
 Hampden ME 04444

Ship To: Hampden, Town Of  
 355 Canaan Rd  
 Hampden ME 04444



Purchase Order No.		Customer ID		Salesperson ID	Shipping Method	Payment Terms	Req Ship Date	Master No.
		862-3337			OUR TRUCK	Net 30	10/13/2025	307,535
Ordered	Shipped	B/O	Item Number	Description		Unit Price	Ext. Price	
2	2	0	110100	S106-16 Boot for Pipe OD 13.00 - 14.00		\$77.62	\$155.24	
2	2	0	110420	I-242 SS Boot Band		\$10.62	\$21.24	
1	1	0	200270	CS-102 1" x 14.5' Long Manhole Sealant		\$12.23	\$12.23	
1	1	0	254520	4' Diameter x 2' High Eccentric Cone		\$156.00	\$156.00	
1	1	0	264140	4' Diameter x 4' High Base (Special)		\$395.00	\$395.00	
1	1	0	257208	8" High Donut Riser		\$75.00	\$75.00	
1	1	0	410230	Fuel Surcharge 0-25 Miles Per Load		\$25.00	\$25.00	

CB 2  
 355 Canaan Rd Hampden  
 Victor Smith

*New Price*  
 Acct. No. 10-10-22-01  
 Date 11/5/2025  
 Initials SC  
 Description yard Drainage  
 Amount \_\_\_\_\_

Subtotal	\$839.71
Misc	\$0.00
Tax	\$0.00
Total	\$839.71
Payments Received	\$0.00
Amount Due	\$839.71

For a complete listing of updated prices, please visit [https://precast.americanconcrete.com/price\\_list.aspx](https://precast.americanconcrete.com/price_list.aspx).

**Please Take Note of Our Return Policy:**

- All Returned Products are subject to a 20% restocking fee. Returned Precast Concrete Retaining Walls, Curbing and installed Manhole Boots are subject to a 50% restocking fee.
- Custom Items are NOT returnable. Road and Filter Fabrics are NOT returnable
- All Products MUST be in resalable condition in order to be Returned.
- All Products MUST be returned within 30 Days of original delivery.
- You MUST have your original Invoice or Proof of Delivery in order to Return Products.

Check out our latest projects on Facebook

Pizza Gourmet

60 Main RD N Suite A  
Hampden, ME 04444

# Invoice

Date	Invoice #
10/28/2025	2026

Bill To
Hampden, Town of 106 Western Ave. Hampden, ME 04444

P.O. No.	Terms	Project
	Net 15	

Quantity	Description	Rate	Amount
	Wraps Non Tax Sale	83.50	83.50
	Sandwiches Non Tax Sale	99.50	99.50
	Chips Non Tax Sale	13.00	13.00
	<i>12/2/25</i> <i>10.10.22.05</i> <i>pas</i> <i>- food for Stormwater group mtg</i>		
Thank you for your business!		<b>Total</b>	\$196.00

received  
OCT 28 2025

October 28, 2025

**Dudley Patterson**  
**116 Patterson Rd.**  
**Hampden, ME 04444**

**Sold to the Town of Hampden 100 bales of hay at \$6.00 per bale.**

**Amount Due \$600.00**

Dudley Patterson

**Dudley Patterson**

Acct. No. 10-10-22-01  
Date 10.27.25  
Initials DP  
Description Hay

# Plymouth Engineering, Inc.

8 Main St., Suite C  
Newport, ME 04953

# Invoice

11/11/2025	34519
------------	-------

Town of Hampden  
Attn: Victor Smith, Engineer  
106 Western Avenue  
Hampden, ME 04444

Ship to:



DATE	Terms	Phone
	Net 30	18234 Hampden Rec Parking

Quantity	Description	Rate	Amount
4	Aimee S. Young, Project Engineer	110.00	440.00
4.5	Scott E. Braley, PE, Principal-in-Charge	173.00	778.50
For bid document preparation for 3 USF's at Town office.  Acct. No. <u>10-10-22-05</u> Date <u>11/25/25</u> Initials <u>VJS</u> Description <u>MUNI BUILDING STORMWATER</u> Amount <u>\$ 1,218.50</u>			
For services through November 2, 2025.		<b>Total</b>	<b>\$1,218.50</b>

SEB

Telephone: (207) 257-2071

www.plymouthengineering.com



**Bangor Publishing Company**

1 Merchants Plaza  
Bangor, ME 04401  
207.990.8246 Phone / fax  
accountsrec@bangordailynews.com  
Tax ID: 01-0024570

# Invoice

#INV369098

11/13/2025

**TOTAL** *COPY* **\$195.00**

**Bill To**

Town Of Hampden  
106 Western Ave  
Hampden ME 04444

**Due Date: 12/13/2025**

<b>Terms</b>	<b>Due Date</b>	<b>PO #</b>	<b>Product</b>	<b>Description</b>
Net 30	12/13/2025		Classifieds	Soil Filter, BDN, Nov. 6

Quantity	Item	Options	Run Date	Amount
1	<b>Print Ad Legal Notice</b> The Town of Hampden will receive sealed Bids for a Soil Filter project located on the Town Office ca		11/6/2025	\$180.00
1	<b>Legal Notices Digital new</b>		11/6/2025	\$15.00

<b>Subtotal</b>	\$195.00
<b>Total</b>	\$195.00

Acct. No. 10.10.22.10  
 Date 11/17/25  
 Initials pas  
 Description Ad fee- RFP

Please return this portion with your payment.



**AMOUNT ENCLOSED**

\$ , .

To pay by credit card, please call 207.990.8246.

Account Number: 4701  
 Invoice Number: #INV369098  
 Invoice Date: 11/13/2025  
 Date Due: 12/13/2025  
 Total Due: \$195.00

Town Of Hampden  
106 Western Ave  
Hampden ME 04444

Bangor Publishing Company  
PO Box 1329  
Bangor, ME 04402-1329

# INVOICE

Bill to:  
 DEPT ENVIRONMENTAL PROTECTION, NRSC  
 ATTN: NRSC FINANCE  
 155 STATE HOUSE STATION  
 AUGUSTA ME 04333-0155



Customer Name		Page 1
TOWN OF HAMPDEN		
Customer Number	Invoice Number	Invoice Date
06AMSTWMER041022	DEP1117251MST0000027	11-17-25
AR Dept BPRO		Due Date
06A:MSTW		01-01-26
Amount Due	Amount Enclosed	
\$375.00		

Bill to:  
 TOWN OF HAMPDEN  
 ATTN: KYLE SEVERANCE, GIS/IT SPECIALIST  
 106 WESTERN AVE  
 HAMPDEN ME 04444

Payment Method: Check  Money Order

Please check if address has changed. Write correct address on back of stub and attach with payment

Please write Invoice No on front of check or Money Order. DO NOT MAIL CASH

Please detach the above stub and return with your remittance payable to TREASURER STATE OF MAINE



## ENVIRONMENTAL PROTECTION

**ORIGINAL**

Customer Number	Orig. Inv. Date	Orig. Due Date
06AMSTWMER041022	11-17-25	01-01-26

Customer Name	Invoice Number	Invoice Date
TOWN OF HAMPDEN	DEP1117251MST0000027	11-17-25

**Office Charges**

Ref Line No.	DESCRIPTION	No. of Units	Unit of Measure	Unit Price	Charges/Credit
1	2026 ANNUAL FEE FOR MUNICIPAL STORMWATER (MS4) DISCHARGES FOR PERMIT # MER041022				\$375.00
Acct. No. <u>10-10-22-05</u> Date <u>11-24-25</u> Initials <u>VJS</u> Description <u>DEUS</u> Amount <u>\$375.00</u>					
Total Invoice Charges					\$375.00

Credit Payments Applied	\$0.00
<b>Total Amount Due By</b> 01-01-26	<b>\$375.00</b>

This invoice is for the licensed facility below:  
 TOWNWIDE MS4 STORMWATER GENERAL PERMIT  
 TOWNWIDE  
 HAMPDEN, ME  
 04444  
 To pay this invoice online, go to [maine.gov/dep/paymentportal](http://maine.gov/dep/paymentportal)

**Instructions**

PLEASE NOTE: Interest at a rate of 1.25% per month will be applied to any balance not received by the Due Date on the original invoice.

CONTACT:	Chris Everett	207-287-7862	christopher.everett@maine.gov
----------	---------------	--------------	-------------------------------

# Plymouth Engineering, Inc.

8 Main St., Suite C  
Newport, ME 04953

# Invoice

**RECEIVED**  
DEC 08 2025  
BY: \_\_\_\_\_

Date	Invoice #
12/4/2025	34624

Bill To
Town of Hampden Attn: Victor Smith, Engineer 106 Western Avenue Hampden, ME 04444

Ship to:

PO Number	Terms	Project
	Net 30	18234 Hampden Rec Parking

Quantity	Description	Rate	Amount
3	Aimee S. Young, Project Engineer Mileage  For pre-bid meeting and correspondence.	110.00 36.40	330.00 36.40
<p>Acct. No. <u>10-10-22-5</u> (W)</p> <p>Date <u>12/9/25</u></p> <p>Initials <u>V.S.S.</u></p> <p>Description <u>MUNI BUILDING STORMWATER DESIGN</u></p> <p>Amount <u>\$ 366.40</u></p>			
For services through November 30, 2025.		<b>Total</b>	<b>\$366.40</b>

SEB

Telephone: (207) 257-2071

www.plymouthengineering.com

## ***Do you live next to a landfill\*? Do you get drinking water from a well?***

**Get your drinking water tested for PFAS for FREE!**

PFAS (per- and polyfluoroalkyl substances) are toxic, man-made “forever” chemicals, created by industry for things like non-stick coating or fire fighting foam.

The Environmental Working Group estimates that every year 16,500 pounds of PFAS end up in landfills from discarded household goods, industrial waste and more, and 1,760 pounds of PFAS escape through liquid waste called landfill leachate, contaminating groundwater and drinking water.

PFAS persistently linger in air, water, and soil, and in our bodies. PFAS exposure is linked to cancer, thyroid disorders, autoimmune disorders, liver damage, and reproductive problems.

The Maine Department of Environmental Protection’s January 2024 Report on *Testing of Landfill Leachate for PFAS* states “it is clear from the 25 landfills sampled that significant concentrations of PFAS are present at landfills and in landfill leachate that have the potential to impact groundwater or surface water in the vicinity of the landfills.”



In response to community concern about PFAS contamination, LD 1604 was passed in 2025. This law requires owners of solid waste landfills that collect and manage leachate to:

- Pay for testing private wells when requested by property owners abutting\*\* a landfill
- Provide additional testing if contamination is found.

***Do you want more information about PFAS well testing?***

Contact: DEP Tracy Kelly [Tracy.Kelly@maine.gov](mailto:Tracy.Kelly@maine.gov) / 207-480-0583

Email us @ [dont.waste.m3@gmail.com](mailto:dont.waste.m3@gmail.com)

\*a solid waste landfill that collects and manages leachate

\*\*a property is considered to be abutting a solid waste landfill if the property is contiguous to property on which the landfill is located, including directly across a public or private right-of-way from the landfill, and is located within one mile of property on which the landfill is located.



Dominique DiSpirito  
Bureau of Remediation and Waste Management  
Maine Department of Environmental Protection (MEDEP)  
106 Hogan Road  
Bangor, Maine 04401

September 30, 2025  
File No. 2030.025

Re: Solid Waste License Minor Revision Application for a Replacement Flare  
Pine Tree Landfill  
Hampden, Maine

Dear Dominique:

On behalf of New England Waste Services of ME, Inc. (NEWSME), Sanborn, Head & Associates, Inc. (Sanborn Head) prepared this solid waste license minor revision application for the Pine Tree Landfill (PTL) in Hampden, Maine (License No. S-001987-WN-HC-N). NEWSME is seeking approval from the MEDEP to replace the existing flare skid at the facility as the flare is now oversized for current landfill gas (LFG) flow rates. According to Chapter 400 of the Maine Solid Waste Management Rules, a minor revision is required for “any proposed alteration that does not require a license amendment but that, in the Department’s judgment, requires Department approval due to the need to evaluate whether the proposed alteration could have a potential impact on public health or welfare, the environment, or create a nuisance.” Based on a pre-application meeting with MEDEP on September 24, 2025, a minor revision application is required to replace the current utility flare (Flare #3) with a smaller capacity flare (proposed Flare #4). The remainder of this letter provides a summary of the proposed revision, the reason for the change, and description of the supporting documents included to support this minor revision application.

#### **BACKGROUND**

PTL accepted solid waste until its final closure in 2009. The landfill remains equipped with an active gas extraction system designed for collection and conveyance of landfill gas. The extracted gas is treated and then combusted in an existing candlestick flare (designated as Flare #3) that is rated for 90 million British thermal units per hour (MMBtu/hr), equivalent to approximately 3,000 standard cubic feet per minute (scfm) of LFG at 50 percent (%) methane (CH<sub>4</sub>). Over time, the gas flow and methane content from the landfill has declined and resulted in difficulty maintaining uninterrupted combustion in Flare #3. The current LFG flow rate is approaching the lower operating limit of the flare.

#### **REPLACEMENT FLARE**

Upon consultation with the flare manufacturer, it was decided that a new (smaller) flare would be better suited for the lower expected flow rates and methane content. A new flare model was selected and NEWSME permitted the flare (proposed Flare #4) with the MEDEP Bureau of Air Quality. A new air emissions license was issued by MEDEP on July 30, 2025 (Air License No. A-850-71-F-M). The new flare is part of a skid-mounted package manufactured by Parnel Biogas Inc. that has a rated capacity of approximately 27.1 MMBtu/hr, or approximately 745 scfm maximum flow. The new flare skid will be positioned in the same location as the current flare and will be integrated into the existing supervisory control and data acquisition (SCADA) system at the site. The existing flare skid components will be removed. Once the new flare system is installed and operational, the existing blower skid located

upstream of the flare will also be bypassed and later removed. Specifications and shop drawings for the proposed flare skid are enclosed with this application.

The new flare skid will be approximately 8' wide x 35' long and includes the following main features:

- One (1) 6-inch diameter x 25-foot-tall flare stack (with windshield)
- One (1) flame arrestor
- One (1) stainless-steel knock-out pot (for moisture removal)
- One (1) gas blower with flanged expansion joints
- Stainless-steel process piping (304 SS)
- One (1) electric fail-close valve
- Two (2) manual butterfly valves with gear operators located at the blower inlet & outlet.
- One (1) manual valve located at the knockout pot inlet
- One (1) variable frequency drive (VFD);
- One (1) NEMA 4 blower control panel with blower control circuit breaker;
- One (1) disconnect switch
- One (1) 480V/110V step down transformer
- Vacuum and temperature gauges at blower inlet and outlet
- One (1) Pressure transmitter
- Three (3) Thermocouples for flare pilot and main flame detection


Additional information regarding these components is included with this application.

#### CLOSING

Pending approval of this minor revision, NEWSME intends to promptly install and commission the new flare once it is fully fabricated and delivered to the site. During the installation, NEWSME anticipates up to two days of flare downtime. Prior to installation and operation of Flare #4, PTL will continue to operate Flare #3 to minimize downtime. Please contact Ryan Clay at [rclay@sanbornhead.com](mailto:rclay@sanbornhead.com) or 603-415-6111 should you require additional information.

Sincerely,  
SANBORN, HEAD & ASSOCIATES, INC.

