INFRASTRUCTURE COMMITTEE MEETING
Monday, June 20, 2016
6:00 P.M.
HAMPDEN TOWN OFFICE
AGENDA

1. MINUTES – 5/23/2016 Meeting

2. OLD BUSINESS
   a. Updated estimate of timeline for consideration of LED streetlight proposal
   b. Discussion of potential recommendation of TIF funds for lighting infrastructure in town center
   c. Discussion of anticipated Fall 2016 public process regarding consideration of potential changes to policies and practices regarding municipal solid waste management and Transfer Station operations

3. NEW BUSINESS
   a. Citizen request for DPW work at 20 George Street storm drain
   b. Results of June 7, 2016 Town of Hampden MS4 Stormwater Management audit conducted by Maine DEP
   c. Stormwater Quiz for distribution to town officials and staff – provided by SEE, Inc.
   d. Review of recent information regarding Fiberight project status including permitting and financing

4. PUBLIC COMMENTS
5. COMMITTEE MEMBER COMMENTS

INFRASTRUCTURE COMMITTEE MEETING
6:00 P.M.
Monday, May 23, 2016

HAMPDEN TOWN OFFICE

MINUTES-DRAFT

Attending-
Councilor Marble
Councilor McPike
Councilor McAvoy
Councilor Sirois
Councilor Cormier

Public Works Director, Sean Currier
Manager Jennings (arrived late)
Alex King, resident

1. **MINUTES – 4/25/2016 Meeting** - *Tabled*

2. **OLD BUSINESS**

   a. **Report on reference check re Pemco (LED Street Lights)** – *DPW Director Sean Currier updated the council on status of the Pemco project. At this point, there has been nothing finalized in the budget process. Still waiting on reference check from Brunswick to find out how this has worked. Stated that we may need to find records of maintenance done here in the past. Councilor McAvoy stated the only savings will be kilowatt usage from the new LED vs what we have now, but all other line items on bill will remain the same. Councilor Marble suggested trying to find 2 or 3 other communities to get references from, and then determine the costs of doing it ourselves and later determine where it falls in the capital plan.*

   b. **Update on sewer financial status, and correspondence with Bangor regarding cost trends** – *Sean reported that this is better than first thought and do follow the trend of the estimated flow. He reported that Bangor did find some items that needed to be removed from the bill such as accounting costs. Heating costs have played a part. Seeing it in graph form has helped understand correlation between flow and costs. Sean stated that the calibration of the meter at the pit has corrected the spike that was seen last summer. He recommends calibrating on a more regular basis, every 2 – 3 years.*

3. **NEW BUSINESS**

   a. **Sewer ordinance – pending abatement requests and discussion of policy for abatement requests and summer meters** - *Sean reported that currently there is no formal policy for sewer abatement. There are three pending abatement requests at this time. Councilor Marble asked the sewer clerk Danielle Simons if the intent was to create a policy first or to deal with the requests first. She stated that the pending requests should be taken care of at this point and that a policy should be created for the future. She has obtained sample policies from other municipalities. Discussion followed regarding the need to address the issue of pools and the use of summer meters. Councilor Marble asked if the Committee was to be tasked with creating the policy and*

both Danielle and Sean stated that they would compile the information received and create our policy from that information. Discussion followed regarding draining pools and hot tubs whether on the ground or into the sewer, summer meters, and the dollar amount of the abatement requests. After discussion, the Committee consensus was to direct staff to handle abatement requests and to have a draft policy by the next meeting.

b. **Review of Ammo Park / Business Park / Calvary Church sewer for town acceptance –** *Sean reported that the Ammo Park portion of the sewer pipe has been updated in the past month. It has been tested and confirmed that it adheres to our standards. Sean reported that on the mandrel testing, there is a difference between our ordinance and the ASTM standards; our ordinance being stricter. He would like to review the ASTM standards and incorporate them into our ordinance. Councilor Marble stated that those findings can be brought back to a later meeting. Regarding the rest of the pipe, progress has been made with Woodard & Curran monitoring project. There have only been a few discrepancies to tie up, but it should be finished this week. All the manholes have been tested and the mandrel testing has been done, some of the lines need to be pressure tested, or else records of pressure testing need to be provided. DPW Director Currier recommended acceptance as part of public sewer as long as all testing is completed. After discussion, Committee consensus was to defer to director Currier regarding the ASTM standards.*

c. **Transfer Station 2015 Annual Report, and review of FY15 and FY16 YTD vendor costs for solid waste and recycling** – *Director Currier reported construction debris, wood ash, scrap metal and electronics costs for FY16 to date as $203,000.00, still on track. Councilors discussed whether to include transfer station as part of capital planning. Discussed doing away with all items at transfer station except for municipal solid waste. Discussed retaining white goods, increasing sticker costs. Councilor Marble suggested that this topic be given real time and attention at future meetings. Councilor McPike is in favor of doing away with municipal responsibility for solid waste, and leave it to the for-profit company. Much discussion followed on various scenarios for solid waste. Consensus to add this to next month's agenda.*

4. **PUBLIC COMMENTS** – *Resident Alex King spoke to support the idea that residents will be upset without a place to take their household waste but costs need to be watched. Said if people do not have a place we will be finding it dropped off on the roadsides. Is in favor of increasing transfer station permit costs rather than outsource this service.*

5. **COMMITTEE MEMBER COMMENTS** – *No comments*

With no other business to conduct, the meeting adjourned at 8:00 p.m.

Respectfully Submitted,

Paula Scott, Town Clerk
for Sean Currier

2-c

TRANSFER STATION OPTIONS REQUESTED BY MAYOR RYDER:

1) Gone Completely
2) Just household waste
3) Everything except demo
4) Roadside and 2x spring cleanup
5) Just household with 2x year weekend demo

OPTIONS PROVIDED:

1) Transfer station moved to Casella
2) Provide household waste and zero sort
3) Provide household waste and zero sort with demo twice per year (3 days each)
4) Roadside pickup (msw and zero sort)
5) Roadside pickup (msw and zero sort) with demo twice per year (3 days each)
6) "Everything except demo" does not seem feasible. Construction debris would end up in brush pile, metal pile and swap shop unless 3 attendants were on duty full-time.

