

CommonWealth

Resource Management Corporation

January 14, 2014

The Municipal Review Committee
Greg Louder, Executive Director
395 State Street
Ellsworth, Maine 04605

RE: Review of the Tip Fee for the First Quarter of 2014:
Compliance with Performance Standards in 2013

Dear Members of the MRC:

In January 2014, the Municipal Review Committee (the MRC) received from the Penobscot Energy Recovery Company (PERC) information, calculations and supporting data intended to demonstrate whether in 2013 the Facility operated in compliance with the Performance Standards set forth in Schedule F of the Second Amended, Restated and Extended Waste Disposal Agreement (the Agreement) and, consequently, whether adjustment of the tipping fee is required under Schedule C, Section A(4), of the Agreement. PERC supplied a summary cover letter, supported by Exhibits A through D, which contain data to demonstrate the Facility's performance in 2013.

CommonWealth Resource Management Corporation (CommonWealth) has reviewed the information supplied by PERC. The following table compares the actual performance of the PERC facility in 2013 to the levels of performance required for compliance with the Performance Standards as defined in Schedule F of the Agreement:

Applicable Standard	2013 Actual Performance	Performance Standard
Residue Moisture	23.4 %	<40.0%
Residue Combustible Content	3.8 %	<9.0%
Residue Truck Loading	30.46 tons	>20.0 tons
FEPR Truck Loading	28.06 tons	>20.0 tons
Ferrous Quality	617 Btu/lb based on 8.4 % by weight	<720 Btu/lb based on <10% by weight
Glass and Grit Quantity	17.8 %	<26 %
Glass and Grit Quality	Not applicable (the value of 2,743 Btu/lb would have complied)	<3,600 Btu/lb if not in compliance with Glass and Grit Quantity Standard

For the Residue Moisture Standard, the tests show that the moisture content of the ash in 2013 ranged between 20 percent and 26 percent, averaging 23.4 percent, compared to 24.4 percent in 2012, 25.0 percent in 2011, 24.4 percent in 2010, 24.4 percent in 2009, 22.6 percent in 2008, 23.2 percent in 2007 and 24 percent in 2006. Reduced moisture content of ash indicates that less water is being landfilled with the ash, thus reducing disposal costs for the Charter Municipalities and for PERC.

For the Residue Combustible Content Standard, the tests show that the average ash loss on ignition (LOI) in 2013 ranged between 2.4 percent and 7.9 percent, averaging 3.8 percent, compared to 3.3 percent in 2012, 6.1 percent in 2011, 4.5 percent in 2010, 1.7 percent in 2009, 3.7 percent in 2008, 2.4 percent in 2007 and 3.4 percent in 2006. Reducing the LOI of ash indicates improved combustion conditions and that less uncombusted waste is being landfilled with the combustion ash, thus reducing the disposal costs to the Charter Municipalities and PERC.

For the Residue Truck Loading Standard, the actual average load was 30.46 tons per truck in 2013, compared to 30.40 tons per truck in 2012, 29.87 tons per truck in 2011, 29.77 tons per truck in 2010, 29.69 tons per truck in 2009, 29.67 tons per truck in 2008, 28.07 tons per truck in 2007 and 28.23 tons per truck in 2006. For the FEPR Truck Loading Standard, the actual average load was 30.21 tons per truck in 2013, compared to 28.06 tons per truck in 2012, 27.76 tons per truck in 2011, 27.73 tons per truck in 2010, 28.06 tons per truck in 2009, 28.55 tons per truck in 2008, 28.15 tons per truck in 2007 and 26.20 tons in 2006.

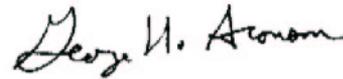
For the Ferrous Quality Standard, tests indicated that the ferrous stream had an average gross calorific value (GCV) of 816 Btu per pound in 2012 (which exceeded the standard), compared to the 653 Btu per pound in 2011, 693 Btu per pound in 2010, 876 Btu per pound in 2009 (which also exceeded the standard), 696 Btu per pound measured in 2008, 432 Btu per pound measured in 2007, and the 422 Btu per pound measured in 2006. The percentage by weight of free combustibles was 9.7 percent, which is less than the reference point of 10 percent for the Ferrous Quality Standard. This compares to 9.5 percent in 2011, 10.4 percent in 2010 (which exceeded the standard), 11.7 percent in 2009 (which exceeded the standard), 9.7 percent in 2008 and 7.6 percent in 2007 and 2006. This standard measures the extent to which combustible materials are diverted from fuel production and contaminate the ferrous stream.