  
Ryan L. Clay, PE  
Senior Project Manager

  
Eric S. Steinhauser, PE, CPESC, CPSWQ  
Senior Vice President and Principal

RLC/TWR:brc

Enclosures: Application Form  
Check for Application Fee  
Flare Installation Drawings prepared by Sanborn Head (Stamped)  
Flare #4 Equipment Specifications and Shop Drawings  
Proposed Updates to PTL's LFG Operations and Maintenance Manual  
Copy of Air License for Flare #4 (Issued on July 30, 2025)

P:\2000s\2030.025\Source Files\Solid Waste Minor Revision for New Flare\20250930 PTL Solid Waste Minor Revision Application Letter.docx

# Application Form

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
Solid Waste Program, Attn: Geraldine Travers  
17 State House Station  
Augusta, Maine 04333-0017  
Telephone: (207) 287-2651

**FOR DEP USE ONLY**

ATS ID: \_\_\_\_\_ Seq: \_\_\_\_\_ DEP ID: \_\_\_\_\_ Received by DEP: \_\_\_\_\_  
Bureau: S Type of Application: WS or WT or WU Activity : N Fees Paid: \_\_\_\_\_  
Project Analyst: \_\_\_\_\_ Check No.: \_\_\_\_\_

**APPLICATION FOR A SOLID WASTE PROJECT MINOR REVISION**

This form shall be used to request approval, pursuant to 38 MRSA, Section 1301 et seq., and Maine's Solid Waste Management Regulations, of minor changes to: (a) project design or operation; or (b) the conditions of a permit as previously approved by the Board or Department of Environmental Protection. Please contact DEP Solid Waste staff to determine if your project is a minor revision or amendment.

PLEASE TYPE OR PRINT

Company Name: New England Waste Services of ME, Inc. Telephone: 207-862-4200  
Contact Person: Jeffrey Pelletier Telephone: 207-249-8025  
Contact e-mail: Jeffrey.Pelletier@Casella.com

Applicant Name: New England Waste Services of ME, Inc. Owner: New England Waste Services of ME, Inc.  
Telephone: 207-862-4200 Telephone: 207-862-4200  
Mailing Address: Mailing Address:  
Street Address: 358 Emerson Mill Road Street Address: 358 Emerson Mill Road  
Town: Hampden State: ME Zip: 04444 Town: Hampden State: ME Zip: 04444  
E-mail: Jeffrey.Pelletier@Casella.com E-mail: Jeffrey.Pelletier@Casella.com

**Address: Billing**

Name: New England Waste Services of ME Inc.  
Mailing Address:  
Street Address: 358 Emerson Mill Road  
Town: Hampden State: ME Zip: 04444

***Site/Activity Information***

Project Description: State-owned landfill Minor Revision  
Location: Hampden, Maine Directions: Take Exit 180 on I-95 South; Turn right on Coldbrook road; Continue 0.3 miles to Emerson Mill Road; Take left on Emerson Mill Road and continue for 0.6 miles. The facility is on the left.

**PLEASE SEE OTHER SIDE OF SHEET - SIGNATURE REQUIRED**

## SIGNATURE OF APPLICANT

By signing this application, the applicant certifies that he or she has: (1) filed a complete copy of this application in the municipal office of the municipality in which the project is located, (2) reviewed the instructions contained in this application form, and (3) reviewed the appropriate state laws that relate to the proposed project.

I certify under penalty of law that I have personally examined the information submitted in this document and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete. I authorize the Department to enter the property that is the subject of this application, at reasonable hours, including buildings, structures or conveyances on the property, to determine the accuracy of any information provided herein. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

DATE: 09-30-25

SIGNATURE: \_\_\_\_\_



PRINTED NAME: \_\_\_\_\_

Jeffrey Pelletier

(Applicant)

TITLE: \_\_\_\_\_

Environmental Manager

(If other than applicant, attach letter of agent authorization.)

**PLEASE SEE ATTACHED FEE SCHEDULE TO DETERMINE THE APPLICATION FEE FOR  
FOR A MINOR REVISION**

**CERTIFICATE OF AUTHORITY**

At a duly authorized meeting of the Board of Directors of New England Waste Services of ME, Inc., it was voted that Jeffrey Pelletier, Environmental Manager, is authorized to execute all environmental reports, permit applications, and related documents, in the name of and on behalf of New England Waste Services of ME, Inc.; and such execution of any document shall be valid and binding upon New England Waste Services of ME, Inc.

A True Copy Attested,

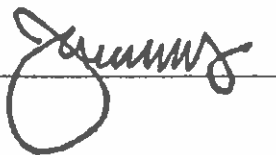
Company Name/Address: New England Waste Services of ME, Inc  
110 Main Street, Suite 1308  
Saco, ME 04072

Name & Title of Signatory: John W. Casella, President & Secretary

Date: January 7, 2022

I hereby certify that I am the Secretary of New England Waste Services of ME, Inc.; that the above vote has not been amended or rescinded and remains in full force and effect as of the date of the date written above.

Signature: \_\_\_\_\_



## INSTRUCTIONS

1. **Please refer to the relevant requirements of the Solid Waste Management Regulations when preparing this application.** If you have any questions that arise at any point during the application process, please contact the DEP Solid Waste Program staff.
2. **Pre-Application meeting.** Applicants proposing a minor revision to a license are encouraged to contact the DEP staff to decide whether a pre-application meeting would be useful in preparing your proposal for a change in the licensed project. The meeting can help avoid unnecessary expense and processing delays.
3. **Fill out the application completely.** INCOMPLETE APPLICATIONS WILL BE RETURNED, CAUSING UNNECESSARY DELAYS IN THE REVIEW PROCESS. All work to support the investigation, design, and construction of a solid waste facility must be undertaken by individuals whose training, experience and professional certification is appropriate to accomplish the specific tasks with accuracy and technical proficiency. Reports, plans or other materials submitted in support of the application must bear the signature and, if appropriate, the seal of the individual who drafted or supervised the drafting of each document.
4. **Send the application** along with all attachments and a check for the fee made payable to "Treasurer, State of Maine" to: Maine Department of Environmental Protection, Bureau of Bureau of Remediation and Waste Management, 17 State House Station, Augusta, Maine 04333-0017. **Please consult with DEP staff to determine how many copies** of the completed application form and supporting reports must be submitted to the Department. In general, three copies of site plans, drawings, soil maps, or other data on sheets larger than 8½" x 14" copies must be submitted unless the staff determines that fewer copies are needed. ALL PLANS SHOULD BE FOLDED TO SIZE 8½" x 11" unless otherwise indicated by DEP staff. Any part of the application which has been prepared by a P.E., C.G. or C.S.S. must be stamped and signed by that person. If the applicant is a corporation, a certificate of good-standing from the Secretary of State must be included.
5. Send one complete copy of the application and any amendments that are subsequently submitted to the Municipal Office of the town within which the project is located. If the project is located in an unorganized area, send the application to the appropriate Office of the County Commissioners and the Maine Land Use Regulation Commission, 22 State House Station, Augusta, Maine 04333-0022. The application must be filed in the municipal office or at the County Commissioners Office and LURC at the time of filing with the DEP.
6. **Keep a copy** of the completed application for your files. This copy will be helpful in speeding up communications with the DEP staff if any questions arise during the review of the project.
7. Upon the approval by the Department of Environmental Protection, a permit will be issued and sent to the applicant. The applicant should read the permit carefully in order to become familiar with any conditions. Failure to comply with conditions of approval may lead to enforcement action or the revocation of a permit.



**Copy of Check for Application Fee  
(Processing Fee & Licensing Fee)**

Processing Fee

127231

**SANBORN HEAD & ASSOCIATES, INC.**  
6 BEDFORD FARMS DR., STE 201  
BEDFORD, NH 03110  
P (603) 229-1900

**M&T Bank**



10-4/220

CHECK DATE August 27, 2025

**PAY** One Thousand Two Hundred Seventy and 00/100 Dollars

**TO** Treasurer, State of Maine

AMOUNT 1,270.00



*Mad L. Pain*

AUTHORIZED SIGNATURE

Application Processing Fee

⑈ 1 2 7 2 3 1 ⑈ ⑆ 0 2 2 0 0 0 4 6 ⑆ ⑆ 0 1 5 7 7 0 8 1 2 ⑈

**SANBORN, HEAD & ASSOCIATES, INC.**

127231

Check Date: 8/27/2025

Invoice Number	Date	Voucher	Amount	Discounts	Previous Pay	Net Amount
2030.025 Process Fee	8/26/2025	0152325	1,270.00			1,270.00
Treasurer, State of Maine		TOTAL	1,270.00			1,270.00
People's United Bank - 4		TREME				

Security features. Details on back.

Licensing Fee

127230

**SANBORN HEAD & ASSOCIATES, INC.**  
6 BEDFORD FARMS DR., STE 201  
BEDFORD, NH 03110  
P (603) 229-1900

**M&T Bank**



10-4/220

CHECK DATE August 27, 2025

**PAY** Two Hundred Eleven and 00/100 Dollars

AMOUNT 211.00

**TO** Treasurer, State of Maine



*Mad L. Pain*

AUTHORIZED SIGNATURE

Application Licensing Fee

⑈ 1 2 7 2 3 0 ⑈ ⑆ 0 2 2 0 0 0 0 4 6 ⑆ ⑆ 0 1 5 7 7 0 8 1 2 ⑈

**SANBORN, HEAD & ASSOCIATES, INC.**

127230

Check Date: 8/27/2025

Invoice Number	Date	Voucher	Amount	Discounts	Previous Pay	Net Amount
2030.025 Lic Fee	8/26/2025	0152324	211.00			211.00
Treasurer, State of Maine		<b>TOTAL</b>	211.00			211.00
People's United Bank - 3		TREME				

Security features. Details on back.

**Flare Installation Drawings  
Prepared by Sanborn Head**



NO. 10  
 THE STATE OF MAINE, DEPARTMENT OF ENVIRONMENTAL PROTECTION

ISSUED FOR MAINE DEP SOLID WASTE  
 PERMIT APPLICATION REVIEW  
**NOT FOR CONSTRUCTION**

**SANBORN HEAD**




DRAWN BY B CROCKWELL  
 DESIGNED BY R CLAY  
 REVIEWED BY E STEINHAUSER  
 PROJECT MGR R CLAY  
 PIC H LITTLE  
 DATE SEPTEMBER 2020

NEW ENGLAND WASTE SERVICE OF MAINE, INC.  
 PINE TREE LANDFILL  
 HAMPSHIRE, MAINE

PROJECT NUMBER  
 2030.025

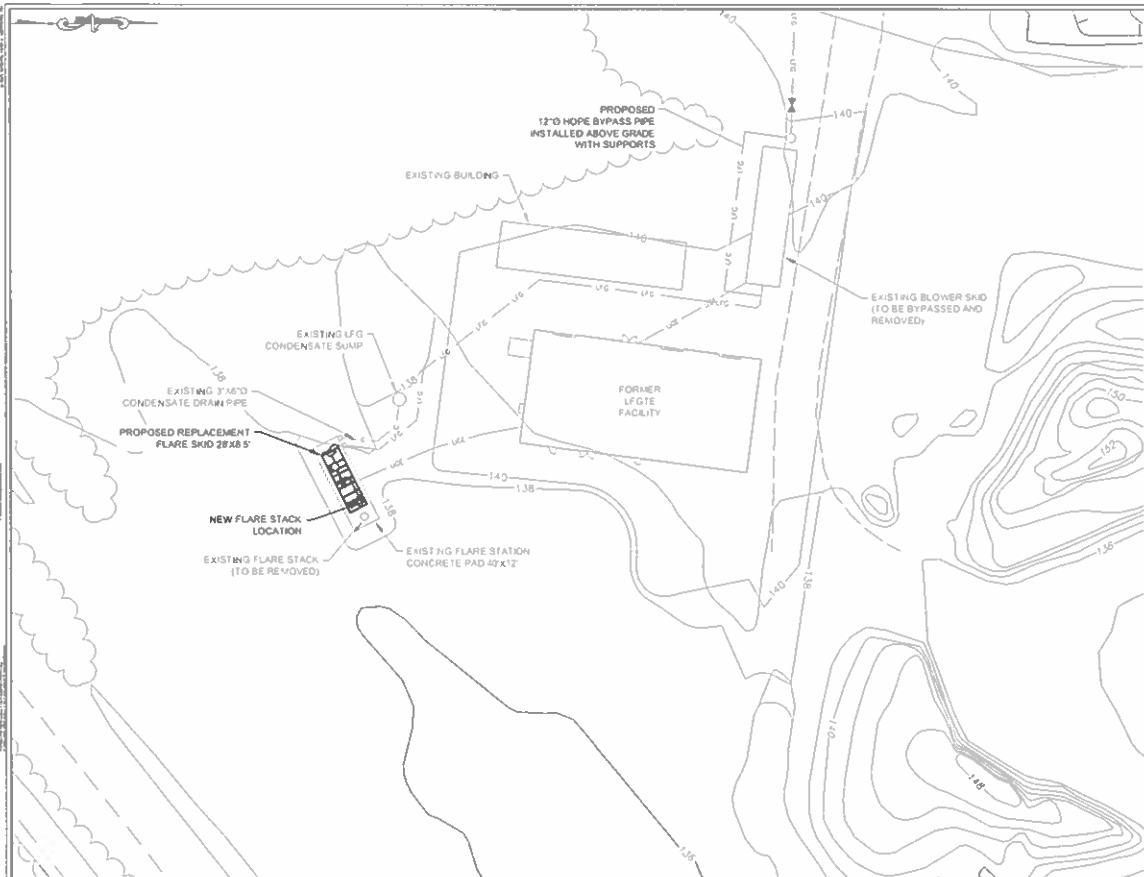
SITE OVERVIEW PLAN

SHEET NUMBER  
 1 OF 4

- NOTES
1. THE EXISTING PROPOSITION SHOWN ON THIS PLAN WAS OBTAINED FROM THE SCANNED PHOTOGRAPH FACILITY. THE CONFORMANCE SHALL BE MAINTAINED BY SANBORN HEAD & ASSOCIATES, INC. DATED JAN. 2007. ACTUAL LOCATIONS OF UTILITY AND PIPE FACILITIES MAY BE DIFFERENT THAN SHOWN.
  2. THIS DRAWING MAY NOT SHOW ALL SUBSURFACE UTILITIES PRESENT AT THE SITE.

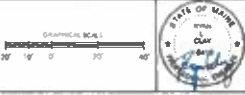
LEGEND

---	EXISTING 8" DODGE CONDUIT
---	EXISTING 2" DODGE CONDUIT
---	CONCRETE PIPES
---	LFG CONDUIT AND PIPES
---	UNLFG CONDUIT AND PIPES
---	TELEPHONE
---	BUILDING
---	REPLACEMENT PROPOSED FLARE SKID
---	RELATION TO V.A.