1. ✓ Gone completely
2. ✓ just household waste
3. everything except demo
4. roadside + 2x spring cleanup
5. ✓ just household with 2x year weekend demo

2016 SOLID WASTE OPTIONS

HISTORIC TONNAGE OF MSW FROM HAMPDEN TRANSFER STATION

2012	1924.26	
2013	1823.84	
2014	1940.69	
2015	1934.47	
2016	1741.85	THRU 6/4

RECOMMENDATION: ON DEMO 2X PER YEAR, EACH RESIDENT GETS 2 TICKETS (ENTRIES) FOR SPRING AND 2 TICKETS (ENTRIES) FOR FALL. TICKET MUST BE PRESENTED TO ATTENDANT AT TIME OF ENTRY. DEMO WOULD BE FOR 3 DAYS. ALSO, IF WE DO NOT CLOSE SWAP-SHOP, ALL DEMO DEBRIS WILL END UP IN THE SHACK IF WE DO NOT EMPLOY A FULL TIME ATTENDANT TO MONITOR.

OPTION 1: ALL HAMPDEN WASTE TO OUTSIDE CONTRACTOR (CLOSE TRANSFER STATION)

DESCRIPTION OF SERVICE	APPRX. COST
- MSW TIPPING FEES AT PERC OR FIBERIGHT	
- CASELLA CHARGES TO RUN COMPLETE SOLID WASTE PROGRAM	
(DEMO/DEBRIS TO BE PAID FOR BY RESIDENT PER TONNAGE)	
TOTAL APPRX. COST	

OPTION 2: PROVIDE HOUSEHOLD MSW AND ZERO SORT ONLY	
DESCRIPTION OF SERVICE	**APPRX. COST**
- MSW TIPPING FEES AT PERC OR FIBERIGHT	
- MSW HAUL FEES FROM CONTRACTOR (CURRENTLY CASELLA)	
- MSW COMPACTOR MAINTENANCE	
- 2 EMPLOYEES SALARY AND BENEFITS	
- ZERO SORT COMPACTOR AND CONTAINER RENTAL	
- ZERO SORT HAUL FEES	
- PERMITS (DECALS)	
- STAFF TIME ISSUING PERMITS (DEALING WITH COMPLAINTS, ETC.)	
- ELECTRICITY COSTS TO RUN FACILITY	
- PLOW/SALT FOR CLEAR OPERATION	
TOTAL APPRX. COST	

OPTION 3: PROVIDE HOUSEHOLD MSW AND ZERO SORT WITH DEMO 2X PER YEAR	
(RECOMMENDED, WITH SWAP SHOP CLOSED)	
DESCRIPTION OF SERVICE	**APPRX. COST**
- MSW TIPPING FEES AT PERC OR FIBERIGHT	
- MSW HAUL FEES FROM CONTRACTOR (CURRENTLY CASELLA)	
- MSW COMPACTOR MAINTENANCE	
- 2 EMPLOYEES SALARY AND BENEFITS	
- 2 ADDITIONAL EMPLOYEES DURING DEMO WEEKENDS	
- ZERO SORT COMPACTOR AND CONTAINER RENTAL	
- ZERO SORT HAUL FEES	
- PERMITS (DECALS)	
- STAFF TIME ISSUING PERMITS (DEALING WITH COMPLAINTS, ETC.)	
- ELECTRICITY COSTS TO RUN FACILITY	
- PLOW/SALT FOR CLEAR OPERATION	
- DEMO TIPPING FEES	
- DEMO HAULING FEES FROM CONTRACTOR (CURRENTLY DM & J)	
- LOADER AND OPERATOR TIME TO LOAD OUT DEBRIS (USE $100/HR)	
- GRIND BRUSH 2X PER YEAR	
- COST FOR FREON REMOVAL	
- ASH CONTAINER RENTAL	
- ASH CONTAINER TESTING	
- ASH CONTAINER HAUL FEES	
- LAMP RECYCLE (TIME TO ADMINISTER)	
- TV / UNIVERSAL WASTE (TIME TO ADMINISTER)	
TOTAL APPRX. COST	

OPTION 4: ROADSIDE PICK UP OF MSW AND ZERO SORT	
DESCRIPTION OF SERVICE	**APPRX. COST**
- MSW TIPPING FEES AT PERC OR FIBERIGHT	
- CONTRACTOR CHARGES TO PROVIDE WEEKLY ROADSIDE PICKUP	
TOTAL APPRX. COST	

OPTION 5: ROADSIDE PICK UP OF MSW AND ZERO SORT WITH DEMO 2X PER YEAR	
DESCRIPTION OF SERVICE	**COST**
- MSW TIPPING FEES AT PERC OR FIBERIGHT	
- CONTRACTOR CHARGES TO PROVIDE WEEKLY ROADSIDE PICKUP	
- STAFF TIME ISSUING PERMITS (DEALING WITH COMPLAINTS, ETC.)	
- 3 EMPLOYEES DURING DEMO WEEKENDS	
- DEMO TIPPING FEES	
- DEMO HAULING FEES FROM CONTRACTOR (CURRENTLY DM & J)	
- LOADER AND OPERATOR TIME TO LOAD OUT DEBRIS (USE $100/HR)	
- GRIND BRUSH 2X PER YEAR	
- COST FOR FREON REMOVAL	
- ASH CONTAINER RENTAL	
- ASH CONTAINER TESTING	
- ASH CONTAINER HAUL FEES	
- LAMP RECYCLE (TIME TO ADMINISTER)	
- TV / UNIVERSAL WASTE (TIME TO ADMINISTER)	
TOTAL APPRX. COST	