For the Glass and Grit Quantity Standard, PERC produced glass and grit at a rate of 17.8 percent of incoming MSW in 2013, compared to the rates of 18.2 percent in 2012, 19.4 percent in 2011, 20.2 percent in 2010, 18.1 percent in 2009, 16.7 percent in 2008, 16.5 percent in 2007 and 15.4 percent in 2006. This standard measures the share of the incoming waste that is removed for landfill disposal prior to combustion. Under the Agreement, the glass and grit stream is presumed to contain an acceptable level of combustible contaminants if the quantity of glass and grit complies with the Glass and Grit Quantity Standard. Because PERC complied with the Glass and Grit Quantity Standard, the Glass and Grit Quality Standard is not applicable.

Commonwealth agrees that the no tip fee adjustment is required for failure of the Facility to comply with Performance Standards in 2013.

If you have any further questions, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "George H. Aronson". The signature is written in a cursive style with a large initial "G".

George H. Aronson
Principal

Attachment 1 Letter on 2013 Performance Standards to the MRC from Gary Stacey,
PERC, dated January 8, 2014



Penobscot Energy Recovery Company

P.O. Box 160 • 29 Industrial Way
Orrington, Maine 04474
(207) 825 - 4566

ESOCO ORRINGTON, INC.
Plant Operator

January 8, 2014

Municipal Review Committee
395 State Street
Ellsworth, Maine 04605

Subject: 2013 Performance Standards

Committee Members:

Attached for your review are Exhibits A through D, which should be sufficient to duplicate and verify PERC's compliance with Plant Performance Standards.

Compliance with Plant Performance Standards

1. **The Residue Moisture Standard** - The moisture in the Residue as shipped shall not exceed forty percent (40%) by weight on an annual basis. (See Exhibit A)
 - From the results of the quarterly ash analysis done by Northeast Lab., the mean percent moisture in the ash residue was 23.4%.
2. **The Residue Combustible Content Standard** - The percent weight of the unburned combustibles in the Residue as measured by the percent LOI shall not exceed nine percent (9%) by weight dry. (See Exhibit A)
 - From the results of the quarterly ash analysis done by Northeast Lab., the mean percent LOI of the ash residue was 3.8%.
3. **The Residue Truck Loading Standard** - The annual average net weight of shipments of Residue (ash) shall not be less than twenty (20) tons per truck. (See Exhibit B)
 - Based on the monthly disposal invoicing from the disposal facilities, the annual average net shipping weight per residue trailer was 30.46 tons.
4. **FEPR Truck Loading Standard** - The annual average net weight of shipments of FEPR (including glass & grit, and non-processable waste) shall not be less than twenty (20) tons per truck. (See Exhibit B)
 - Based on the monthly disposal invoicing, the annual average net shipping weight per FEPR trailer was 30.21 tons.
5. **The Ferrous Quality Standard** - The higher heating value (HHV) of the recovered ferrous materials as measured by the ratio of the BTU's of free combustibles to the total weight of the recovered ferrous material shall not exceed 720 BTU/lb on the basis of ten percent (10%) by weight free combustibles. (See Exhibit C)
 - From the results of the monthly ferrous sampling, the percentage by weight of free combustibles was 8.4% and the HHV was 617 BTU/lb.
6. **The Glass & Grit Quantity Standard** - The weight of glass & grit shall not exceed twenty-six percent (26%) of the weight of all Acceptable Waste accepted at the Facility (including non-processable waste) on an annual basis. (See Exhibit D)
 - From the monthly production reports, the annual average percent by weight of glass & grit was 17.8%.