ISSUED FOR MAINE DEP SOLID WASTE PERMIT APPLICATION REVIEW  
**NOT FOR CONSTRUCTION**

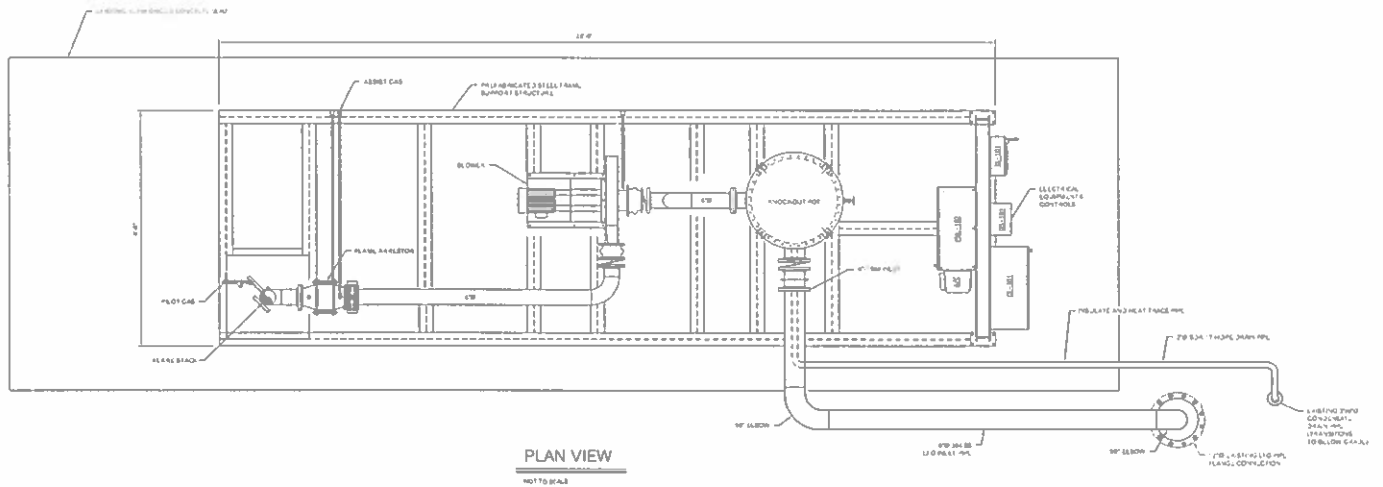
**SANBORN HEAD**




DRAWN BY: B. CROCKWELL  
 DESIGNED BY: R. CLAY  
 REVIEWED BY: E. STEINHAUSER  
 PROJECT MGR: R. CLAY  
 P.C.: H. LITTLE  
 DATE: SEPTEMBER 2025

NEW ENGLAND WASTE SERVICES OF ME, INC.  
 PINE TREE LANDFILL  
 HAMDEN, MAINE  
**FLARE REPLACEMENT PLAN**  
 PROJECT NUMBER: 2030.025  
 SHEET NUMBER: 2 OF 4

- NOTES
1. THIS DRAWING WAS PREPARED TO ILLUSTRATE THE GENERAL ARRANGEMENT OF THE FLARE AND RELATED ELECTRICAL CONNECTIONS AND IS BASED ON SHOP DRAWINGS PREPARED BY PARYL ENGINEERING, DATED AUGUST 2025.
  2. THE PIPING WITH 2" AND 3" DIAMETERS ASSOCIATED WITH CONNECTIONS TO LISTED PIPING AND "PROBABLE" NOT SHOWN ON THIS DRAWING AS PIPING LISTING WILL BE NUMBERED AND CUT IN THE FIELD DURING THE INSTALLATION. PIPING SUPPORTS SHALL BE INSTALLED FOR ALL PIPING SUPPORTS THEY REQUIRE.
  3. NO EXHAUSTION IS REQUIRED FOR THIS FLARE AND ALL CONNECTIONS ARE TO BE ABOVE GRADE.
  4. ALL ELECTRICAL WIRING SHALL BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) AND ALL ELECTRICAL CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) AND ALL ELECTRICAL CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC).
  5. THE FLARE SHALL BE ANCHORED TO LISTED CONCRETE AND FOUNDATION IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. THE INTEGRITY OF THE CONCRETE SHALL BE EVALUATED BY THE FIELD PRIOR TO INSTALLATION.
  6. FOR CLARITY THIS DRAWING DOES NOT SHOW ALL CONCRETE, DRAINAGE ASSOCIATED WITH THE FLARE AND THIS SHALL BE PROVIDED TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
  7. INSULATION AND HEAT TACKLE SHALL BE PROVIDED ON ALL EXPOSED PIPING AND IN LOCATIONS AS SPECIFIED BY THE MANUFACTURER.
  8. PIPING SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
  9. ALL ELECTRICAL WIRING SHALL BE PROVIDED BY A LICENSED ELECTRICIAN.



PLAN VIEW  
NOT TO SCALE

ISSUED FOR MAINE DEP SOLID WASTE PERMIT APPLICATION REVIEW  
**NOT FOR CONSTRUCTION**

**SANBORN HEAD**

SCALE AS NOTED

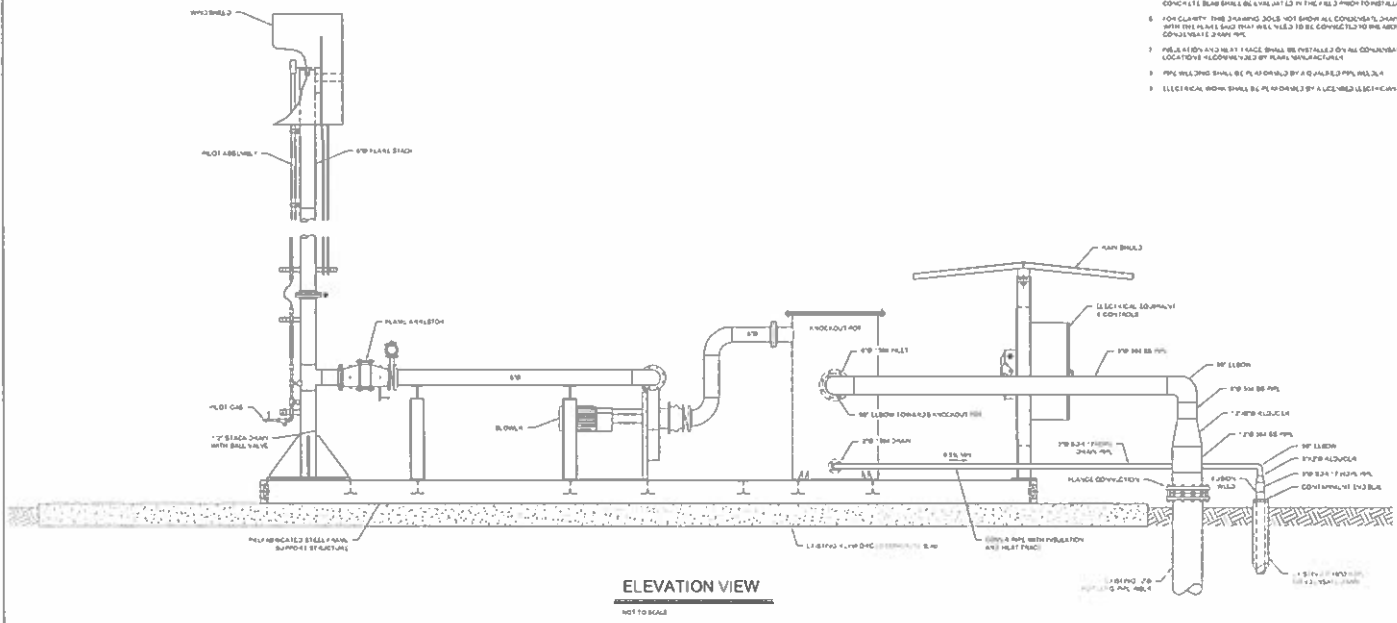


DRAWN BY: B. CROCKWELL  
DESIGNED BY: R. CLAY  
REVIEWED BY: E. STEINHAUSER  
PROJECT MGR: R. CLAY  
P.E. H. LITTLE  
DATE: SEPTEMBER 2025

NEW ENGLAND WASTE SERVICES OF ME, INC. PINE TREE LANDFILL HAMPSHIRE, VERMONT	PROJECT NUMBER 2030.025
FLARE CONNECTION DETAILS	SHEET NUMBER 3 OF 4

**NOTES**

1. THIS DRAWING HAS BEEN PREPARED TO ILLUSTRATE THE GENERAL ARRANGEMENT OF THE FLARE AND ASSOCIATED PIPING CONNECTIONS TO BE INSTALLED ON SHOP DRAWINGS PREPARED BY PARTY, BIDDING NO. 2030 AUGUST 2025.
2. THE PIPE AND FITTINGS ASSOCIATED WITH CONNECTIONS TO EXISTING PIPING ARE APPROXIMATELY NOT SHOWN ON THIS DRAWING AS PIPE LENGTHS WILL BE MEASURED AND CUT IN THE FIELD DURING INSTALLATION. PIPE JOINTS SHALL BE INSTALLED FOR ALL PIPE LENGTHS LONGER THAN 10 FEET.
3. NO EXCAVATION IS REQUIRED TO INSTALL THE FLARE AND ALL CONNECTIONS ARE ABOVE GRADE.
4. FLARE TO EXISTING OR FUTURE DRAWINGS FOR WHICH INFORMATION REGARDING PIPE SIZES AND SPACING IS REQUIRED BY EACH PARTY, BIDDING COMPANY.
5. THE FLARE SHALL BE APPROXIMATELY 2 FEET ABOVE THE FINISHED FLOOR OR GRADE. THE FLARE SHALL BE INSTALLED IN THE FIELD AS SHOWN TO INSTALLATION.
6. FOR CLARITY THIS DRAWING DOES NOT SHOW ALL CONNECTIONS, CHANGE ASSOCIATED WITH THE FLARE AND SHALL BE FIELD TO BE CONNECTED TO THE UNDERGROUND CONNECTIONS AS SHOWN.
7. INSTALLATION AND MAINTENANCE SHALL BE INSTALLED ON ALL CONNECTIONS CHANGES AND TO LOCATE THE ADDRESS FOR THE FLARE MANUFACTURER.
8. PIPE SIZES SHALL BE AS SHOWN BY A QUALIFIED PIPE FABRICATOR.
9. ELECTRICAL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICIAN.



**ELEVATION VIEW**  
NOT TO SCALE

ISSUED FOR MAINE DEP SOLID WASTE PERMIT APPLICATION REVIEW  
**NOT FOR CONSTRUCTION**

	SCALE AS NOTED		<table border="1"> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>													DRAWN BY: B. CROCKWELL DESIGNED BY: R. CLAY REVIEWED BY: E. STEINHAUSER PROJECT MGR: R. CLAY PRC: H. LITTLE DATE: SEPTEMBER 2025	NEW ENGLAND WASTE SERVICES OF ME, INC. PINE TREE LANDFILL HAMPSHIRE WASTE	PROJECT NUMBER: 2030.025 SHEET NUMBER: 4 OF 4
<b>FLARE CONNECTION DETAILS</b>																		

# **Flare #4 Equipment Specifications & Shop Drawings**

13701 S Highway 75  
Glenpool, OK 74033  
918-294-3868 Fax: 918-294-9897



April 21, 2025

Casella Waste Systems, Inc.  
358 Emerson Mill Rd.  
Hampden, Me  
04444

Ph: 207-249-8025

Attention: Jeffrey Pelletier

RE: One 745 scfm Skid-Utility Landfill Gas Flare System

Gentleman:

The solution to landfill gas control begins with selecting a company that specializes in just that! Parnel Biogas Inc. is dedicated to supplying quality landfill gas flaring equipment and service.

As a company Parnel Biogas Inc. offers:

- The latest and best available Landfill Gas Control Technology
- Flare performance guarantees
- Qualified service personnel
- And the commitment to respond to your Landfill Gas Flaring needs, immediately

Parnel Biogas Inc., Landfill Gas Flares meet the stringent operating requirements set forth by the major landfill operators. The flare combustion chamber is designed to provide the necessary residence time to completely combust the landfill gas. The control system is designed to operate one or two gas blowers and will operate the flare in manual and automatic in trouble free and safe manner.

THIS INFORMATION IS PROPRIETARY TO PARNEL BIOGAS INC.

Parnel Biogas Inc. though extensive field experience has improved on conventional flare designs in the following areas:

- Parnel Biogas Inc. Utility Flares are designed to prevent flame instability and flame lift off.
- Parnel Biogas Inc. Utility Flare tips are constructed of stainless steel with an integral flame holder to provide superior flame retention even in high wind conditions.
- State of the art PLC control burner management
- Guaranteed emission values
- The Parnel Biogas Inc. proprietary pilot is designed exclusively for Landfill Gas service to provide superior pilot performance and trouble free operation.

Parnel Biogas Inc. would like to earn the opportunity of being your preferred Landfill Gas Flare supplier. We enjoy discussing this proposal with you in detail at your convenience

Sincerely

Jeff Parker  
President

**Process Specifications**

Landfill Gas Flow rate Flare (max 6" tip)	745 scfm
Landfill Gas Flow rate Flare (min 6" tip)	74 scfm
Flare exit velocity (not to exceed)	60.0 ft/sec
Landfill Gas Composition:	
Methane	20%
CO2, N2, O2, VOC's, H2O, H2S	80%
Heat Release @ 710 scfm (max)	10.04 MMBtu/hr
Inlet Pressure to flare	10" WC (approx)
Blower motor Horsepower	10 hp
Sight Elevation	108 MSL
Design wind load per ASCE 7-93	110mph
Noise level at 3ft.	< 85dba
Design ambient air temperature	-30F to 110F
Electrical Area Classification	Non-hazardous

**Expected Flow/Emissions at 710scfm, 25.9% methane:**

N2 47.06 % vol.  
O2 1.84 % vol.  
CO2 24.2 % vol.  
H2O 1 % vol.  
NO2 0.068 lbs/MMBTU  
CO 0.31 lbs/MMBTU

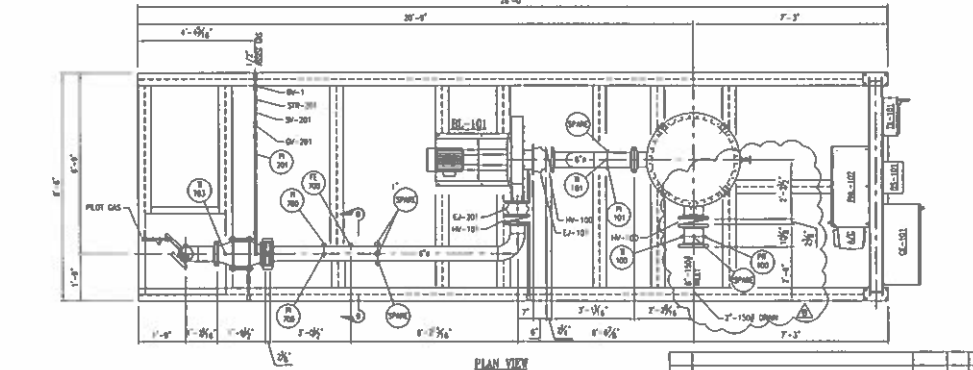
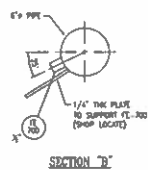
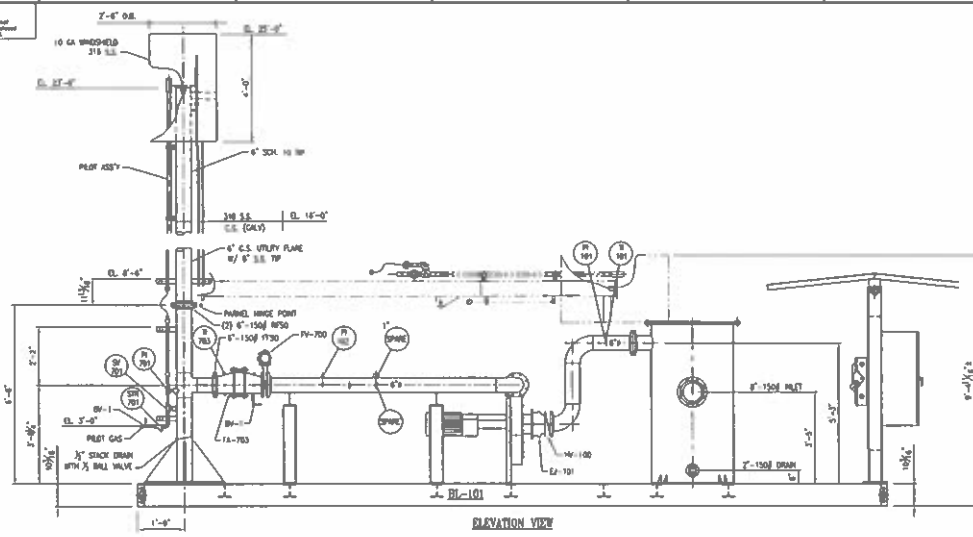
Destruction efficiency at design flow with landfill gas methane content of 20% to 60%---98% overall destruction of total hydrocarbons.