OPTION 6: ALL SERVICES EXCEPT FOR DEMO (NOT FEASIBLE IMO BECAUSE DEMO WILL END UP IN ANOTHER PILE)

Angus Jennings <townmanager@hampdenmaine.gov>

Transfer Station

1 message

ajking9@tds.net <ajking9@tds.net> Sat, Jun 18, 2016 at 8:55 AM
To: Angus Jennings <townmanager@hampdenmaine.gov>, wildetowncouncil@hampdenmaine.gov, marbletowncouncil@hampdenmaine.gov, mcavoytowncouncil@hampdenmaine.gov, rydertowncouncil@hampdenmaine.gov, cormiertowncouncil@hampdenmaine.gov, mcpiketowncouncil@hampdenmaine.gov, siroistowncouncil@hampdenmaine.gov

I urge the council to be slow and careful on any decision to close or limit the existing transfer station. As of last week there were 2710 permits issued. No service other than town roads is used by so many residents. I do not have any hidden agenda. I live 1000 feet from a town road in the middle of the woods so I can store my debris and burn my brush, but most residents cannot. Every family has house-hold debris-an old broken chair or other furniture, bed or need to replace steps, etc., and yes, some have more than others but people still need to dispose of any amount that they do have. I would be with the council if the solid waste costs were going higher each year, but the 2017 budget is 5-6% less than the last 11 year average cost. The transfer station budget has always been in the tax base with the permits used to control who uses it. I urge the council to keep the transfer station the same until after 2018 to see how Fiber Right and MRC work out. We may find there will be some host community benefits to affect the costs. Another option would be to flat line the budget and increase the costs of permits to pay for future increases. The system we enjoy now keeps the town clean.

Alex King

3-a

Angus Jennings <townmanager@hampdenmaine.gov>

Storm sewer issue at 20 George St.

1 message

Mike G. Lyford <Mike.Lyford@sgceng.com> Wed, May 25, 2016 at 7:32 AM
To: "townmanager@hampdenmaine.gov" <townmanager@hampdenmaine.gov>

Angus,

I have attached some photos and a Location Plan for your reference. As I stated yesterday, the storm sewer pipe has jacked up to the point that any vehicle, other than a truck, cannot get into my driveway without hitting the front wind deflector. I am asking the town at a minimum to remove the pavement over the pipe and cut down the gravel so I can get my vehicles in my driveway without incurring any damage to them.

This pipe starts at a catch basin and slopes down to the next catch basin, this is not a culvert. It is a storm sewer pipe. It does not seem the town would leave it upon a resident to dig up storm sewer pipes that cross their property and potentially change the course of drainage in a town right-of-way.

In both pictures, you will see that the front bumper on my daughters car is less than one inch from touching the pavement and it is worse in the winter months.

If you have any questions please do not hesitate to contact me.

Regards,

Please take note as my email address has recently changed

Michael G. Lyford

SGC Engineering, LLC
a part of **LR Senergy**

40 Harlow St, Suite 2

Bangor, ME 04401

Office: 207-217-6768

Mobile: 207-478-8707

Email: mike.lyford@sgceng.com

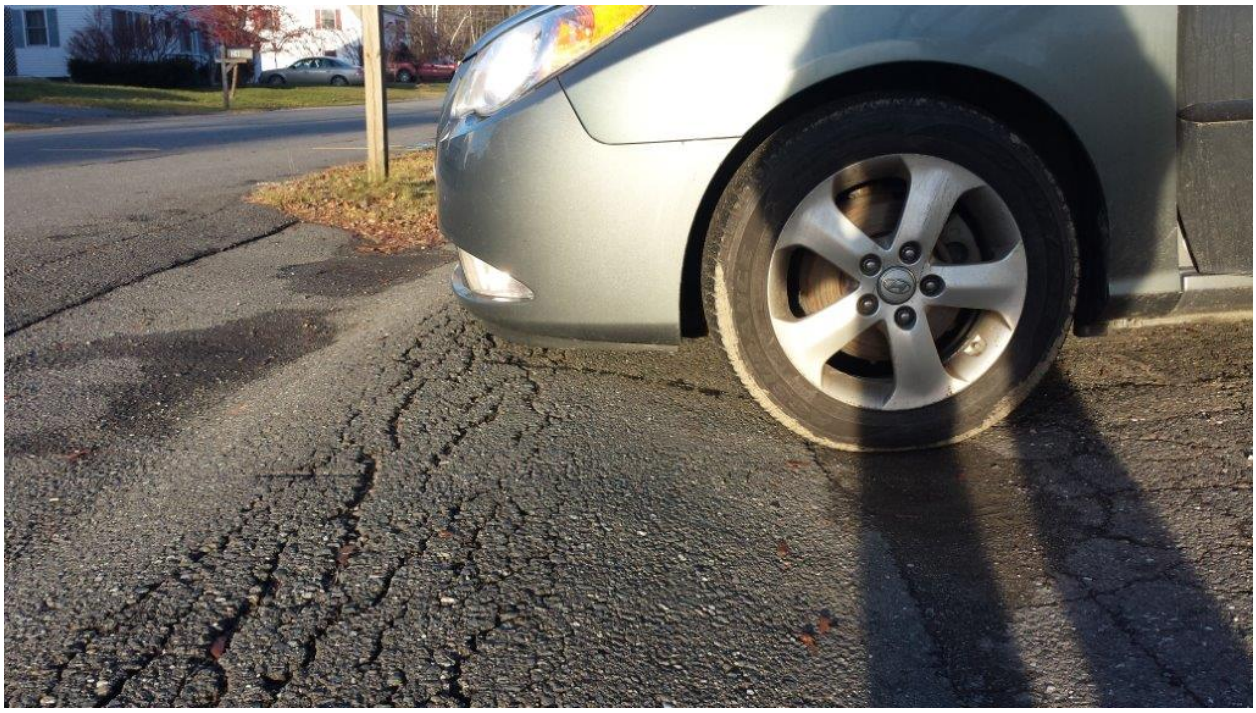
Web: www.sgceng.com

www.senergyworld.com

20 George Street

Catch Basin Location Plan

MAINE
AUG
633-ATJ
early detection saves lives
16



Angus Jennings <townmanager@hampdenmaine.gov>

RE: Storm sewer issue at 20 George St.