Municipal Review Committee

01/08/14

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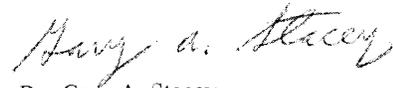
7. **The Glass & Grit Quality Standard** - The HHV of the glass & grit shall not exceed 3,600 BTU/lb on an annual average basis. This standard shall not apply unless the Facility has not complied with the Glass & Grit Quantity Standard above. (See Exhibit C)

➤ THIS STANDARD DOES NOT APPLY. However, from the results of the monthly glass & grit sampling, the HHV of the glass & grit, 2,743 BTU/lb.

The information supplied herewith, along with the monthly Plant Performance Reports, should be sufficient to duplicate and verify the Performance Standards calculations.

Please feel free to call me should you have any questions.

Very truly yours,
Penobscot Energy Recovery Company
By: ESOCO Orrington, LLC, As Agent



By: Gary A. Stacey
Plant Controller

Attachments:

Cc: G. Aronson, CWRM
John Noer, SET PERC Investment, LLC
K. Nordby, PERC Holdings, LLC
P. Prata, PERC
~~E. C. White, PERC~~
A. Prata

2013 WEEKLY ASH DATA

Exhibit A

DATE	TYPE	NEL % SLD	NEL % LOI	PERC pH
3/26	C	78.0	7.90	12.2
5/16	C	80.0	2.70	12.1
7/1	C	77.0	2.40	12.1
9/22	C	74.0	2.70	12.0
11/7	C	74.0	3.30	12.1
N		5	5	5
MEAN		76.6	3.8	12.1
VAR		6.8	5.4	0.0
STD DEV		2.6	2.3	0.1

Exhibit B

	Tons Shipped	# Loads	Ave. Wt. Per Load
Ash	53,577.00	1,759	30.46 tons

	Tons Shipped	# Loads	Ave. Wt. Per Load
G & G	53,585.06	1,772	
N/P	31.74	3	
	<u>53,616.80</u>	<u>1,775</u>	30.21 tons