Guaranteed to meet E.P.A. emission standards for landfill gas utility type flares. Designed in accordance of EPA established criteria for open flares 40 CFR 60.18





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 The information contained herein is the property of Pamel Biogas Inc. and shall not be copied or used in any manner or disclosed to other persons or entities without the express consent of Pamel Biogas Inc.

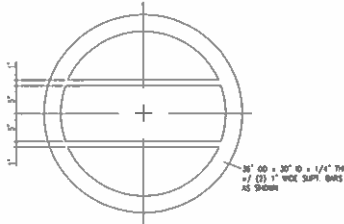
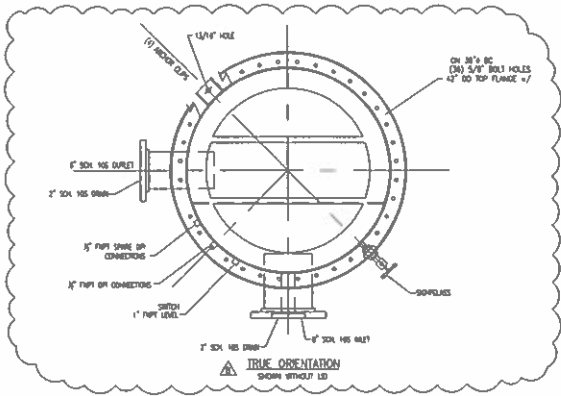


- NOTES:  
 1. JOSSS SCH. 10 UNLESS OTHERWISE NOTED  
 2. C.S. STRUCTURAL STEEL TO BE HOT DIPPER GALVANIZED  
 3. ALL DIMENSIONS TO BE 1/8\"/>

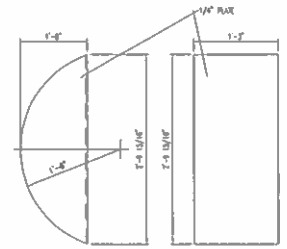
<b>Pamel Biogas Inc</b> 1200 S. HWY. 12 HAMDEN, ME 04846 TEL: 207-833-1100 FAX: 207-833-1101 WWW: WWW.PAMELBIOGAS.COM		ORDER NO. 25-414-301 SHEET NO. 1 OF 1
PROJECT: CASSELLA TRANSFER STATION DRAWN BY: [Name] CHECKED BY: [Name] DATE: 6/25		SCALE: 1/4" = 1'-0" SHEET: 1 OF 1

REV	DESCRIPTION	DATE	BY	APP	DATE
B	REVISED KOP PLET PER CUSTOMER COMMENTS				
A	PRELIMINARY SKID LAYOUT				

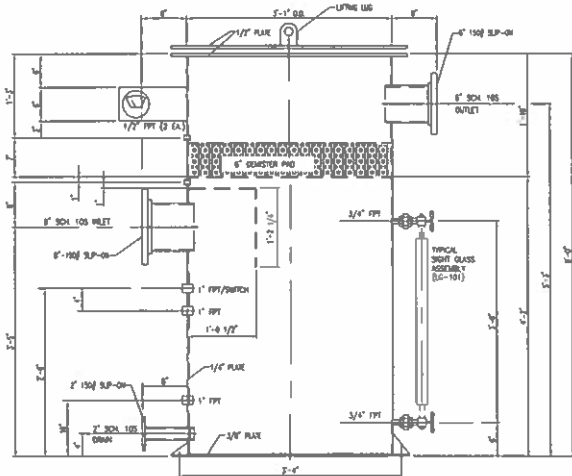
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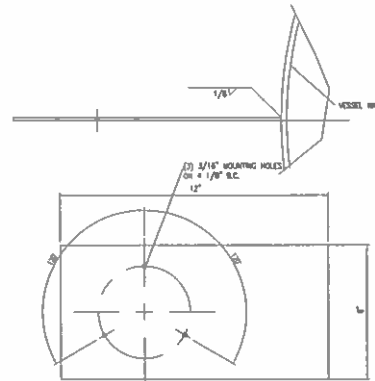
DEWISTER SUPPORT DETAIL  
SHOWN WITHOUT LID



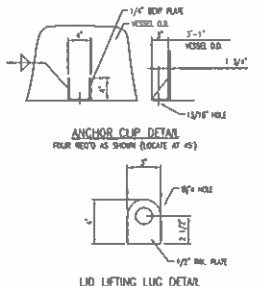
BAFFLE PLATE DETAIL  
TWO PIECES AS SHOWN



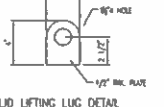
ELEVATION VIEW  
PLEASE REQUEST FOR CLARITY



MAGNETIC DPM MOUNTING PLATE  
17 GA. PLATE



ANCHOR CLIP DETAIL  
FRONT VIEW AS SHOWN (LOCATE AT 45°)



LID LIFTING LUG DETAIL

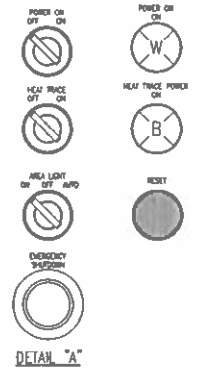
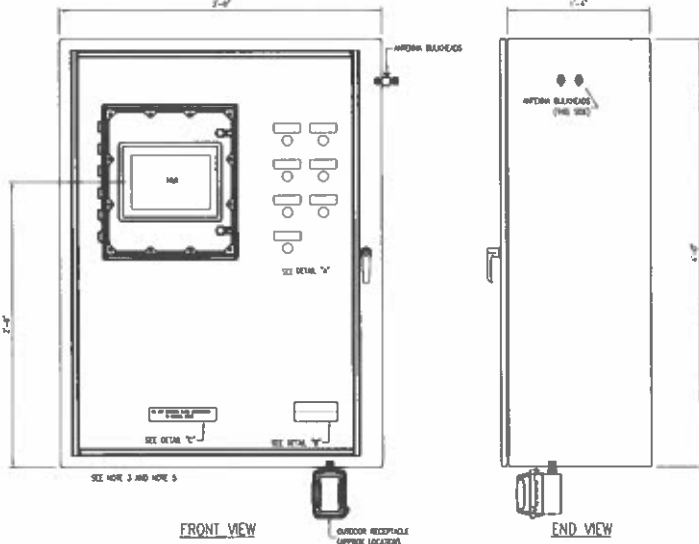
- NOTES
1. ALL MATERIAL TO BE 304SS.
  2. ALL NOZZLES TO HAVE 1" MIN. PROJECTION INSIDE.

REV	DESCRIP	DATE	DR	APP	BY	CHK
B	REMOVED KOP INLET FOR CUSTOMER COMMENTS	6/28/20	BN	JD	BN	JD
A	REVISED FOR CUSTOMER APPROVAL	6/29/20	BN	JR	BN	JD
REV	DESCRIP	DATE	DR	APP	BY	CHK

COMPANY <b>CABELLA WASTE SYSTEMS</b> 1000 W. 10th St. HAMPSHIRE, IA 50425	PROJECT <b>Parnell Biogas Inc</b> 1000 W. 10th St. HAMPSHIRE, IA 50425
DRAWING NO. <b>25-414-340</b>	SHEET NO. <b>B</b>
TITLE <b>KNOCKOUT POT</b> <b>37" O.D. x 6'-0" TALL</b> <b>14" INLET x 12" OUTLET</b>	
SCALE <b>AS SHOWN</b>	DATE <b>6/25/20</b>



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**Parnell Biogas Inc**

JOB NUMBER: 25-614

DESCRIPTION: CE-101 CONTROL PANEL

SHIP DATE: 2026

**WARNING**  
 DO NOT OPERATE FLARE UNATTENDED  
 IN MANUAL MODE.

**UL** LISTED  
 ENCLOSED INDUSTRIAL CONTROL PANEL  
 No. CL 44XXXXX  
 TO BE MOUNTED INSIDE PANEL PER 508A

- PANEL IS NEMA 4, NON-CLASSIFIED AREA CLASSIFICATION IS CLASS I DIV2, GROUP II WITHIN 3' FT OF ANY GAS
- ALL TAGS TO BE WHITE WITH BLACK LETTERS.
- CONDUIT SEALS ARE TO BE USED AT TRANSITIONS BETWEEN CLASSIFIED AND UNCLASSIFIED AREAS.
- GROUNDING STRAPS MOUNTED ON ALL PANEL DOORS.

CABELLA WASTE SYSTEMS 1000 W. 10th St. HAMPSHIRE, ME 04401 CABELLA TRANSFER STATION		<b>Parnell Biogas Inc</b> 1000 W. 10th St. HAMPSHIRE, ME 04401 <b>PANEL LAYOUT          CE-101          CONTROL PANEL</b>	
A BELIEVED FOR CUSTOMER APPROVAL REV DESCRIPTION	DATE DR APP	DATE 6/23 6/26	TITLE D SCALE 1:1



## **Proposed LFG O&M Manual Revisions**

# PTL Landfill Gas Operations and Maintenance Manual

~~Revised April 2024~~  
Revised September 2025

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**TABLES**

Table 2-1:	Typical LFG Constituents
Table 3-2:	Recommended Monitoring Schedule

**APPENDICES**

Appendix A:	Engineering Drawings
Appendix B:	Post-Closure Quarterly Inspection Report Form

## 1.0 INTRODUCTION

This manual describes the operation and maintenance procedures for the landfill gas (LFG) management system at the closed Pine Tree Landfill (PTL) in Hampden, Maine. The objectives of the LFG management system are to: (i) comply with the federal and state requirements regarding LFG emissions; (ii) properly extracting & ~~managing~~ manage LFG ~~for fuel at the landfill gas-to-energy plant~~; and (iii) mitigate off-site LFG migration.

Individuals designated to operate and maintain the LFG management system are properly trained with respect to the potential hazards of LFG and the proper operating procedures for the site-specific equipment. This manual is a general guide and not intended to be a substitute for proper hands-on training in operations, regulatory requirements, and site-specific safety activities that may be required by various local, state, and/or federal agencies. PTL offers periodic training through its Safety and Environmental Program.

Landfill operations staff should become familiar with the properties of LFG and related hazards discussed below, and should be trained in lockout/tag out procedures as well as electrical and pneumatic safety procedures. Suggested training topics include:

- LFG characteristics and potential hazards;
- LFG condensate characteristics and potential hazards;
- LFG infrastructure – components, locations, function;
- Operation and maintenance of LFG monitoring equipment;
- Routine monitoring procedures, data collection, and reporting;
- Blower/flare station – components, function, operation, and monitoring;
- SCADA system monitoring;
- LFG management system troubleshooting; and
- Emergency contacts.

## 2.0 CHARACTERISTICS OF LANDFILL GAS AND POTENTIAL HAZARDS

### 2.1 Landfill Gas Characteristics

LFG is produced when anaerobic bacteria consume organic matter in waste. LFG is typically composed of methane and carbon dioxide with lesser amounts of oxygen, nitrogen, and water vapor and trace amounts of hydrogen, ethane, hydrogen sulfide, and volatile organic compounds (VOCs). Oxygen and nitrogen are typically present because of air entrained in the landfill (air is approximately 21 percent oxygen and 79 percent nitrogen). Typical ranges of constituent concentrations in LFG are presented in Table 2-1.

**TABLE 2-1 – TYPICAL LANDFILL GAS CONSTITUANTS**

<b>COMPONENT</b>	<b>PERCENT VOLUME (All are stated on a dry basis except moisture.)</b>
Methane (CH <sub>4</sub> )	40 to 50%.
Carbon Dioxide (CO <sub>2</sub> )	25 to 35%.
Oxygen (O <sub>2</sub> )	0.5 to 1.5%.
Nitrogen (N <sub>2</sub> )	10 to 25%.
Hydrogen (H <sub>2</sub> )	Trace, generally less than 1%.
Carbon Monoxide (CO)	Trace; CO is an indicator of the possible presence of a subsurface fire.
Hydrogen Sulfide (H <sub>2</sub> S) & Other Sulfur Components <sup>(2)</sup>	Varies by landfill (10-15,000 ppm typical range).
Moisture	Up to 14% (increases with gas temperature).
Volatile Organic Compounds (VOCs)	Less than 2%; typically ¼ to ½%.

Important LFG characteristics are listed below.

- LFG is primarily comprised of methane (typically about 55 percent) and carbon dioxide (typically about 45 percent).
- LFG can also contain odorous compounds such as hydrogen sulfide from 0-5,000 ppm typical.

- LFG has relatively high moisture content; cooling usually results in the formation of condensate.
- LFG is flammable and potentially explosive.
- LFG may migrate through the vadose zone of surrounding bedrock and soils, within open conduits, and in trench backfill.
- LFG may accumulate in confined spaces.
- LFG has a specific gravity (vapor density) that is usually close to that of air.
- Within a municipal solid waste (MSW) landfill, the typical temperature range for LFG is from 16 degrees (°) to over 58° Celsius (C) (60° to 120° Fahrenheit (F)). At PTL, which accepted wastes other than MSW (e.g., sludge), temperatures as high as 160° F have been measured, but more typically the high temperatures are below 150° F.
- Component gases (methane, carbon dioxide, water vapor, and others) tend to stay together, but may separate through soil and liquid contact.
- Secondary constituents (trace gases) may cause nuisance odors, environmental pollution, and may create a health risk.

The flammable range of methane is approximately 5 to 15 percent (by volume) in air. The lower limit of 5 percent is referred to as the Lower Explosive Limit (LEL); the upper limit of 15 percent is referred to as the Upper Explosive Limit (UEL). The specific gravity of methane and carbon dioxide are 0.55 and 1.52, respectively. However, because the specific gravity of LFG is close to that of air, it should not be assumed that methane gas would rise. The LFG mixture may be lighter or heavier than air and its behavior will be dictated by its overall composition.

LFG has its own characteristic odor due to the presence of trace compounds in the gas. Some of the most significant examples of the classes of odor causing trace constituents include esters, phenols, organic acids, solvents, and sulfur compounds (including mercaptans). However, LFG may not always exhibit an identifiable odor because the odor carrying trace components may be stripped off because of movement through cover or adjacent soil.

LFG levels can be monitored using various meters. At a minimum, LEL, percent oxygen, and percent hydrogen sulfide should be measured at any location where there is potential for LFG to be present and where personnel could be exposed to LFG.