1 message

Mike G. Lyford <Mike.Lyford@sgceng.com> Fri, Jun 10, 2016 at 2:45 PM
To: Angus Jennings <townmanager@hampdenmaine.gov>
Cc: "publicworks@hampdenmaine.gov" <publicworks@hampdenmaine.gov>

That is the response I expected from you two.

It seems ridicules that I pay thousands of dollars in property taxes and the town can't even cut out a large hump over their own pipe, that they installed and that is causing damage to my vehicles. If you drive around the neighborhood and look, there are driveways all over the place where the town did fix the problem they caused. I know this because I have asked my neighbors who fixed it and their response was the town did. If you look, once the hump has been removed it does not come back. Therefore, it is not going to be an ongoing problem. The majority of the neighborhood does not have ditches but it does have storm sewer drains. Seems logical the town should be responsible for fixing the problem they caused. But instead, someone has decided that it is no longer in the towns interest to fix the problem they created and the residents are stuck with it. It does not seem fair, but it does seem typical of town politics, especially in Hampden.

I am not going to be the one who causes my neighbors to have their lawns dug up, pipes removed and ditches installed, which is completely absurd by the way….more town money spent with no real gain. I guess I will have to fix the problem myself.

Thank you for nothing really.

Mike Lyford

From: Angus Jennings [mailto:townmanager@hampdenmaine.gov]
Sent: Friday, June 10, 2016 11:29 AM
To: Mike G. Lyford <Mike.Lyford@sgceng.com>
Subject: Re: Storm sewer issue at 20 George St.

Mike,

See below response from DPW. As you can see he's suggesting a couple of alternate ways to address this. (The Culvert Policy referred to in the email is attached - this was revised this spring). Let me know your thoughts.

This month's Infrastructure Committee was rescheduled to June 20 (not the 27th) so we can place this on that agenda for discussion if warranted.

Thanks,

Angus

---------- Forwarded message ----------
From: **Sean Currier** <publicworks@hampdenmaine.gov>
Subject: Re: Storm sewer issue at 20 George St.
To: Angus Jennings <townmanager@hampdenmaine.gov>

Angus, It is my understanding that the ditches were underdrained at the request of the residents at time of installation to avoid open ditches which are hard to mow. The catch basins are really yard drains, which are plastic "tee's" with an inlet to allow inflow into the system. In my opinion, this is not simply a "pipe", it is functionally the same as a culvert at the end of the drive. This to me, should follow the culvert policy. If this is treated as a separate item from a culvert, it will have Town wide implications for maintenance. If this would be deemed a pipe and the resident is not satisfied with the response, I would suggest we dig it out, put culverts in with open ditches and have the residents adhere to the culvert policy going forward. We may want to poll the neighbors that would be affected by this decision in the immediate vicinity first.

I would be happy to discuss more at any time or at the infrastructure committee meeting if additional information is needed.

Sean

On Mon, Jun 6, 2016 at 7:23 AM, Mike G. Lyford <Mike.Lyford@sgceng.com> wrote:

> Angus,

Town of Hampden

Driveway/Entrance Culvert Policy

Background:

Title 23SS 705 MRSA defines culvert responsibility with respect to driveway/entrance culverts. With consideration of this law and the various situations and complaints that have occurred around the state, this document has been prepared to more clearly define the specific responsibilities of Maine's taxpayers as a whole through MaineDOT, The Town of Hampden and the individual highway abutters.

A culvert is "a covered channel that carries water under a road, railway or through an embankment". In the case of a driveway or entrance culvert, it is the culvert's ability to effectively move water from one side of a driveway or entrance to the other side that is critical to protecting the Town's infrastructure (the public corridor to which the driveway or entrance connects). To the end, it is in the Town's interest to ensure that this conveyance of water is maintained. For additional information regarding required culvert sizing and material, refer to the Town of Hampden, Town Ways Ordinance. For additional information regarding State or State Aid roads, refer to the Maine Department of Transportation Driveway/Entrance Culvert Policy.

Policy:

Activities performed by the Town's Public Works crew with regard to driveway/entrance culverts and within the right-of-way of a Town Road shall include the following:

1) When a culvert has become plugged by natural causes, such as the gradual accumulation of debris or ice, or has failed to the point where water can no longer be effectively conveyed, the Town of Hampden is responsible for restoring adequate flow through the culvert.

2) When the Town of Hampden undertakes a capital or ditching project that requires the replacement or relocation of driveway/entrance culverts, the Town of Hampden is responsible for such culvert replacement/relocation and driveway/entrance restoration.

3) When a natural event causes regional or localized flooding and washouts, causing a culvert to fail and/or a driveway/entrance to washout, the Town of Hampden will reinstall or replace the culvert (at the Town of Hampden's option) and reestablish access to the abutting property.

Activities that are the responsibility of the owner/abutter, in accordance with Title 23 SS 705 MRSA, shall include the following:

1) Culvert replacement not covered above.
2) Driveway repairs of any type (excepting damage caused by natural events as described above in item 3). This includes such issues as: bumps or depressions that may develop over a culvert (usually due to seasonal freeze/thaw cycles), erosion of the driveway/entrance side slopes, and potholes that may develop as the result of a deteriorating pipe prior to replacement.

3) Restoring flow when the culvert is obstructed, either directly or indirectly, by the actions of the abutter or their agents (such as intentionally depositing leaves, debris or plowing snow into a ditch line).

When an abutter fails to uphold their responsibilities and damage to the highway corridor has occurred or is imminent, the Town of Hampden may address the issue and pursue compensation as necessary.