2013												YTD TOTALS	
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	
ASH													
SHIPMENTS TO OLD TOWN	148	113	119	157	164	155	154	155	146	146	143	159	1,759.00
WEIGHT SHIPPED	4,462.50	3,480.25	3,636.69	4,802.29	5,005.32	4,736.01	4,682.80	4,663.12	4,399.83	4,519.85	4,373.46	4,834.88	53,577.00
TOTAL SHIPMENTS	148	113	119	157	164	155	154	155	146	146	143	159	1,759.00
TOTAL WEIGHT SHIPPED	4,462.50	3,480.25	3,636.69	4,802.29	5,005.32	4,736.01	4,682.80	4,663.12	4,399.83	4,519.85	4,373.46	4,834.88	53,577.00
COST PER TON	49.74	50.57	50.55	50.55	50.55	50.55	50.55	50.55	50.55	50.55	50.55	50.55	53,610.06
ASH PRODUCED	4,497.50	3,425.25	3,666.69	4,797.29	5,010.30	4,731.00	4,685.80	4,660.10	4,399.83	4,526.90	4,366.50	4,842.90	2,706,345.58
CURRENT MONTH ACCRUAL=	223,705.65	173,214.89	185,282.67	242,503.01	253,270.67	239,152.05	236,867.19	235,568.06	222,411.41	228,834.80	220,726.58	244,808.60	
ADJ FEB 13 ACCRUAL PRICE DIFF			(68.51)										
QUARTERLY TOTALS			\$582,203.21			\$734,925.73			\$894,846.66			\$694,369.98	
G&G													
SHIPMENTS TO OLD TOWN	201	112	65	140	175	147	143	161	155	175	182	116	1,772
WEIGHT SHIPPED	5,597.97	3,230.34	1,824.26	3,990.89	4,982.81	4,231.20	4,111.04	4,591.09	4,506.60	5,059.95	5,240.60	6,208.31	53,585.06
TOTAL SHIPMENTS	201	112	65	140	175	147	143	161	155	175	182	116	1,772.00
TOTAL WEIGHT SHIPPED	5,597.97	3,230.34	1,824.26	3,990.89	4,982.81	4,231.20	4,111.04	4,591.09	4,506.60	5,059.95	5,240.60	6,208.31	53,585.06
COST PER TON	47.37	48.16	48.13	48.13	48.13	48.13	48.13	48.13	48.13	48.13	48.13	48.13	53,385.09
G & G PRODUCED	5,428.00	3,200.34	1,824.26	4,015.89	4,967.80	4,231.20	4,156.00	4,546.10	4,506.60	5,060.00	5,315.60	6,133.30	2,565,299.09
CURRENT MONTH ACCRUAL=	257,124.36	154,128.37	87,705.62	193,284.79	239,100.21	203,647.66	200,028.28	218,803.79	216,902.66	243,537.90	255,839.83	295,195.73	
ADJ FEB 13 ACCRUAL PRICE DIFF			(96.01)										
QUARTERLY TOTALS			\$498,868.36			\$636,032.66			\$635,734.72			\$794,573.36	
N/P (LANDFILL)													
SHIPMENTS TO OLD TOWN	0	0	1	0	1	0	0	0	0	0	0	1	3
WEIGHT SHIPPED	0	0	8	0	8	0	0	0	0	0	0	15.74	31.74
TOTAL SHIPMENTS	0	0	1	0	1	0	0	0	0	0	0	1	3.00
TOTAL WEIGHT SHIPPED	0	0	8	0	8	0	0	0	0	0	0	15.74	31.74
COST PER TON	65.27	66.33	66.33	66.33	66.33	66.33	66.33	66.33	66.33	66.33	66.33	66.33	0.00
N/P PRODUCED	0	0	0	0	0	0	0	0	0	0	0	0	0.00
CURRENT MONTH ACCRUAL=	0	0	530.64	0	530.64	0	0	0	0	0	0	1044.03	2,105.31
QUARTERLY TOTALS			\$530.64		\$530.64				\$0.00			\$1,044.03	
N/P (GRINDING)													
S. J. CLISHAM - GRINDING													
TOTAL TONS GROUND	393.50	564.80	342.00	1026.63	1149.83	634.00	1114.06	929.58	1135.66	1018.67	666.43	735.60	9,710.76
LESS BEGINNING INVENTORY	(50.00)	(325.00)	(285.00)	(300.00)	(150.00)	(25.00)	(315)	(250.00)	(350)	(165)	0	(300)	
PLUS ENDING INVENTORY	325.00	285.00	300.00	150.00	25.00	315.00	250.00	350.00	165	0	300	225.99	
TOTAL TONS PRODUCED	668.50	524.80	357.00	876.63	1024.83	924.00	1049.06	1029.58	950.66	853.67	966.43	661.59	9,886.75
COST PER TON TO GRIND	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00
CURRENT MONTH ACCRUAL=	29,414.00	23,091.20	15,708.00	36,571.72	45,092.52	40,656.00	46,158.64	45,301.52	41,829.04	37,561.48	42,522.92	29,109.96	435,017.00
QUARTERLY TOTALS			\$68,213.20			\$124,320.24			\$133,289.20			\$109,194.36	
TOTAL RESIDUE ACCRUAL	\$510,244.01	\$350,434.46	\$289,226.83	\$474,359.52	\$637,994.04	\$483,455.71	\$483,054.11	\$499,673.37	\$461,143.11	\$509,834.08	\$519,089.33	\$570,158.32	5,708,766.98