**Personnel should either not enter or immediately leave if already present if monitoring results indicate:**

- The LEL is 50 percent or higher (2.5 percent methane by volume);
- The concentration of oxygen is lower than 19.5 percent; or
- The concentration of hydrogen sulfide is more than 10 parts per million (ppm).

## **2.2 Potential Hazards to Personnel**

Landfill operations staff should be familiar with the following types of hazards related to the presence of LFG and LFG condensate, and the appropriate and safe procedures to identify and avoid them.

Methane is a colorless, odorless, flammable, and potentially explosive gas that may be emitted into the atmosphere as LFG together with other volatile trace gases. LFG, which may contain other gases, may migrate through soil and bedrock into surrounding areas or contact groundwater where it may adversely affect the environment. LFG may travel long distances underground and accumulate underneath and in structures and confined or enclosed spaces creating a potential explosion hazard. Carbon dioxide, the other major component of LFG, is colorless, odorless, and non-combustible.

### **2.2.1 Asphyxiation**

Methane and carbon dioxide are asphyxiates. A potential hazard posed by LFG is oxygen deficiency, which may cause asphyxiation. As LFG builds up it displaces air, hence reducing the amount of oxygen available for respiration. An oxygen deficient atmosphere exists when the oxygen comprises 19.5 percent or less of the air. It is imperative that confined space regulations and procedures be followed before personnel enter confined spaces or locations where there may be an oxygen deficient atmosphere. Under certain circumstances, special "permitted entry" requirements may apply.

Potentially lethal concentrations of hydrogen sulfide (H<sub>2</sub>S) may be present at landfills, particularly at landfills that received construction and demolition (C&D) debris. Personnel must always be alert for the hazards created by H<sub>2</sub>S. H<sub>2</sub>S is a colorless, toxic flammable gas, which at low concentrations has an offensive odor similar to that of rotten eggs. Hydrogen sulfide exposure causes humans to lose their sense of smell within 2 to 15 minutes of exposure.

### **2.2.2 Explosive Atmosphere**

LFG tends to migrate and may accumulate in confined spaces. The occurrence and accumulation of methane is sometimes transient. The presence of slight amounts of methane, less than the LEL, is an indication that more may accumulate under other conditions if corrective action is not taken. If methane is detected at concentrations greater than 15 percent (100 percent of the UEL) by volume, then there is always the potential for an explosive methane-air "front" that could be formed nearby by dilution.

Personnel should take the following precautions.

- Avoid any possible source of ignition when working on the LFG management system. **Smoking is prohibited when working on or near the LFG system components.** Other potential sources of ignition include electronic devices such as non-intrinsically safe gas meters, cell phones, battery-powered wristwatches, two-way radios, etc.
- Avoid wearing synthetic clothing, such as polyester or nylon, as these materials are extremely flammable and are likely to produce static electric sparks. **Wearing synthetic clothing can be fatal in a methane gas flash fire.**

### **2.2.3 Potential for Landfill Fire**

Typically, surface and shallow subsurface fires are visible (e.g. open flame or smoke). These types of fires often occur due to large quantities of air being introduced into a localized area, either through natural occurrence or through overly aggressive operation of the LFG management system. Air intrusion into the landfill can result from:

- Short-circuiting through the landfill/cover soil interface (e.g., cracks, breaks or buried imperfections in the cover/cap;

- Breaks in buried conveyance pipe and extraction wells; or
- Permeable backfill surrounding collection system components (e.g., from the filter or gravel pack of an extraction well or the gravel backfill around a sump).

The potential for these types of fires can be limited by controlling the introduction of air into the landfill by proper operation of the LFG management system and maintenance of the landfill cover. Oxygen levels should be maintained below 4% at active wellheads where gas collection is occurring.

Deep subsurface landfill fires are difficult to corroborate as they may not produce readily visible indications, and significant data collection and corresponding data evaluation are required to substantiate such a claim. Conditions that may indicate the possibility of a deep subsurface fire include: (i) oxygen levels in excess of 4 percent; (ii) abnormally high temperatures in excess of 180 degrees F; (iii) lack of methane; (iv) presence of carbon monoxide; and (v) excessive localized settlement. Several rounds of data should be collected before an evaluation can be performed. Temperatures taken as part of routine monitoring should be watched closely if they exceed 160 degrees F, and the suspect well closely monitored (i.e. weekly) until temperatures return below 160 degrees F. In most cases it would be prudent to temporarily decrease vacuum to the suspect well to reduce the potential of oxygen infiltration. If temperatures continue to rise above 180 degrees F, carbon monoxide monitoring should begin. Should a deep subsurface fire be suspected after an evaluation of the data, options to extinguish the fire may be limited, and may even exacerbate the situation. Therefore, unless there is clear evidence of a deep landfill fire that would constitute an environmental threat, then continued monitoring of the situation should be performed.

#### **2.2.4 Landfill Gas Condensate**

LFG condensate may contain trace chemicals and may be biologically active. Appropriate protective gloves and splash protection equipment should be used when working with LFG condensate. Skin contact with condensate should be avoided.

Workers may be exposed to condensate any time they are working with the LFG or condensate management systems, especially under the following situations:

- Working on LFG or condensate conveyance pipes:

- Removing wellheads from extraction features; and
- Working on condensate traps and knockouts.

Condensate is odorous, and may release VOCs, including methane. Careful control during condensate handling and disposal is necessary to limit release of odors.

The vapors emanating from condensate storage tanks may be flammable.

### **3.0 SYSTEM COMPONENTS AND MONITORING PROGRAM**

The LFG management system includes vertical extraction wells, horizontal collection trenches, subliner vents, and associated wellheads, conveyance pipe, and blower/flare station. The design of the LFG management system is depicted on the Engineering Drawings (see Appendix A).

The LFG management system should be operated in a manner that maintains anaerobic conditions within the landfill, thereby limiting the possible intrusion of air. To meet the objectives, the system components should be monitored on a monthly basis, and on a bi-weekly basis for qualifying recirculation activities. For a description of qualifying recirculation activities please refer to the Post-Closure Leachate Recirculation Plan. A description of the various components of the LFG management system is provided below. Where applicable, the monitoring requirements for the various components are also discussed below and summarized in Table 3-1.

**TABLE 3-1 – RECOMMENDED MONITORING SCHEDULE <sup>(1)</sup>**

ITEM	FREQUENCY	PARAMETER
Condensate Knockout	Weekly	<ul style="list-style-type: none"> <li>• Liquid depth</li> </ul>
Wellheads	Monthly <sup>(2)</sup>	<ul style="list-style-type: none"> <li>• Condition of flex hose;</li> <li>• Condition of penetration boot;</li> <li>• Valve position;</li> <li>• Gas flow rate;</li> <li>• Static Pressure;</li> <li>• Percent methane;</li> <li>• Percent carbon dioxide;</li> <li>• Percent oxygen; and</li> <li>• Temperature of gas.</li> </ul>
Capped Passive Vents	Annually	<ul style="list-style-type: none"> <li>• Condition of exposed pipe;</li> <li>• Internal pressure or vacuum; and</li> <li>• Integrity of seal.</li> </ul>
Passive Flare	Quarterly	<ul style="list-style-type: none"> <li>• Condition of pipe and connections;</li> <li>• Consistency of flame; and</li> <li>• Functioning of ignition system.</li> </ul>
Blower	Weekly	<ul style="list-style-type: none"> <li>• Evidence of leakage anywhere on the assembly;</li> <li>• Gas flow rate through the blower;</li> <li>• Percent methane;</li> <li>• Percent carbon dioxide;</li> <li>• Percent oxygen;</li> <li>• Gas temperature;</li> <li>• Abnormal noises or vibration in the motor or blower; and</li> <li>• Maintenance required.</li> </ul>
Blower/Flare	Quarterly	<ul style="list-style-type: none"> <li>• Drive coupling alignment (direct-drive system);</li> <li>• Condition of igniter system;</li> </ul>
Controls	Quarterly	<ul style="list-style-type: none"> <li>• Thermocouple and temperature control module;</li> <li>• Solenoid valve;</li> <li>• Actuated valve;</li> <li>• Liquid level sensors;</li> </ul>
Flame Arrester	Quarterly	<ul style="list-style-type: none"> <li>• Pressure drop across arrester.</li> </ul>
Valves	Quarterly	<ul style="list-style-type: none"> <li>• Exercised to confirm satisfactory operation.</li> </ul>
Landfill Surface Scans	Semi-Annually	<ul style="list-style-type: none"> <li>• Methane emissions and stressed vegetation</li> </ul>
Site Perimeter and Monitoring Wells	Tri-annually	<ul style="list-style-type: none"> <li>• Presence of landfill gas.</li> </ul>
Transmission Piping	Bi-Annual	<ul style="list-style-type: none"> <li>• General condition of exposed pipe.</li> </ul>
Electrical Cabinet and Controls	Annual	<ul style="list-style-type: none"> <li>• Blow dust out of the cabinet;</li> <li>• Tightness of connections;</li> <li>• Calibration of gauges; and</li> <li>• Thermocouple and alarms.</li> </ul>

Notes: (1) In addition to the monitoring schedule outlined above mechanical components such as the blower and flare should also be monitored and serviced in accordance with the manufacturer's instructions.

(2) More frequent monitoring of the wellheads may be required when new extraction points are installed and/or the blower/flare capacity is changed.

### **3.1 Landfill Gas Monitoring in Groundwater Monitoring Wells**

Groundwater monitoring wells have been installed at various locations around the landfill. Monitoring for the presence of LFG in monitoring wells should be performed in conjunction with groundwater monitoring activities. The atmosphere within each monitoring well should be monitored for combustible gas concentrations using a combustible gas meter. Groundwater monitoring wells with submerged screens may also contain LFG due to gas dissolved in the groundwater coming out of solution.

### **3.2 Vertical Extraction Wells**

Vertical extraction wells generally consist of 8-inch diameter Schedule 80 PVC pipe installed in boreholes drilled with a 30-inch diameter bucket auger to various depths within the waste. The wells are perforated from depths of up to 15 feet below ground surface to the base of the well. The perforated section of each well is backfilled with stone.

### **3.3 Wellhead Assemblies**

The wellhead assemblies are located between each active LFG extraction point and the LFG conveyance pipe. The wellhead assembly includes a gate valve, flexible hose, fittings, and taps that allow for:

- Differential settlement between the LFG conveyance pipe and the well;
- Sampling of LFG;
- Measurement of the LFG flow rate;
- Measurement of the LFG temperature;
- Control of the LFG flow rate; and
- Access to the well from the top for equipment or measurements.

The wellheads should be monitored on a regular basis to observe their general condition, with particular attention to the condition of the flexible hose between the wellhead and the conveyance pipe. Additional data to be gathered includes:

- Valve position (percent open);
- Gas flow rate;

- Static pressure;
- Percent methane;
- Percent carbon dioxide;
- Percent oxygen; and
- Gas temperature.

### **3.4 Conveyance Pipe**

LFG from the wellhead assemblies at the extraction points passes through the conveyance pipe to the blower/flare station. Condensate formed in the conveyance pipe is drained by gravity to condensate traps in the landfill or to a condensate knockout structure near the blower/flare station for removal. The LFG is conveyed in SDR-17 HDPE pipe that varies in diameter from 4 to 18 inches.

The conveyance pipe penetrates the geomembrane cover system at each extraction location. At the penetration location, a boot is constructed around the pipe to avoid uncontrolled emissions. The boot is designed to be adjusted as the waste settles. The penetration boots should be monitored regularly to observe their general condition, and adjustments for settlement should be made as needed. As part of inspections, surface scans, and well tuning activities, boots needing adjustment will be noted, and adjustments will be performed as soon as practical. During adjusting, the boot must be re-sealed with sika-flex® or an alternative appropriate gasket material to assure a proper seal around the penetration.

### **3.5 Valves**

Gate valves are located at each wellhead assembly, and butterfly valves are located along the conveyance pipe. The valves at wellhead assemblies are used to control the LFG flow rate from the extraction points. The valves located along the conveyance pipe can be used to isolate sections of the LFG extraction system for maintenance. Sheet 2A of the Engineering Drawings (Appendix A) depicts the location of the various LFG extraction system valves.

The valves installed along the conveyance pipe should be monitored quarterly. The valves shall be exercised to confirm they are operable, and the valve position (percent open) shall be noted. Generally, these valves should be left in a full-open position.

### 3.6 Blower/Flare Station

There is a ~~90-27.1~~ million British Thermal Units (BTUs/hr) skid-mounted blower/flare station on the site, consisting of blower/flare electronic control system, and associated pipe and instrumentation. The blower/flare station has a manually controlled butterfly valve on the vacuum side of the blower that can be used to throttle the flow of LFG through the system. In the event of a system failure, ~~an pneumatically actuated butterfly electric fail-close~~ valve will automatically shut off the flow of LFG through the system. The ~~actuated fail-close~~ valve is controlled by the ~~programmable logic controller (PLC) logic in the control equipment installed on the flare skid and powered using an independent source of bottled high pressure nitrogen gas.~~

On the discharge side of the blower, a thermal in-line flow meter measures the LFG flow rate.

The flare assembly includes a flame arrester near the base of the flare. The flame arrester limits the potential for a flame to travel back through the system in the event of a pressure loss. A thermocouple is located within the windscreen near the tip of the flare, and is used as a flame sensor to provide input for the system's logic controls.

The general condition of the flare assembly should be monitored in conjunction with normal inspections ~~being conducted at the landfill gas to energy plant.~~

The blowers should be monitored on a weekly basis, and the following data shall be monitored:

- Throttling valve position (percent open);
- Actuator solenoid valve gas pressure; pressure in the bottle and low pressure supply to the valve;
- Evidence of leakage anywhere on the assembly;
- LFG flow rate through the blower;
- Percent methane;
- Percent carbon dioxide;
- Percent oxygen;
- Gas temperature; and
- Abnormal noises in the motor or blower.

### **3.7 Landfill Gas to Energy (LFGTE) Facility**

The 3.2 megawatt LFGTE facility consisting of three engine-generator sets ~~is fueled by LFG~~ is no longer operational at PTL. All LFG is now burned at the flare. Treatment of H<sub>2</sub>S is no longer needed as long as H<sub>2</sub>S concentrations remain below SO<sub>2</sub> thresholds within PTL current air license.

### **3.8 Condensate Handling Components**

The LFG condensate handling system is designed to remove condensate that forms within the LFG conveyance pipe by allowing it to drain back into the leachate collection system through a trap, or collecting it in a condensate knockout structure installed outside the landfill and pumping it to the leachate management system. Condensate traps are located at low points along the LFG conveyance pipe, and are designed to collect and remove LFG condensate. A condensate knockout is located outside the landfill and collects condensate that forms in the conveyance pipe between the landfill and the blower/flare station.

The condensate traps drain to either the perimeter drain pump station, a primary leachate collection system cleanout riser, or a leak detection manhole. Each trap consists of a U-shaped tube filled with liquid to provide a seal against vacuum in the system. To maintain a seal, the liquid column in the trap must be at least as high as the maximum vacuum obtainable in that portion of the system.

Condensate collected in the condensate knockout structures located outside the landfill is pumped directly into the closed landfill beneath the final cover system, with the option of pumping directly into the leachate system should the need arise. Operation and maintenance of the various condensate knockout structures (including those associated with the LFGTE facility) is the responsibility of landfill technicians. The liquid level in condensate knockout should be routinely monitored.

The condensate knockout should be routinely monitored to note:

- Depth of condensate in the knockout; and
- Whether liquids are present in the containment system.