Town Clerk:

Paula A Scott

APPROVED by majority of the Town Council:

DM

Mark DiCommo

Adopted April 4, 2016

3-b

STATE OF MAINE
DEPARTMENT OF
ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

PAUL MERCER
COMMISSIONER

June 13, 2016

Angus Jennings, Town Manager
Town of Hampden
106 Western Avenue
Hampden, Maine 04444

Sent via email: Angus Jennings: townmanager@hampdenmaine.gov

RE: 7 June 2016 Town of Hampden MS4 Audit Conducted by Maine DEP

Dear Mr. Jennings,

Maine Department of Environmental Protection Staff conducted an initial MS4 Audit of the Town's municipal stormwater program on June 7, 2016, to determine compliance with Maine's 2008 and July 1, 2013, MS4 General Permits. This audit focused on Minimum Control Measures ("MCMs") 3, 4, 5 and 6. MCMs 1 and 2 were evaluated in the Town's annual reports with additional questions and discussion performed during the Department's June 7, 2016, audit; and additional documentation provided by the Town. At the time of the audit MCMs 1 and 2 were found to be in substantial compliance with permit requirements for permit years one and two of the 2013 MS4 GP. The following report outlines the Department's findings for the remaining MCMs.

MCM #3 Illicit Discharge Detection and Elimination Review performed by David Ladd

GENERAL RESPONSIBILITIES: Evaluate the Town's implementation of plans developed pursuant to *General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems,* MER041000, July 1, 2008 (referred to in this report as " 2008-MS4 GP" reissued July 1, 2013) Sub-section Part (IV)(H)(3). This portion of the audit documents findings regarding certain aspects of that plan that are indicators of overall success regarding subsection H(3), namely the implementation and enforcement of a program to identify and eliminate illicit discharges.

1. **Development and Implementation of Stormwater Discharge Program**

   PERMIT REQUIREMENT. The 2008 and 2013 MS4 GPs, Part IV H(3), requires the Town to develop, implement, and enforce a program to detect and eliminate illicit discharges and non-stormwater discharges as defined in 06-096 CMR 521(9)(b)(2), except as provided in the 2013 MS4 GP Part IV H(3)(c). Part IV H(3) further requires permittees: to "...develop a watershed based storm sewer system infrastructure map showing the location of all stormwater catch basins, connecting surface and subsurface infrastructure depicting the direction of in-flow and out-flow pipes, and the locations of all discharges from all

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312 CANCO ROAD
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PRESQUE ISLE
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PRESQUE ISLE, MAINE 04769
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web site: www.maine.gov/dep

stormwater outfalls. Each catch basin must be uniquely identified to facilitate control of potential illicit discharges, and to ensure proper operation and maintenance of the structures." Each mapped outfall must have data associated with it, recording the "...type, material, and size of conveyance..." whether it is an "...outfall or channelized flow..." and "...the name and location of the immediate surface water body or wetland to which runoff..." directly or indirectly discharges.

OBSERVATIONS. The Town was able to provide the requested copies of its illicit discharge detection and elimination program plan. The Town also supplied a copy of its IDDE SOP/Plan to the Department during the audit.

I was able to do a cursory review of the Town's maps as presented by the Town. The Town has both electronic and paper copies of the maps which were last updated in June 2016. Evaluation began with a desktop exercise during which an overview and demonstration of the stormwater infrastructure map(s) of the Urbanized Area covered by the MS4 GP. The maps are maintained for the purpose of MS4 compliance. The maps are maintained in both electronic and paper format. At the time of the audit, The Town was able to demonstrate that its maps did have direction of flow. At the time of the audit the Town had mapped 83 outfalls and 417 catch basins and has mapped 2.6 miles of open ditches which are maintained by the Town. The Town has an additional 243 catch basins mapped which are operated by the State Department of Transportation to better understand this MS4 interconnection.

I conducted a field investigation of the Town's storm sewer infrastructure with Dudley Patterson from the Town's Public Works Department and Jeff Spaulding, one of the Town's stormwater consultants. The field portion of the audit identified two new outfalls that the Town must add to its map(s), these outfalls were added to the Town's electronic maps during the audit by Jeff Spaulding. Less than half of the Town's ditches and outfalls were evaluated during the field portion of the Department's audit. The Town must conduct a field evaluation of its MS4 system to ensure it has all its outfalls and infrastructure mapped.

The Town's IDDE SOP has a program to conduct follow-up inspections to ensure there are no illicit discharges associated with observed flows. The plan does outline visual inspections, and additional inspections and testing within the storm drain system to help categorize the nature of the flow and determine sources of any potential illicit discharges.

2. Dry Weather Outfall Inspections

CONDITION EXPECTED. The 2013-MS4 GPs, subparagraph H(3)(a)(iii), requires the Town to "...implement a prioritized dry weather inspection plan based on drainage area...." A fundamental aspect of implementing such a plan is the ability to locate all stormwater outfalls depicted on watershed based storm sewer system infrastructure maps.

CONDITION FOUND. The Town conducts outfall inspections bi-annually in the spring and fall, and the Town provided copies of outfall inspections at the time of the audit for Department staff to review. All outfalls chosen during the field portion of the audit were quickly located in the field except for the two new outfalls that were added/identified during the audit.

3. Illicit Discharge Detection and Elimination (I.D.D.E.)

CONDITION EXPECTED: The 2008-GP section H(3)(a)(iii) requires the Town to maintain "...a defined procedure...that details the steps that must be taken when an illicit discharge is identified...."

CONDITION FOUND. A documented approach to I.D.D.E. has been developed and is used by the Town to track the discovery and resolution of illicit discharges. The Town has developed a municipal stormwater team for its IDDE program. This program provides a mechanism to convey information to the appropriate municipal staff to investigate complaints and any illicit discharges encountered during inspections or maintenance activities to the Town's MS4. The Town conducts follow-up inspections when dry weather flows are observed to categorize the nature of the flow.