Exhibit C

MRC PERFORMANCE STANDARDS SUMMARY 2013

Date	ID	FFC TEST DATA 2013					FERROUS TEST DATA INTERPRETATION 2013						
		H2O (%)		Ash (%)		GCV (BTU/lb)		Wt (lb)		Wt (%)		GCV (BTU/lb)	
		Rec'd	Dry	Rec'd	Dry	Rec'd	Dry	Total	Ferrous	FCC	FCC	Rec'd	Dry
3/20/2013	FFC13-1A	37.9	7.3	11.7	7080	11400	16.56	14.44	2.13	12.8	908	1463	
4/15/2013	FFC13-1B	20.6	8.5	10.7	8390	10570	17.13	15.75	1.38	8.0	674	849	
5/6/2013	FFC13-2A	14.4	13.6	16.4	7460	9031	18.31	16.81	1.50	8.2	611	740	
5/6/2013	FFC13-2B	14.5	20.3	24.8	7376	9006	17.25	14.19	3.06	17.8	1310	1599	
6/12/2013	FFC13-3A	22.2	13.5	17.4	5790	7440	16.25	15.13	1.13	6.9	401	515	
6/12/2013	FFC13-3B	27.8	13.2	18.3	9400	13020	15.75	14.06	1.69	10.7	1007	1395	
7/10/2013	FFC13-4A	32.7	8.2	12.2	8380	12450	15.25	14.06	1.19	7.8	653	969	
7/10/2013	FFC13-4B	24.8	13.2	17.6	6900	9180	16.75	15.63	1.13	6.7	463	617	
9/17/2013	FFC13-5A	35.0	13.5	20.9	5514	8534	17.50	16.50	1.00	5.7	315	488	
9/17/2013	FFC13-5B	20.5	13.4	17.1	6288	8464	18.25	17.38	0.88	4.8	301	406	
11/5/2013	FFC13-6A	28.0	5.0	7.0	7640	10610	15.50	14.38	1.13	7.3	555	770	
11/5/2013	FFC13-6B	31.2	9.4	14.7	5583	8693	19.75	19.00	0.75	3.8	212	330	

STATS

	FERROUS	12	12	12	12	12	12	12	12	12	12	12	
n			12	12	12	12	12	12	12	12	12	12	12
MEAN			25.8	11.6	15.7	7150	9866	17.02	15.61	1.41	8.4	617	845
LIMIT			40.0			9400					10.0		940
VAR			58.5	16.6	23.3	1480965	2994311	1.71	2.44	0.41	14.6	104554	184665
STD DEV			7.7	4.1	4.8	1217	1730	1.31	1.56	0.54	3.8	323	430
MIN			14.4	5.03	6.99	5514	7440	15.25	14.06	0.75	3.8	212	330
MAX			37.9	20.3	24.8	9400	13020	19.75	19.00	3.06	17.8	1310	1599

MRC PERFORMANCE STANDARDS SUMMARY 2013

Date	ID	RDF TEST DATA 2013				G&G TEST DATA 2013								
		H2O (%)		Ash (%)		GCV (BTU/lb)		ID	H2O (%)		Ash (%)		GCV (BTU/lb)	
		Rec'd	Dry	Rec'd	Dry	Rec'd	Dry		Rec'd	Dry	Rec'd	Dry	Rec'd	Dry
3/20/2013	RDF13-1A	36.1	38.2	59.8	2620	4100	GG13-1A	40.3	33.0	55.3	2450	4100		
4/15/2013	RDF13-1B	30.1	18	25.8	6790	9710	GG13-1B	32.5	40.9	60.6	2360	3500		
5/6/2013	RDF13-2A	30.3	10.7	15.4	6080	8720	GG13-2A	29.8	32.0	45.9	3731	5350		
5/6/2013	RDF13-2B	36.4	7.0	11.0	5680	8930	GG13-2B	34.6	33.7	52.2	3237	5007		
6/12/2013	RDF13-3A	43.3	6.1	10.7	4980	8780	GG13-3A	41.1	29.0	49.2	2780	4720		
6/12/2013	RDF13-3B	38.3	4.1	6.7	6480	10500	GG13-3B	39.1	32.7	53.7	2410	3960		
7/10/2013	RDF13-4A	24.8	17.8	23.7	5460	7270	GG13-4A	30.0	37.3	53.3	2750	3930		
7/10/2013	RDF13-4B	35.7	10.2	15.9	5180	8060	GG13-4B	35.1	30.9	47.6	3360	5180		
9/17/2013	RDF13-5A	37.1	15.3	24.3	5280	8390	GG13-5A	31.3	43.0	67.1	2056	3449		
9/17/2013	RDF13-5B	34.0	11.2	17.0	5560	8420	GG13-5B	34.1	42.2	68.0	1737	4662		
11/5/2013	RDF13-6A	25.6	5.2	7.0	7060	9490	GG13-6A	35.9	26.9	44.5	3340	5515		
11/5/2013	RDF13-6B	42.7	8.3	14.5	5310	9270	GG13-6B	30.5	34.9	55.4	2703	4293		