The integrity of the condensate collection and pumping system outside the landfill footprint should be completed as part of leachate collection system inspections (quarterly, and annually).

### **3.9 Controls**

The controls for the LFG management system rely on sensor input from the system. A thermocouple installed near the tip of the flare is used to monitor the temperature of the exhaust. The thermocouple is connected to a temperature controller module located in the electric control panel near the blower. The temperature switch points in the controller module are set by the operator. There is also a delay timer that can be adjusted by the operator to provide a delay between the temperature reading and the switching to allow the thermocouple to get up to temperature in the event of a cold start.

If the temperature falls below the low set point for longer than the time set in the delay timer, then the controller module activates the solenoid valve on the butterfly valve actuator, which closes the valve and turns off the LFG supply to the blower. The control module also causes

the blower motor to be turned off. Once the system is off, the control system provides remote notification of the fault conditions at the office building and scale house.

The control logic and sensors should be tested periodically to be sure they function as intended. Conditions are to be fabricated to test:

- The thermocouple and temperature controller module;
- The solenoid valve on the valve actuator;
- The actuated valve; and
- The remote fault indication.

### **3.10 Ancillary Observations**

In the course of monitoring system components, the condition of the landfill cover should also be observed including indications of settlement, stressed vegetation, improper drainage, and condition of cover soils. Appendix B includes the post-closure quarterly inspection report form. In addition, a landfill surface scan and cover integrity check will be performed and documented twice per year during 2011 & 2012, then annually beginning in 2013. The scan will be performed in general accordance with the NPS for MSW landfills (i.e., 40 CFR 60, support WWW).

## **4.0 OPERATION AND ADJUSTMENT**

### **4.1 Wellhead Adjustment**

The adjustment or "tuning" of the LFG management system involves monitoring various parameters and making adjustments to optimize the extraction of LFG from each extraction point in the system. The objective of the tuning is to provide negative pressure at each extraction point without causing intrusion of air into the landfill. Tuning is an iterative process, as adjustments to any portion of the system have the potential to affect the entire system. A discussion of the monitoring and tuning procedures is provided below. A summary of the steps to be taken and data to be gathered is presented in the outline below:

**A. Prior to going out onto the landfill.**

1. Calibrate the GEM-5000/Elkins Earth works gas extraction monitor (meter) using methane, carbon dioxide, and oxygen span gases in accordance with manufacturer guidelines.
2. Calibrate the pressure transducers by performing the "Zero Pressure" function, in accordance with manufacturer guidelines.
3. Record the ambient weather conditions including:
  - Temperature;
  - Barometric pressure;
  - Current observations (i.e., drizzling, raining, snowing).
4. Record landfill gas composition, vacuum, and flow rate at the blower/flare station prior to monitoring or tuning the wellfield.

**B. At each gas extraction wellhead assembly.**

1. Connect the tubing with the external filter/water trap assembly from the static pressure/sampling port on the meter to the static pressure port on the wellhead assembly.
2. Connect the tubing between the impact pressure port on the meter and the impact pressure port on the wellhead assembly.
3. Connect the temperature probe to the lapcock/temperature port.
4. Record the following data on the data sheets or in the meter memory:
  - Station identification;
  - Percent methane;
  - Percent carbon dioxide;
  - Percent oxygen;
  - Percent balance;
  - Temperature of the gas stream;
  - Static pressure;
  - Differential pressure;
  - Gas flow rate;

5. Make adjustments to the flow rate by adjusting the wellhead control valve, if required. Limit changes in flow rate to 15 percent if possible to prevent over correction.
6. Note any wellhead parts that need fixing, or cover issues noticed. Also note any abnormal occurrences, or findings.

**C. After monitoring the extraction points on the landfill.**

1. Record landfill gas composition vacuum, and flow rate at the blower/flare station after completing the wellfield monitoring or tuning.

**D. After monitoring is complete.**

1. Download readings from meter onto specified computer.
2. Check downloaded data set for correctness and completeness. Manually add flare flow, temperature, and static pressure to data set from readings previously taken in the field recorded in the field log.
3. Upload completed data set to landfill gas database, create EDD and email to necessary parties.

Equipment required for monitoring the LFG management system includes a device or devices to measure LFG flow rates and LFG composition, and a volt-ohm meter and amp meter probe to evaluate components of the electrical and control systems. The instrumentation used to monitor LFG flow rates, pressures, and composition is a GEM-5000 Gas Analyzer and Extraction Monitor provided by CES Landtec of Colton, California. A newer Elkins Earthworks monitor may also be used instead.

Like most analytical instrumentation, it is important to field calibrate the GEM-5000 prior to using it to collect LFG data. The instrument requires calibration with methane, carbon dioxide,

and oxygen span gases. The GEM-5000 should be field-checked with calibration gas, and if necessary, calibrated in accordance with the manufacturer's recommendations at least once each day that it is used. A log of the calibration should be kept with the instrument. Vibration, shock, and large temperature changes can affect the calibration of the instrument.

Particular attention should be paid to the condition of the o-rings on the fittings of the sample tubing. O-rings should be changed on a regular basis to limit the likelihood of air leaks while sampling.

#### **4.2 Indicator Parameters**

Typical ranges in concentrations of the various constituents found in LFG are presented in Table 2-1. Normal values for the facility are to be established using data collected during operation. System tuning should be performed based on the methane, carbon dioxide, and oxygen concentrations. Typically, as the methane and carbon dioxide concentrations decrease the concentrations of oxygen and nitrogen will increase. Such a trend indicates air intrusion into the system and adjustments should be made to reduce the LFG extraction rate. Alternatively, the LFG extraction rate could be increased if the methane and carbon dioxide concentrations are consistently in the middle to upper end of the typical ranges.

The composition of the LFG with respect to methane, carbon dioxide, and oxygen content is read using the "Read Gas Levels" option on the GEM-5000 instrument. The gas sample is obtained through the static pressure port on the instrument. The instrument provides a readout in percent of each of the three gases, methane, carbon dioxide, and oxygen, and percent of the remaining gas, which is designated the "balance gas."

#### **4.3 Flow Rates**

The LFG extraction flow rates will be different at each extraction point and will vary with barometric pressure changes as well as landfill cover condition, (i.e., whether geomembrane has been constructed over the extraction location or the condition of the intermediate cover). Likewise, the cumulative extraction rate at the blower/flare station(s) will vary with time. The flow rates should be adjusted based on the concentrations of the various constituents as described above. As the operating record of the system becomes established over time,

“normal” flow ranges for the individual extraction points as well as the system may be established. In general, a “normal flow rate” is one that consistently exhibits LFG quality within the parameters described in Section 4.6 (Operating Guidelines).

The LFG flow rate is calculated based on the differential pressure readings at the wellheads. The GEM-5000 can be programmed to directly correlate differential pressure to flow rate.

#### **4.4 Pressures**

LFG pressure will vary throughout the system at any given time, and will also vary with varying extraction rates. The pressures at the extraction points should be negative (vacuum) to provide active extraction from that point. If the pressure is positive, then adjustments should be made to increase the flow rate, provided that the LFG constituent concentrations are within the normal ranges as discussed above.

The static pressure at the LFG extraction points and along the conveyance pipe is obtained using the “Read Gas Levels” option on the GEM-5000 instrument. The tube with the external filter/water trap assembly is used to connect between the static pressure port on the GEM-5000 and the static pressure ports at the monitoring locations.

#### **4.5 Temperature**

LFG temperature at the extraction points is obtained directly from thermometers installed on the wellhead assemblies or from the GEM-5000 using a thermocouple inserted in the wellhead thermometer port.

## 4.6 Operating Guidelines

The LFG extraction system for the closed PTL consists of vertical extraction wells, collection trenches, and a perimeter toe collector within the Secure Landfill and sub-liner collectors within the Conventional Landfill. In addition, there are extraction points beyond the limits of the Conventional Landfill waste (i.e., PDMH 1, 3, and 4, and six perimeter soil extraction wells).

The operating guidelines for extracting LFG from points located within waste differ from those located outside the waste mass. Specifically, extraction points located within the landfill should be adjusted to maximize the concentration of the methane and carbon dioxide and minimize the presence of oxygen and nitrogen. The concentrations of the various LFG components presented in Table 2-1 should be maintained at each extraction point. By maintaining these LFG component concentrations, the potential for uncontrolled emissions and subsurface fires will be minimal, while the energy content of the extracted LFG optimized.

Operating guidelines for extracting LFG from points located outside the waste mass are aimed to maximize LFG extraction, and minimize offsite LFG migration. External LFG extraction points should be operated to maintain a vacuum at the wellhead, therefore maintaining a path of travel to the active gas collection system for migrating LFG from the conventional landfill. While oxygen and nitrogen are not of primary concern, they should be limited to no more than 10% and 40% respectively when possible.

The LFG concentration measurements at each extraction point should be recorded over time to develop a point-specific operating range. Significant changes to LFG concentrations, flow rate, or temperature should be evaluated.

## **5.0 MAINTENANCE AND TROUBLESHOOTING**

### **5.1 Well Field and System Maintenance**

Well field maintenance involves the following:

- Repairs to the conveyance pipes due to damage caused by accident, settlement, environmental factors and aging;
- Repair or replacement of system components (e.g., wellheads, access ports, flex hoses, valves, condensate traps, etc.);
- Excavation for repair of damaged pipe and components;
- Periodic liquid level measurement in vertical extraction wells, and liquid removal if the water level inhibits LFG extraction; and
- Repairing and re-adjusting pipe supports and anchors.

In many instances, repairing the system may require shutting down the blowers. The duration of the shutdown should be kept to a minimum; where possible, the work should be scheduled to coincide with a scheduled shutdown of the flare.

### **5.2 Landfill Surface**

The landfill cover is an integral part of the LFG management system. Proper landfill cover maintenance practices are important for effective operation and performance of the LFG management system. Experience has shown that in most cases, proper cover maintenance will address most landfill odor problems. A visual inspection is helpful in identifying cracks, fissures, or bare spots in the cover. For the first two years post-closure, landfill surface scans shall be performed semi-annually. After two years, the frequency of these scans will be evaluated. Damaged areas should be evaluated and repaired.

### **5.3 Conveyance Pipe**

Over time, the conveyance pipe may develop air leaks. Air leakage should be limited to the degree practicable and it is recommended that oxygen not exceed 3½ percent by volume in

LFG in the conveyance pipe. Under normal operations, the LFG should contain no more than two percent oxygen.

Leaks can occur in above-grade PVC pipe systems due to pipe separations caused by thermal contraction resulting from cooling at night and during a system shutdown. Separations or damage of below-grade pipe can occur due to differential settlement. Buried pipe is also subject to expansion and contraction, but to a lesser degree because of a more uniform temperature and the anchoring effect of the soil support within the trench.

The conveyance pipe was installed at a minimum slope of 5 percent within the landfill to limit the potential for liquid ponding in isolated low spots in the pipe because of differential settlement. However, condensate blockages along the conveyance pipe may occur, and may be identified by gurgling noises. The extent of these blockages can be evaluated by installing access ports for monitoring. With buried systems, it may be necessary to “pot hole” (i.e., perform exploratory excavation) with a backhoe to install access ports for monitoring. If the main conveyance pipe becomes blocked or restricted with condensate, then the condition should be rectified by either re-establishing the slope of the pipe or installing an additional condensate trap and drain.

Should it be necessary to excavate through the landfill cover systems to repair or replace the conveyance pipe, then the cover system should be restored to its original condition using like materials. Excavation through and repair of the landfill cover system and conveyance pipe should be performed under the observation of a properly trained and qualified engineer. Repairs required to be made to the cover system must meet original cover specifications and be carried out by qualified contractors. Documentation of the repair work (pipe and cover system) should be prepared by a licensed engineer.

#### **5.4 Blower/Flare Station(s) Maintenance**

A brief discussion of general maintenance requirements for specific equipment follows. For more detailed information refer to the applicable manufacturer's information. Monitoring and maintenance of the blower/flare station is ~~covered by the GTE plant staff~~performed by PTL operations staff as part of routine ~~GTE~~ operations.

#### **5.4.1 Pipe and Fittings**

Process plant pipe and fittings commonly consist of both steel and thermoplastic. Both are durable long-lived materials. However, thermoplastic pipe can be subject to damage from shock, strain, or heat. Thermoplastic pipe should not be used near sources of extreme heat such as the flare. Carbon steel pipe can erode and corrode. Stainless steel, cast iron, and aluminum pipe have all been successfully used in LFG applications.

LFG and condensate exhibit corrosive properties. The presence of oxygen, carbon dioxide, and organic acids common to LFG can be present in LFG condensate. The combination of these constituents can promote corrosion of steel pipe that carries LFG condensate. The most common point of wear due to erosion or corrosion in steel pipe in landfill applications is typically at pipe elbows and other fittings that are subject to erosion and where liquid condensate accumulates. The pipe should be inspected for evidence of corrosion (leakage, particularly at fittings). Where questions of pipe integrity exist, ultrasonic thickness testing may be performed.

Pipes located within the landfill collection and conveyance system at PTL consist of thermoplastic piping, specifically high density polyethylene (HDPE) and schedule 80 polyvinyl chloride (PVC).

Pipes located at the flare station ~~and GTE plant~~ vary from HDPE piping, to schedule 80 carbon steel, and stainless steel.

#### **5.4.2 Valves**

Valve seats and stem seals may wear and eventually require replacement. Butterfly valves with elastometer seals, such as Buna-N or EPDM, may be affected by LFG. In such cases, it may be necessary to try other elastometer types to find a material more suitable to the service. Viton or Teflon™ valve seats in butterfly and ball valves, respectively, have had reasonably good performance.

Valves located within the landfill collection and conveyance system at PTL consist of thermoplastic valve bodies, specifically high density polyethylene (HDPE) and schedule 80 polyvinyl chloride (PVC), with Buna-N or EPDM seals.

#### **5.4.3 Hydrogen Sulfide Removal System**

LFG at PTL no longer needs a hydrogen sulfide removal system. Treatment of H<sub>2</sub>S is no longer needed as long as H<sub>2</sub>S concentrations remain below SO<sub>2</sub> thresholds within PTL current air license.

#### **5.4.4 Blower Maintenance**

Routine maintenance for blowers and motors consists of listening for signs of abnormal operating conditions, monitoring for excessive vibration or temperature, and draining condensate from the blower housing periodically and before startup (if not automatically drained). For belt-driven blowers, the blower drive belt tension and wear should be checked on a monthly basis. If belts are glazed or cracked, then they should be replaced. At least one spare set of matched belts should always be on hand.

On direct drive machines, flexible coupling alignment should be checked on initial setup and periodically as recommended by the manufacturer (typically quarterly to annually). Bearings should be greased or repacked according to the manufacturers' recommendations (typically quarterly to annually). The electric drive motor, if not equipped with sealed bearings, should also be greased. Blower seals and packing should be checked periodically for leakage. If blower seals continually leak or will not last, then consult the manufacturer or try another type of seal or seal material. Consult the manufacturer's literature for detailed information on the maintenance of the blower.

#### **5.4.5 Gas Inlet Automatic Block Valve**

An automatic (fail-close) block valve shuts off the flow of LFG to the blower/flare station when the flare is not operating or when a fault or shutdown is initiated. This is a butterfly type valve with a pneumatic ~~electric~~ actuator and should be serviced only when needed. The automatic block valve (continue to next page)

seat should maintain a gas tight seal whenever the valve is in the closed position. Refer to the manufacturer's literature for information on service.