NARRATIVE. The MS4 GP requires continuous implementation as well as continuous evaluation of the permittee's IDDE Plan. The Town's stormwater team is aware of these implementation and evaluation requirements.

MCM 4 Construction Site Stormwater Runoff Control performed by Jana Wood and Kurt Yuengling

Condition Expected: Part IV(H)(4) Construction Site Stormwater Runoff Control.

Each permittee shall develop, implement, and enforce a program or modify an existing program, to reduce pollutants in any stormwater runoff to the regulated small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre must be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more.

Condition Found: The Town relies on Chapter 500 as its regulatory mechanism for activities that disturb one or more acres. All potential development projects are required, to go through the Town's planning department with site plan review for stormwater controls and building permits.

At the time of the audit, there were no active construction sites within the Urbanized Area however, there was one active construction just outside of the Urbanized Area that the Town was actively monitoring to ensure that track-out did not impact the regulated MS4. The Town stated that it conducts inspections as required by the MS4 General Permit to ensure compliance with Chapter 500. The Town provided access to the last five years of construction inspection reports to the Department during the audit.

MCM 5 Post Construction Stormwater Management in New Development and Redevelopment performed by Jana Wood and Kurt Yuengling

Permit Requirement Part IV(H)(5)(a):
Each permittee shall develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the

MS4. This program shall ensure that controls are in place that will prevent or minimize water quality impacts.

To ensure adequate long-term operation and maintenance of post construction BMPs, each permittee subject to the 2008 MS4 General Permit shall continue to implement a post construction discharge ordinance, or similar measure approved by the Department. Permittees not subject to the 2008 MS4 General permit shall implement a post construction discharge ordinance, or similar measure approved by the Department, by no later than June 30, 2015. This ordinance or similar measure must stipulate that the owner or operator of a post construction BMP described in Part IV(H)(5(a)(i) provide the permittee with an annual report documenting that the BMP is adequately maintained and is functioning as intended or requires maintenance. If the post construction BMP requires maintenance, the owner or operator shall provide a record of the deficiency and corrective action(s) taken to the permittee. In permit year two and in subsequent permit years, each permittee shall include the following in their annual report:

- The cumulative number of sites that have post construction BMPs discharging into their MS4;
- A summary of the number of sites that have post construction BMPs discharging into their MS4 that were reported to the municipality;
- The number of sites with documented functioning post construction BMPs; and
- The number of sites that required routine maintenance or remedial action to ensure that the post construction BMP is functioning as intended.

  Each permittee shall annually inspect a percentage of post construction BMPs located in the direct watershed of a lake most at risk from new development or in watersheds of an urban impaired stream. If the owner or operator of a post construction BMP hires a qualified third party inspector, the permittee will have no inspection requirements. If the owner or operator of a post construction BMP does a "self" inspection, the permittee is required to conduct the following inspection schedule.

  1-10 post construction sites: inspect at least one site, or 40% (whichever is greater)
  11-30 post construction sites: inspect at least four sites, or 30% (whichever is greater)
  31-60 post construction sites: inspect at least nine sites, or 25% (whichever is greater)
  61-100 post construction sites: inspect at least fifteen sites, or 20% (whichever is greater)
  101-160 post construction sites: inspect at least twenty sites, or 17% (whichever is greater)
  Over 160 post construction sites: inspect at least twenty seven sites, or 11% (whichever is greater).

CONDITION FOUND. The Town's Post-construction ordinance became effective in July 6, 2009. Two post-construction sites, Chickadee Crossing and Marina Park, were evaluated during the audit. Department staff documented an erosion scour at the Chickadee Crossing site, which was very small in size, in a grassy area of the shallow ditch near the inlet of the culvert towards the rear of the subdivision. This was reported to be from the rain event on Saturday June 4, 2016. This area must be reseeded and mulched immediately to prevent the discharge of sediment. There was no evidence of track-out on to Maine Route 1A from the house construction activities currently taking place. Department staff did not document any other post construction non-compliance with the Chickadee Crossing site.

The Marina/Riverfront Park aka Turtle Head Park has built an infiltration basin and is in the post construction maintenance phase of this project. The Town has begun to reseed and mulch the side slopes of the basin and will continue to monitor and conduct corrective actions until vegetation is permanently established. There is no discharge expected at this basin but an

emergency spillway is in place that will discharge to a level lip spreader and flow toward the boat launch and discharge to the Penobscot River via the boat ramp.

MCM 6 Pollution Prevention/Good Housekeeping Review performed by Jana Wood and Kurt Yuengling

Permit Requirement Part IV(H)(6)(a)(i):

a. Required Strategies.

i. Permittees subject to the 2008 MS4 General Permit shall continue to maintain their inventory of properties, facilities and activities, and continue implementation of their operation and maintenance plans. These procedures must address as applicable:

- Proper use, storage and disposal of petroleum and non-petroleum products, hazardous materials, waste materials, pesticides and fertilizers including minimizing the use of these products, and an alternative product analysis;
- Spill response and prevention;
- Vehicle and equipment storage, maintenance and fueling;
- Amount and type(s) of deicing materials used each deicing season
- Landscaping and lawn care including, where applicable, an evaluation of reduced mowing frequencies, establishing and maintaining buffers, cutting vegetation within 100 feet of a stormwater conveyance or surface water;
- Erosion and sedimentation control;
- Feeding gulls, waterfowl or other wildlife.

Condition Found:

- During the audit, pump stations 3, 4, 5, 6, and 8 were evaluated. Department staff found no non-compliance issues associated with these facilities.
- Department staff evaluated the Community Library and noted that maintenance was required to prevent soil erosion associated with winter plowing or snow pile storage. This area will require vegetative stabilization and monitoring. Road shoulders were in need of grading to prevent channelized flow directly adjacent to the road prior to vegetative stabilization.
- VFW Sports Complex has some construction activity associated with stormwater management to reduce standing water in mowed areas. The ditch to convey stormwater was stabilized with vegetation at the time of the audit.
- The Town Ballfield had no issues of non-compliance
- Locust Grove Cemetery is currently being managed to address grub damage which has resulted in areas of soil without vegetation. Riverview Cemetery was inspected and found to be in compliance.

