

# CommonWealth

Resource Management Corporation

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January 13, 2011

The Municipal Review Committee  
Greg Louder, Executive Director  
40 Harlow Street  
Bangor, Maine 04401

RE: Review of the Tip Fee for the First Quarter of 2011:  
Compliance with Performance Standards in 2010

Dear Members of the MRC:

In January 2011, the Municipal Review Committee (the MRC) received from the Penobscot Energy Recovery Company (PERC) information, calculations and supporting data intended to demonstrate whether in 2010 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 2010.

CommonWealth Resource Management Corporation (CommonWealth) has reviewed the information supplied by PERC. The following table compares the actual performance of the PERC facility in 2010 to the levels of performance required for compliance with the Performance Standards as defined in Schedule F of the Agreement:

Applicable Standard	2010 Actual Performance	Performance Standard
Residue Moisture	24.4 %	<40.0%
Residue Combustible Content	4.5 %	<9.0%
Residue Truck Loading	29.77 tons	>20.0 tons
FEPR Truck Loading	27.73 tons	>20.0 tons
Ferrous Quality	693 Btu/lb based on 10.4% by weight <b>The fraction by weight (but not the Btu/lb) exceeds the standard</b>	<720 Btu/lb based on <10% by weight
Glass and Grit Quantity	20.2 %	<26 %
Glass and Grit Quality	Not applicable (the value of 3,068 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 2010 ranged between 20 percent and 30 percent, averaging 24.4 percent, compared to 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.

For the Residue Combustible Content Standard, the tests show that the average ash loss on ignition (LOI) in 2010 ranged between 3.0 percent and 7.1 percent, averaging 4.5 percent, compared to 1.7 percent in 2009, 3.7 percent in 2008, 2.4 percent in 2007 and 3.4 percent in 2006. Overall, the average LOI value for all samples was less than the guaranteed Standard value of nine percent. 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. Note that the value of LOI increased steadily over the year after the boiler outages for maintenance at the start of the year.

For the Residue Truck Loading Standard, the actual average load was 29.77 tons per truck in 2010, compared to 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 27.73 tons per truck in 2010, compared to 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 in 2010 had an average gross calorific value (GCV) of 693 Btu per pound, compared to the 876 Btu per pound in 2009 (which 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 of 10.4 percent in 2010 exceeded the reference point for the Ferrous Quality Standard, which is 10 percent. This compares to 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.

Pursuant to Schedule C of the Agreement, the penalty for failure to comply with the Ferrous Quality Standard is an adjustment to the Tipping Fee in the amount of the actual costs of transportation and disposal for the excess tons associated with excess combustible material. The Agreement does not specify whether compliance is determined on the basis of the GCV or the percentage by weight. In Commonwealth's view, compliance should be based on whether the GCV standard is met. The standard for percentage by weight is provided as a basis for calculating potential penalties, not as a basis for determining compliance. Using this interpretation, PERC complied with the Ferrous Quality Standard, and no penalty payment is due. Note that the penalty amount calculated on the basis of the shortfall in the percentage by weight compared to the

reference standard would be \$76.84 for 2010, which is not significant enough to warrant additional deliberation on this matter. Nonetheless, the elevated levels of combustibles in the ferrous stream are an area of concern that PERC is advised to evaluate in order to improve future performance.

For the Glass and Grit Quantity Standard, PERC produced glass and grit at a rate of 20.2 percent of incoming MSW in 2010, compared to the rates of 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 Facility has complied with all of the Performance Standards in 2010 other than the Ferrous Quality Standard. The Glass and Grit Quality Standard is not applicable inasmuch as the Facility operated in compliance with the Glass and Grit Quantity Standard.

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

Sincerely,

George H. Aronson  
Principal

Attachment 1 Compliance With Performance Standards