#### **5.4.6 Flame Arrester**

A flame arrester is designed to prevent the migration of burning LFG from the flare backwards into the process pipe and the blower/flare station. This condition can cause what is known as "detonation" (an explosion) or "flashback" within the pipe network. A flame arrester will only work properly if the velocity and pressure of the "flashback" in the pipe is within the allowable range and the flame arrester is properly assembled.

The differential pressure across the flame arrester should be checked during the monthly monitoring. The normal differential pressure is typically less than 0.5 inches water column (w.c.). The differential pressure across the flame arrester should not exceed 1.0-inch w.c. If excessive differential pressure is observed, then the flame arrester should be serviced. To service the flame arrester, shut down the facility and block in the flame arrester upstream using the manual and automatic block valves (**verify the valves do not leak**). Closely follow the directions in the manufacturer's literature for maintenance and re-assembly of the flame arrester element. It is important to note that a flame arrester's effectiveness is based upon a design spacing or gap in the flame arrester element. During maintenance and re-assembly, this spacing must be maintained according to the manufacturer's original specifications if the flame arrester is to function as designed. Ensure that all parts are returned and in the proper orientation when re-assembling the flame arrester.

#### **5.4.7 Flare**

Operation and maintenance of the flare consists of maintaining proper fuel pressure, maintaining the igniter system, and keeping the flare drained of condensate. Proper fuel velocity, quality, mixing and flame condition are key to performance. Also, to operate consistently, the flare burner assembly must be adequately shielded from excessive wind. Problems with flame stability in an open flare are usually caused by low concentrations of methane in the LFG.

The primary wear on flares is due to thermal stress. If the flare is operated in an imbalanced condition or at excessively high temperature, then it will exhibit signs of accelerated thermal stress. This may be indicated by wear and deformation of the burner.

The flare may require burner adjustment or modification to achieve and maintain proper combustion performance. Adjustment of the flare may involve changing an orifice or burner ring, or moving or changing a plate. Consult the manufacturer or seek qualified assistance.

LFG velocity to the flare is adjusted at the blower/flare station facility inlet. This is accomplished by balancing the distribution of the blower's total pressure so that there is sufficient fuel pressure at the flare. In severe cases where adjustment will not work, the flare burner or the blower may need to be modified or replaced. **Never modify the flame arrester to increase gas velocity.**

The flame safeguard sensor system consists of an electronic controller mounted in the control panel and a thermocouple mounted near the tip of the flare. At least one spare thermocouple should be kept on site.

A thermocouple can be checked independently with a voltmeter and thermocouple tables or with a digital thermocouple test meter or digital thermometer. Proper polarity must be observed when installing and monitoring a thermocouple. If the thermocouple is subjected to flame impingement, then its life may be shortened considerably. Thermocouples can be mounted in protective sheathing; however, this will cause some delay in response to temperature changes.

See the flare manufacturer's literature for specific component operation, maintenance, and troubleshooting information.

#### **5.4.8 *Electrical Equipment Controls and Instrumentation***

Dust may accumulate in electrical cabinets and absorb moisture from the air. Over sufficient time, a conductive path can be created that can cause a failure. Connections may also become loose due to thermal expansion and contraction. Electrical service and control

cabinets should be cleaned on an annual basis. Wire connections should be checked and tightened throughout the cabinets annually. Calibration and verification of instrumentation gages and thermocouples should be performed annually. Shutdown alarms and devices should be tested and the results recorded in a log. Thermocouples for sensing flare stack temperature should be maintained, and replaced when they no longer perform properly. This is normally evident by failure of the temperature controller to properly read or control the flare stack temperature (usually due to an open junction) or by loose or corroded connection terminals at the temperature transmitter, connector block, or temperature controller.

Test and recalibrate instruments, fault protection, and shutdown devices. Large breakers or fused disconnects should be disconnected under load, if rated to do so. Ensure high voltage breakers or disconnects are "locked out" in accordance with 29 CFR 1910.147 and 1910.333 Subpart S before working on equipment associated with them. Fuses should be physically pulled to isolate equipment. When the facility will be shut down for major maintenance or stand down, large breakers should be locked out (i.e., physically separated and disconnected), and the fuses should be pulled.

#### **5.4.9      *Lubrication - General***

Follow the manufacturer's recommendations for specific types and brands of lubricants. It is important to use the recommended type of grease and not to mix types or brands of grease. Do not over lubricate. Personnel who perform lubrication services should be knowledgeable in lubrication practices and should follow the manufacturer's instructions for lubrication requirements.

Establish an initial lubrication frequency based upon the equipment manufacturer's recommendation. It may be necessary to adjust the lubrication frequency interval based upon experience with the equipment.

#### **5.4.10     *Other Equipment Maintenance and Operating Tips***

The system operator should be proactive, remain alert, and develop a habit of observing equipment.

Equipment noises (such as bearings) may be monitored using an equipment stethoscope or using a wrench or similar tool by placing it on the equipment and placing the opposite end of the tool against the bone in front of the ear to listen. It is important to develop a sense of what baseline conditions are for comparison. The smell of leaking LFG or burned lubricant can indicate a seal, component, or lubricant failure.

When checking motors or other electrical devices for temperature by feel, the back of the hand should be used. Approach the equipment slowly and feel for radiant heat, which would indicate a very high temperature. If the equipment is too hot to maintain hand contact, then it is at or above a threshold of about 60 to 63°C (140 to 145°F) and may be considered excessive in many cases depending upon the equipment and service. The reason for using the back of the hand is that it is more heat sensitive and in the case of electrical fault to the casing, the natural reaction will be for the muscles of the arm to contract away from the device. This can prevent electrocution.

Operating personnel should wear all cotton clothing that provides some degree of protection in gas flash fires. Some synthetics such as polyester blends will melt readily, which can be fatal. Ties or loose items (e.g., identification badges hanging around the neck, etc.) should never be worn around rotating or belt-driven equipment. All watches, rings, identification bracelets, etc., should be removed when performing electrical testing or troubleshooting.

It is important that maintenance supplies, lubricants, and spare parts be inventoried on a frequent basis to ensure that adequate stocks are maintained for when they will be needed. Supplies should be reordered and restocked as used.

#### **5.4.11     *Condensate Handling Systems***

The blower/flare station(s) are fitted with various traps, drains, valves, and pumps for handling condensate. Condensate can be corrosive and the equipment should be checked carefully and frequently for the effects of corrosion. Seals, o-rings, and valves are usually high maintenance items. Refer to the manufacturer's information for maintenance of individual equipment or components.

## **6.0 COLD WEATHER OPERATIONAL CONSIDERATIONS**

Condensate in exposed pipes and equipment or in below-grade pipes without adequate soil cover may freeze during winter operations. Care must be taken to limit the amount of condensate allowed to collect in the LFG system at any time. The LFG is a source of heat for the system. If the system shuts down for a short period of time during winter months, then condensate in the exposed portions of the system may freeze.

If freezing of condensate under normal operating conditions becomes a regular problem, then heat trace and insulation in the affected areas may be necessary.

The normal operating temperature of the CES-LANDTEC GEM 5000 LFG Multi-Functional Analyzer is 32°F to 104°F. For temperatures below 32°F, the device should be kept warm using non-electric warming devices (e.g., hand warmers), and the device should be stored in a warm vehicle between monitoring events whenever possible.

## **7.0 DATA COLLECTION**

Data will be collected routinely using reading sheets for the blower/flare station(s), the well field, structures, etc. These "readings" should become part of the facility operating record.

### **7.1 Data Assessment**

During the initial start-up and operation of the LFG management system, baseline data should be acquired. The data should be representative of normal (not unusual, imbalanced, or irregular) conditions. These baseline data may be used in the future for comparison with current data. Parameters to be monitored include pressure, differential pressure, temperature, and flow, at various locations within the LFG management system.

Pressure will change with changes in LFG flow. Similarly, the temperature rise across a blower will change based on the flow through it.

With the above caveat in mind, equipment performance may be compared with past or baseline performance under similar operating conditions. Persons assessing the data should

be aware of the normal operating range for each parameter and note any changes and assess the reasons for that change. Equipment deterioration that can be either sudden or very gradual may be indicated by an abnormal monitoring result. Such indications should be promptly investigated. Facility data should fall within established parameters for normal operating ranges for that equipment based upon service conditions. Manufacturer's information and equipment operating experience along with judgment are required to assess facility data and determine these ranges.

Over the years a number of data assessment techniques for LFG well fields have been developed including:

4. Comparing current performance data with baseline data;
5. Comparing data with tables of acceptable ranges and conditions cross-referenced with recommended adjustments;
6. Directly comparing monitoring data with target criteria (e.g., methane, oxygen, nitrogen residual, wellhead vacuum, flow, etc.);
7. Assessing individual well data parameters with subjective judgment (no specific analytical or mathematical method used);
8. Performing a summation of total well field flow and comparing with predicted or prior demonstrated acceptable well field flow, which may be used to develop a compensation factor to calculate individual well flow targets and readjust the wells;
9. Differentiating between air intrusion through the landfill cover and waste mass, and collection pipe leakage, and compensating accordingly;
10. Evaluating nitrogen residual by measuring nitrogen with a gas chromatograph or calculate nitrogen as a balance gas; and
11. Comparing a summation of individual well data with total composite well field flow, while accounting for pipe leakage and flow measurement error.

These techniques should be used in conjunction with target criteria and established acceptable performance ranges for each extraction location.

## **7.2 Facility Daily Log Book**

Whenever the system is monitored for any reason, staff should make appropriate entries in the Daily Log Book stored in the LFGTE office.

- Name of person making the entry;
- Date and time;
- Reason for the monitoring (e.g., routine, shutdown, specific monitoring or maintenance activity, etc.);
- Reason for any shutdown;
- Actions taken or adjustments made;
- Equipment status upon leaving; and
- Unusual observations made.

The daily log is used as a record of events regarding the facility and to communicate between operating personnel. The log entry also becomes part of the daily facility readings.

## **7.3 The Data Collection Routine**

Data are collected manually in the field at the individual data points (i.e., at wells on the landfill, at migration monitoring probes surrounding the landfills, etc.).

Equipment used for data collection includes:

- GEM-5000 Gas Extraction Monitor;
- Calibration gases (use before going into the field);
- Data reading sheets;
- Clipboard and writing implement;

- Pocket calculator;
- Site map of the data points;
- Carrying tray, toolbox, or backpack, etc.;
- Tools needed to access the system components; and
- Spare parts for maintenance such as access ports, plugs, etc.

After it is downloaded to the on-site computer system, the collected data will be transmitted to Maine DEP electronically.

**APPENDIX A**  
**ENGINEERING DRAWINGS**

This figure was updated to remove the existing blower skid.

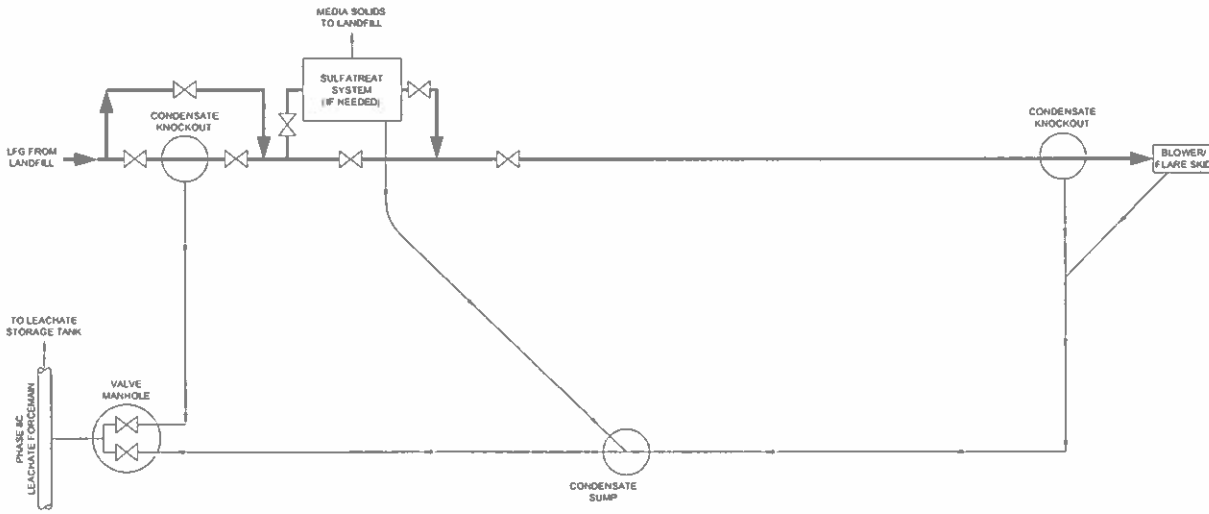


Figure 1  
**LFG and Condensate Management Flow Diagram (Collection Through Destruction)**

NEW ENGLAND WASTE SERVICES OF ME, INC.  
PINE TREE LANDFILL  
HAMPDEN, MAINE

Drawn By: B. Crockett  
Designed By: R. Clay  
Reviewed By: T. Reed  
Date: August 2025

**Figure Narrative**  
This figure depicts the flow of landfill gas (LFG) and condensate between the landfill and the flare.

- Legend**
- Valve
  - Depicts LFG Flow Direction
  - Depicts Condensate Flow Direction

**APPENDIX B**

**POST-CLOSURE QUARTERLY INSPECTION REPORT FORM**

**PINE TREE LANDFILL  
-POST CLOSURE QUARTERLY INSPECTION REPORT-**

INSPECTION DATE: \_\_\_\_\_

NAME OF INSPECTOR: \_\_\_\_\_

INSPECTION ITEM DESCRIPTION	INSPECTED NO ACTION TAKEN	NEEDS ACTION (See Comments)
<b>LEACHATE MANAGEMENT</b>		
Build-up of sediment in wetwells		
Pumps & valves functioning properly		
Flow conditions		
Pump station vented properly		
Electrical panel inspection		
Flow meter inspection		
Manholes intact and serviceable		
Inspection of leachate storage tank		
Storage tank containment		
Tank pump station		
Inspection of loading rack system		
Leachate forcemain system		
<b>STORM WATER COLLECTION &amp; CONTROL SYSTEMS</b>		
Check outlet structures for condition		
Drainage ditches clear and flowing		
Signs of erosion		
Check dams		
Detention ponds		
Check roadway ditches for erosion		
<b>ACTIVE GAS COLLECTION &amp; FLARE SYSTEMS</b>		
Condensate knockout system		
Condition of wellheads ok		
Presence of leakage on assembly		
Flare operation ok		
Noise/vibration in flare motor or blower		
Maintenance up-to-date		
Condition of igniter system		
<b>COVER SYSTEMS</b>		
Landfill cover intact		
No signs of ponding or erosion		
Cover growth being maintained		
No signs of excessive settlement		
All final cover subsurface drainage outlets functioning properly as designed		
Slope stability		
Secure II surface water drainage checked for integrity		
<b>SITE ACCESS &amp; SECURITY</b>		
All landfill roads accessible by vehicles		
Main gate fully functional		
Security fencing & gates intact and locked		
No signs of security breach or vandalism		
All electrical panels & switches secured		
<b>MISC.</b>		
No noticeable onsite or offsite odors		
Combustible gas monitoring at facility property lines		
Combustible gas monitoring at facility structures		
Emergency generator operational		
Buffer areas inspected		

**COMMENTS SECTION ON NEXT PAGE**



**Copy of Air License for Flare #4  
(Issued on July 30, 2025)**



STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

DEPARTMENT ORDER

New England Waste Services of ME, Inc.  
d/b/a Pine Tree Landfill  
Penobscot County  
Hampden, Maine  
A-850-71-F-M

Departmental  
Findings of Fact and Order  
Air Emission License  
Amendment #1

FINDINGS OF FACT

After review of the air emission license amendment application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes (M.R.S.) § 344 and § 590, the Maine Department of Environmental Protection (Department) finds the following facts:

I. **REGISTRATION**

A. Introduction

New England Waste Services of ME, Inc. d/b/a Pine Tree Landfill (PTL) was issued Air Emission License A-850-71-E-R/A on January 29, 2021, for the operation of emission sources associated with their closed municipal solid waste landfill.