Permit requirement Part IV(H)(6)(a)(ii):

ii. Using training materials that are available from the EPA, the State, regional stormwater groups or other organization, Guidelines and Standard Operating Procedures For Stormwater Phase II

Communities in Maine volumes 1 and 2, and the Think Blue Maine website, www.thinkbluemaine.org this program must include employee training to prevent and reduce stormwater pollution from municipal operations and facilities. The permittee shall report annually on the types of trainings presented, the number of municipal and contract staff that received training, the length of the training, and training effectiveness.

Condition Found: At the time of the audit, training records showed the Town was participating in employee training as required beginning in 2013, PY1. Employees associated with Parks and Public Works, Public Safety attended these trainings. Required O&M training is detailed in the below section.

Permit Requirement Part IV(H)(6)(a)(iii):
The permittee shall develop and implement a program to sweep all publicly accepted paved streets and publicly owned paved parking lots maintained by the permittee at least once a year as soon as possible after snowmelt.

Condition Found:
The Town has implemented a program to sweep all publicly accepted paved streets and publicly owned paved parking lots as soon as possible after snow melt. The Town typically sweeps more than once a year when needed in certain areas.

Permit Requirement Part IV(H)(6)(a)(iv):
The permittee shall develop and implement a program to evaluate and, if necessary, clean catch basins and other stormwater structures that accumulate sediment at least once every other year and dispose of the removed sediments in accordance with current state law. The permittee shall clean catch basins more frequently if inspections indicate excessive accumulation of sediment. Excessive accumulation is greater than or equal to 50 percent filled.

Condition Found:
At the time of inspection, the Town was implementing a program to evaluate and if necessary clean catch basins.

Permit Requirement Part IV(H)(6)(a)(v):
The permittee shall evaluate and implement a prioritized schedule, as necessary, for repairing or upgrading the conveyances, structures and outfalls of the regulated small MS4.

Condition Found:
At the time of inspection, the Town showed they have a prioritized schedule for the maintenance of stormwater infrastructure for surface and subsurface infrastructure

Permit Requirement Part IV(H)(6)(a)(vi):
Permittees not subject to the 2008 MS4 General Permit shall by June 30, 2015, develop and implement a stormwater pollution prevention plan (SWPPP) for the following municipal operations: public works facilities, transfer stations, and school bus maintenance facilities operated by the permittee unless the facility is currently regulated under Maine's industrial Stormwater Program. The SWPPP must meet the conditions and requirement including quarterly visual monitoring per Maine's Multi-Sector General Permit ("MSGP") Stormwater Discharge Associated with Industrial Activity, published April 26, 2011.

The SWPPP outlines sources of potential stormwater pollutants and the methods by which these pollutants will be reduced or prevented from entering Waters of the State, other than ground water, or to an MS4. The Plan identifies in writing a SWPPP team of facility personnel as well as a SWPPP team leader who is ultimately responsible for SWPPP implementation. The Department has developed a generic SWPPP for municipal operations which can be modified by the permittee for individual facilities as required by this permit. Contact the Municipal and Industrial Stormwater Coordinator for an electronic copy of the SWPPP, Quarterly inspection forms, visual monitoring forms or for technical assistance, including on-site assistance, to meet this permit obligation. Permittees subject to the 2008 MS4 General Permit shall continue to implement and update their SWPPP(s) to ensure it meets Maine's April 26, 2011 MSGP requirements including visual monitoring. The Department shall honor request for technical assistance including on-site technical assistance inspections and SWPPP training.

Condition Found:
During the Audit the Town did not have any facility within the Urbanized Area that required the development and implementation of a SWPPP.

Conclusion

The Department's MS4 audit has identified some minor program deficiencies that must be addressed by no later than July 29, 2016, unless otherwise stated in this MS4 audit inspection report.

Please let me know if you have any questions with the Department's Audit Report or any questions regarding the Department's MS4 program.

Sincerely,

David H. Ladd
Municipal & Industrial Stormwater Coordinator
Maine DEP; 17 State House Station; Augusta, ME 04333
David.Ladd@maine.gov
207-215-7168

3-c

Municipal Stormwater Survey

1. Do you live in a watershed?
   - ☐ Yes
   - ☐ No
   - ☐ I don't know

2. Based on your current knowledge, do you think the overall water quality of the river, streams and lakes in your area are:
   - ☐ Poor
   - ☐ Fair
   - ☐ Good
   - ☐ Excellent

3. How concerned are you about water quality in your area?
   - ☐ Very concerned
   - ☐ Somewhat concerned
   - ☐ Not concerned

4. In your opinion, what is the most significant source of water pollution (check one):
   - ☐ Municipal sewer plant
   - ☐ Water flowing from yards, parking lots, and streets
   - ☐ Farm and agricultural activities
   - ☐ Soil erosion from construction sites
   - ☐ Lawn maintenance (chemical use)
   - ☐ Pet waste

5. Do you think pet waste is a significant source of water pollution?
   - ☐ Yes
   - ☐ No
   - ☐ Don't know

6. Do you think that wastewater from municipal sewer treatment plants is a significant source of water pollution?
   - ☐ Yes
   - ☐ No
   - ☐ Don't know

7. Do you think that rainfall runoff from yards, parking lots, and streets is a significant source of water pollution?
   - ☐ Yes
   - ☐ No
   - ☐ Don't know

8. Do you think that rainfall runoff from farms and agricultural operations is a significant source of water pollution?
   - ☐ Yes
   - ☐ No
   - ☐ Don't know

9. Do you think that dirt eroding from construction sites is a significant source of water pollution?
   - ☐ Yes
   - ☐ No
   - ☐ Don't know