STATS

	RDF	12	12	12	12	12	GLASS&GRIT	12	12	12	12	12		
n			12	12	12	12		12		12	12	12	12	12
MEAN			34.5	12.7	19.3	5540		8470		34.5	34.7	54.4	2743	4472
LIMIT			40.0							40.0			2088	
VAR			34.9	86.3	203.2	1287691		2583909		15.8	26.7	57.8	344354	495352
STD DEV			5.9	9.3	14.3	1135		1607		4.0	5.2	7.6	587	705
MIN			24.8	4.12	6.68	2620		4100		29.8	26.9	44.5	1737	3449
MAX			43.3	38.2	59.8	7060		10500		41.1	43.0	67.98	3731	5515

**Penobscot Energy Recovery Company
Actual 2013**

Exhibit D

Solids Flow Summary

2013	MSW Received (tons)	Daily Avg. MSW (tons)	Wood Received (tons)	Daily Avg. Wood (tons)	G&G Out (tons)	Ferrous Out (tons)	Ash Out (tons)	Non-Pro Out (tons)	By Passed MSW (tons)	Ash Produced (tons)	NP's Ground (tons)
Jan	26,446	853	131	4	5,598	840	4,463	-	-	4,498	393.5
Feb	20,406	704	248	9	3,230	570	3,337	-	1,351	3,425	564.8
Mar	21,375	690	286	9	1,824	369	3,637	8	5,947	3,667	342.3
Apr	27,764	925	152	5	3,991	756	4,802	-	-	4,797	1,026.6
May	28,475	919	45	-	4,993	734	5,005	8	-	5,010	1,149.8
Jun	26,754	892	45	-	4,231	703	4,736	-	-	4,731	634.0
Jul	29,159	941	47	2	4,111	652	4,683	-	-	4,686	1,114.1
Aug	27,389	884	44	-	4,591	634	4,663	-	-	4,660	929.6
Sep	25,164	839	58	2	4,507	523	4,400	-	-	4,400	1,135.7
Oct	25,677	856	50	2	5,060	894	4,520	-	-	4,527	1,018.7
Nov	23,619	787	33	-	5,241	669	4,373	-	-	4,367	666.4
Dec	24,646	795	16	1	6,208	690	4,835	16	-	4,843	735.6
Y-T-D	306,875	841	1,155	3	53,585	8,074	53,454	32	7,298	53,610	9,711

2013	MSW Processed (tons)	Daily Avg MSW (tons)	RDF Produced (tons)	G&G Produced (tons)	Ferrous Produced (tons)	Non-Pro Produced (tons)	% RDF	% G&G	% Ferr	% N/P
Jan	25,346	818	18,913	5,428	730	275	74.6%	21.4%	2.9%	1.1%
Feb	18,789	648	15,111	3,200	518	(40)	80.4%	17.0%	2.8%	-0.2%
Mar	16,249	524	13,946	1,824	456	23	85.8%	11.2%	2.8%	0.1%
Apr	27,014	900	22,442	4,015	706	(150)	83.1%	14.9%	2.6%	-0.6%
May	28,375	915	22,711	4,968	814	(117)	80.0%	17.5%	2.9%	-0.4%
Jun	27,754	925	22,500	4,231	733	290	81.1%	15.2%	2.6%	1.0%
Jul	27,359	883	22,621	4,156	647	(65)	82.7%	15.2%	2.4%	-0.2%
Aug	27,189	877	21,864	4,545	679	100	80.4%	16.7%	2.5%	0.4%
Sep	26,314	877	21,345	4,507	648	(185)	81.1%	17.1%	2.5%	-0.7%
Oct	25,127	811	19,564	5,060	669	(165)	77.9%	20.1%	2.7%	-0.7%
Nov	24,319	784	17,910	5,315	794	300	73.6%	21.9%	3.3%	1.2%
Dec	25,546	824	18,832	6,133	640	(58)	73.7%	24.0%	2.5%	-0.2%
Y-T-D	299,382	820	237,757	53,385	8,034	208	79.4%	17.8%	2.7%	0.07%