The equipment addressed in this license is located at 358 Emerson Mill Road in Hampden, Maine.

PTL has requested a minor revision to their license in order to install a new flare (Flare #4) that will replace Flare #3.

B. Emission Equipment

The following equipment is addressed in this air emission license amendment:

**Flares**

<b>Equipment</b>	<b>Maximum Heat Input Capacity (MMBtu/hr)</b>	<b>Maximum Flow Rate (scfm)</b>
<i>Flare #3*</i>	<i>90.0</i>	<i>3,000</i>
<i>Flare #4</i>	<i>27.1</i>	<i>745</i>

\* Flare #3 is being removed as part of this licensing action.

C. Application Classification

All rules, regulations, or statutes referenced in this air emission license refer to the amended version in effect as of the date this license was issued.

This amendment will not increase licensed emissions of any pollutant. Pursuant to § 2(R) of *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 115, replacement of an existing air pollution control system may be considered a minor revision provided the new equipment achieves BPT. As discussed below, the new flare will achieve BPT. Therefore, this application has been processed as a minor revision in accordance with 06-096 C.M.R. ch. 115.

D. Facility Classification

With the limits on annual criteria pollutant and HAP emissions contained in the Order section of this license, the facility is licensed as follows:

- As a synthetic minor source of air emissions for criteria pollutants, because PTL is subject to license restrictions that keep facility emissions below major source thresholds for SO<sub>2</sub> and VOC; and
- As an area source of hazardous air pollutants (HAP), because the licensed emissions are below the major source thresholds for HAP.

As described in Air Emission License A-850-71-E-R/A (issued 1/29/2021), the emission limits for hazardous air pollutants are intended to demonstrate that the facility is an area source of HAP. With this license the annual emission limits for HAP are being lowered to 7.9 tpy for any single HAP and 19.9 tpy for all HAP combined to demonstrate that this facility is no longer classified as an 80% Synthetic Minor for the purpose of determining the minimum required compliance inspection frequency in accordance with Maine's Compliance Monitoring Strategy.

**II. BEST PRACTICAL TREATMENT (BPT)**

A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. Separate control requirement categories exist for new and existing equipment.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions*

*Regulation, 06-096 C.M.R. ch. 100. BACT is a top-down approach to selecting air emission controls considering economic, environmental, and energy impacts.*

B. Flare #4

PTL has proposed the installation of a new flare (Flare #4) to replace the existing Flare #3. Following the landfill’s closure in 2009, landfill gas (LFG) generation and methane content of the LFG has steadily declined. The declining quantities of LFG being generated and its methane content are approaching the lower designed operating range for Flare #3. Flare #4 will be more appropriately sized for the LFG currently being produced by the landfill.

Flare #4 has a maximum design heat input of 27.1 MMBtu/hr and can flare up to approximately 745 standard cubic feet per minute (scfm) of LFG with a methane content of up to 60%.

The BACT emission limits for Flare #4 were based on the following:

- PM/PM<sub>10</sub> – 17 lb/MMscf of methane based on AP-42 Table 2.4-5 dated 5/25
- NO<sub>x</sub> – 38 lb/MMscf of methane based on AP-42 Table 2.4-5 dated 5/25
- CO – 0.31 lb/MMBtu based on manufacturer specifications
- VOC – based on 98% control efficiency
- Visible Emissions – 06-096 C.M.R. ch. 115, BPT

The BACT emission limits for Flare #4 are the following:

Unit	Pollutant	lb/MMBtu
Flare #4	PM	0.017

Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	PM <sub>2.5</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Flare #4	0.46	0.46	0.46	1.02	8.40	3.43

Emissions of SO<sub>2</sub> are caused by combustion of total reduced sulfur (TRS) compounds in the landfill gas and are independent of the flare’s operation. BPT for emissions of SO<sub>2</sub> from the landfill were addressed in Air Emission License A-850-71-E-R/A (issued 1/29/2021), which established a facility-wide SO<sub>2</sub> emission limit of 28.0 ton per year (tpy). Compliance is demonstrated by regular testing of the landfill gas pursuant to PTL’s current air emission license.

PTL shall continuously utilize Flare #4 to control emissions from the LFG collection system except for periods of scheduled or unscheduled maintenance and repair and equipment malfunction. Periods of flare downtime due to maintenance, repair, and

equipment malfunction shall not exceed 438 hours per year on a 12-month rolling total basis.

Visible emissions from Flare #4 shall not exceed 20% opacity on a six-minute block average basis.

C. Flare #3 Downtime

PTL's current air emission license limits periods of downtime for Flare #3 to 438 hours per year on a 12-month rolling total basis.

Due to the time needed to acquire all necessary permits, including Solid Waste licensing of the modified collection and control system, PTL anticipates installing Flare #4 in June 2026. In the interim, PTL expects there may be increased periods of downtime for Flare #3. When operating at the lower end of its operating range, Flare #3 is more likely to experience difficulty keeping the flare lit during periods of high winds. PTL has requested a temporary increase in the limit on flare downtime until Flare #4 is brought online.

December 2024 had the highest amount of flare downtime for that calendar year. PTL experienced 77 hours of downtime in that month. PTL has proposed a temporary increase in the downtime limit for Flare #3 to 972 hours per year on a 12-month rolling total basis. This proposed limit assumes 77 hours of downtime per month plus two days of downtime needed when Flare #3 is taken out of service and replaced with Flare #4.

The Department finds the proposed limit to be reasonable and is BPT for emissions from the landfill based on the current low flowrate of the LFG and the limited nature of the activity.

D. Emission Statements

PTL is subject to emissions inventory requirements contained in *Emission Statements*, 06-096 C.M.R. ch. 137. PTL shall maintain the following records in order to comply with this rule:

1. Hours Flares #3 and #4 are operating or active on a monthly and calendar year basis;
2. Hours of downtime of Flares #3 and #4;
3. LFG flow (scf) to Flares #3 and #4 on a monthly and calendar year basis;
4. Site-specific sampling data on the NMOC concentration of the LFG; and
5. TRS concentration of the LFG measured on a quarterly basis.

Every third year, or as requested by the Department, PTL shall report to the Department emissions of hazardous air pollutants as required pursuant to 06-096 C.M.R. ch. 137, § (3)(C). The next report is due no later than May 15, 2027, for emissions occurring in calendar year 2026. The Department will use these reports to calculate and invoice for the

applicable annual air quality surcharge for the subsequent three billing periods. PTL shall pay the annual air quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A(3). [38 M.R.S. § 353-A(1-A)]

E. Annual Emissions

The table below provides an estimate of facility-wide annual emissions for the purposes of calculating the facility's annual air license fee and establishing the facility's potential to emit (PTE). Only licensed equipment is included, i.e., emissions from insignificant activities are excluded. Similarly, unquantifiable fugitive particulate matter emissions are not included except when required by state or federal regulations.

**Total Licensed Annual Emissions for the Facility**  
**Tons/year**  
(used to calculate the annual license fee)

	PM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
<b>Facility-Wide Total</b>	<b>2.9</b>	<b>2.9</b>	<b>28.0</b>	<b>11.7</b>	<b>63.5</b>	<b>40.4</b>

Pollutant	Tons/year
Single HAP	7.9
Total HAP	19.9

**ORDER**

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards, and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License Amendment A-850-71-F-M subject to the conditions found in Air Emission License A-850-71-E-R/A and the following conditions.

Severability. The invalidity or unenforceability of any provision of this License Amendment or part thereof shall not affect the remainder of the provision or any other provisions. This License Amendment shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

**SPECIFIC CONDITIONS**

The following shall replace Condition (17)(B) of Air Emission License A-850-71-E-R/A upon startup of Flare #4:

**(17) Solid Waste Landfill**

- B. PTL shall operate and maintain a landfill gas collection and control system, including Flare #4. [06-096 C.M.R. ch. 115, BPT]

The following shall replace Condition (18)(A) of Air Emission License A-850-71-E-R/A:

**(18) Facility-Wide Emission Limits**

- A. PTL shall not exceed the following emission limits on a 12-month rolling total basis: [06-096 C.M.R. ch. 115, BACT]

<b>Pollutant</b>	<b>(ton/year)</b>
PM	2.9
PM <sub>10</sub>	2.9
PM <sub>2.5</sub>	2.9
SO <sub>2</sub>	28.0
NO <sub>x</sub>	11.7
CO	63.5
VOC	40.4
Single HAP	7.9
Total HAP	19.9

The following shall replace Conditions (18)(F) and (G) of Air Emission License A-850-71-E-R/A:

**(18) Facility-Wide Emission Limits**

- F. To demonstrate compliance with the PM, PM<sub>10</sub>, NO<sub>x</sub>, and CO annual limits, PTL shall calculate annual emissions based on the amount of LFG sent to the flare and the following emission factors derived from the licensed emission limits established for Flares #3 and #4. [06-096 C.M.R. ch. 115, BACT]

	<b>PM (lb/MMBtu)</b>	<b>PM<sub>10</sub> (lb/MMBtu)</b>	<b>PM<sub>2.5</sub> (lb/MMBtu)</b>	<b>NO<sub>x</sub> (lb/MMBtu)</b>	<b>CO (lb/MMBtu)</b>
Flare #3	0.017	0.017	0.017	0.040	0.370
Flare #4	0.017	0.017	0.017	0.038	0.310

- G. To demonstrate compliance with the VOC annual limit, PTL shall calculate annual emissions based on a combination of VOC emissions from Flares #3 and #4 and fugitive emissions of VOC. VOC emissions from Flares #3 and #4 shall be calculated based on the amount of LFG sent to the flare and site-specific concentration data based on sampling previously performed. Fugitive VOC emissions from the landfill shall be calculated in accordance with EPA's Compilation of Emission Factors (AP-42), Section 2.4, *Municipal Solid Waste Landfills*. [06-096 C.M.R. ch. 115, BACT]

**The following shall replace Condition (19)(A) of Air Emission License A-850-71-E-R/A:**

**(19) Flare #3**

- A. PTL shall continuously utilize Flare #3 to control emissions for the LFG collection system except for periods of scheduled or unscheduled maintenance and repair and equipment malfunction. Periods of flare downtime due to maintenance, repair, and equipment malfunction shall not exceed 972 hours per year on a 12-month rolling total basis. [06-096 C.M.R. ch. 115, BPT]

**Upon startup of Flare #4, Condition (19) of Air Emission License A-850-71-E-R/A as amended above shall be replaced with the following:**

**(19) Flare #4**

- A. PTL shall continuously utilize Flare #4 to control emissions for the LFG collection system except for periods of scheduled or unscheduled maintenance and repair and equipment malfunction. Periods of flare downtime due to maintenance, repair, and equipment malfunction shall not exceed 438 hours per year on a 12-month rolling total basis. [06-096 C.M.R. ch. 115, BACT]
- B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Flare #4	PM	0.017	06-096 C.M.R. ch. 115, BACT

- C. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BPT]:

Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	PM <sub>2.5</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Flare #4	0.46	0.46	0.46	1.02	8.40	3.43

- D. Visible emissions from Flare #4 shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

- E. PTL shall record data and maintain records for the following periodic monitoring values for Flare #4.
1. Periods of downtime on a monthly, calendar year, and 12-month rolling total basis (date and length of time); [06-096 C.M.R. chs. 115 and 137]
  2. Reason for all flare downtime; [06-096 C.M.R. ch. 115, BACT]
  3. LFG flow to Flare #4 (scf) on a monthly, calendar year, and 12-month rolling total basis; [06-096 C.M.R. chs. 115 and 137]
  4. TRS concentration of the LFG measured on a quarterly basis. [06-096 C.M.R. ch. 115, BACT]

**The following shall replace Condition (20) of Air Emission License A-850-71-E-R/A:**

**(20) Annual Emission Statements**

- A. In accordance with *Emission Statements*, 06-096 C.M.R. ch. 137, PTL shall annually report to the Department, in a format prescribed by the Department, the information necessary to accurately update the State's emission inventory. The emission statement shall be submitted as specified by the date in 06-096 C.M.R. ch. 137.
- B. PTL shall keep the following records in order to comply with 06-096 C.M.R. ch. 137:
1. Hours Flares #3 and #4 are operating or active on a monthly and calendar year basis;
  2. Hours of downtime of Flares #3 and #4;
  3. LFG flow (scf) to Flares #3 and #4 on a monthly and calendar year basis;
  4. Site-specific sampling data on the NMOC concentration of the LFG; and
  5. TRS concentration of the LFG measured on a quarterly basis. [06-096 C.M.R. ch. 137]
- C. Every third year, or as requested by the Department, PTL shall report to the Department emissions of hazardous air pollutants as required pursuant to 06-096 C.M.R. ch. 137, § (3)(C). The next report is due no later than May 15, 2027, for emissions occurring in calendar year 2026. PTL shall pay the annual air quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A(3). [38 M.R.S. § 353-A(1-A)]

New England Waste Services of ME, Inc.  
d/b/a Pine Tree Landfill  
Penobscot County  
Hampden, Maine  
A-850-71-F-M

**Departmental  
Findings of Fact and Order  
Air Emission License  
Amendment #1**

9

**The following are new conditions:**

- (21) PTL is licensed to install and operate Flare #4. Flare #3 shall cease operation and be permanently disabled or removed from the site within 30 days of completion of Flare #4 commissioning. PTL shall notify the Department in writing of the date of completion of Flare #4 commissioning and the date of shutdown of Flare #3. [06-096 C.M.R. ch. 115, BACT]
  
- (22) If the Department determines that any parameter value pertaining to construction and operation of the emissions units, including but not limited to stack size, configuration, flow rate, emission rates, nearby structures, etc., deviates from what was submitted in the application or ambient air quality impact analysis for this air emission license, PTL may be required to submit additional information. Upon written request from the Department, PTL shall provide information necessary to demonstrate AAQS will not be exceeded, potentially including submission of an ambient air quality impact analysis or an application to amend this air emission license to resolve any deficiencies and ensure compliance with AAQS. Submission of this information is due within 60 days of the Department's written request unless otherwise stated in the Department's letter.  
[06-096 C.M.R. ch. 115, § 2(O)]

DONE AND DATED IN AUGUSTA, MAINE THIS 30<sup>th</sup> DAY OF JULY, 2025.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:  for  
MELANIE LOYZIM, COMMISSIONER

**The term of this license amendment shall be ten (10) years from the issuance of Air Emission License A-850-71-E/R/A (issued 1/29/2021).**

[Note: If a renewal application, determined as complete by the Department, is submitted prior to expiration of this license, then pursuant to Title 5 M.R.S. § 10002, all terms and conditions of the license shall remain in effect until the Department takes final action on the license renewal application.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 6/24/2025

Date of application acceptance: 6/27/2025

This Order prepared by Lynn Muzzey, Bureau of Air Quality.