10. Do you think lawn maintenance (clippings, fertilizer, pesticides etc.) is a significant source of water pollution?
    - ☐ Yes
    - ☐ No
    - ☐ Don't know

11. Presently, how do you dispose of common household products such as left over paint and paint thinner, unused gasoline, pesticides, cleaning products or solvents. (Check all that apply):
    - ☐ Dump down drain or flush down toilet
    - ☐ Pour on ground
    - ☐ Pour down storm sewer/drain
    - ☐ Put in trash
    - ☐ Let air dry then put in trash
    - ☐ Drop off at household hazardous waste collection site
    - ☐ Store it/hold on to it for now
    - ☐ Drop used or old motor oil at local garage
    - ☐ Share or give left over product to friends or family
    - ☐ Avoid purchasing hazardous household products

12. When you mow your grass, what do you do with the grass clippings? Do you.....
    - ☐ Leave them in the yard
    - ☐ Collect them and throw them in the garbage
    - ☐ Rake or blow them into a drain
    - ☐ Mulch or compost them
    - ☐ Something else

13. Do you ever use fertilizer on your lawn?
    - ☐ Yes
    - ☐ No (skip to question 16)

14. About how often would you say you use fertilizer on your lawn? Would you say:
    - ☐ Monthly
    - ☐ Two or three times a year
    - ☐ Once a year or less

15. Does anyone ever test the soil on your lawn to determine how much fertilizer is needed?
    - ☐ Yes
    - ☐ No

16. Do you have a car/truck or other vehicle?
    - ☐ Yes
    - ☐ No (skip to question 21)

17. Do you wash your vehicle at home, or do you take it to a car wash?
    - ☐ At home
    - ☐ Other, someone else washes it, or some other scenario
    - ☐ Take to a car wash

18. When you wash your vehicle at home, does the soapy water flow into the grass, or onto the street?
    - ☐ Into the grass, dirt or gravel
    - ☐ Into the street or driveway
    - ☐ Varies, sometimes one, sometimes another

19. Do you change the oil in your vehicle at home?
    - ☐ Yes
    - ☐ No (skip to question 21)

20. When you change your oil at home, how do you dispose of the used oil? Do you dispose of it....
    - ☐ In a designated lawn area
    - ☐ With other garbage (dumpster, placed in trash bags with other trash, etc.)
    - ☐ Pour it down a storm drain
    - ☐ Take it somewhere it can be recycled (recycle center, Jiffy Lube, gas station)
    - ☐ Other

21. Do you walk your pet?
    - ☐ Yes
    - ☐ No
    - ☐ No Pets (skip to question 23)

22. How often do you pick up their pet waste? Would you say..
    - ☐ Always
    - ☐ Often
    - ☐ Sometimes
    - ☐ Rarely
    - ☐ Never

23. Storm water is all the water that collects on streets and parking lots after a rain storm and then runs into storm drains in the Town of Hampden. If you had to pick one of the following options for where storm water runoff goes once it enters a storm drain, would it be that it goes to....
    - ☐ The Town's regular sewer treatment plant
    - ☐ A separate special stormwater treatment plant
    - ☐ Nearby fields and yards
    - ☐ Penobscot Riveror other Hampden water body
    - ☐ Drainage pond
    - ☐ Almost all of the water soaks into the ground and does not leave the property
    - ☐ I don't know where the rain water goes

24. Which of these categories best describes your age? Are you....
    - ☐ 17-29
    - ☐ 30-42
    - ☐ 43-55
    - ☐ 56-68
    - ☐ Over 68

3-d

Angus Jennings <townmanager@hampdenmaine.gov>

Fiberight additional information posted

1 message

Churchill, Julie M <Julie.M.Churchill@maine.gov> Fri, Jun 17, 2016 at 9:53 AM

Dear Interested Persons:

It has been brought to my attention there were 3 pieces of information cited in the DRAFT Solid Waste License that were missing on the Web site including:

1. April 28, 2016 DEP Memo
2. Appeal Procedure
3. Appendix A - Standard Conditions of Approval

The 3 documents are available for viewing on the project web site under: http://www.maine.gov/dep/projects/mrc/index.html

DRAFT Licenses

Solid Waste

- Additional Information Referenced

Julie M. Churchill

Regulatory Assistance

Small Business Ombudsman

Maine DEP: Office of Innovation & Assistance

(207) 287-7881

Hotline: (800) 789-9802

CommonWealth
Resource Management Corporation

2 June 2016

Municipal Review Committee, Inc.
c/o Greg Lounder, Executive Director, MRC
395 State Street
Ellsworth, Maine 04605

RE: Pro forma economics of the Fiberight Facility

To the Members of the MRC Board of Directors:

In May 2016, Fiberight provided CommonWealth Resource Management Corporation (CRMC) with a revised pro forma economic analysis (the Fiberight Pro Forma) for the construction and operation of its mixed municipal solid waste processing facility under development in Hampden, Maine (the Fiberight Facility). The Fiberight Pro Forma is a mathematical model of the Fiberight Facility's process flow diagram; mass, energy and water balances; construction costs; operations and maintenance costs; approach to financing; and potential returns to investors, all in the form of a large integrated multi-tab Excel spreadsheet. The Fiberight Pro Forma provides refined costs and additional details regarding the pro forma analysis that Fiberight presented to the MRC Board in the fall of 2015; that CRMC reviewed to evaluate Fiberight's compliance in achieving the Feasibility Milestone under the Development Agreement[1]; and that was the basis for information that CRMC presented to the public at the MRC's 2015 Annual Meeting[2].

In this letter, CRMC describes its review of the Fiberight Pro Forma in order to provide additional information on the economic feasibility of the Fiberight Facility to municipalities that are considering whether to execute Joinder Agreements with the MRC to provide long-term commitments to have MSW delivered to the Fiberight Facility.

[1] The Development Agreement between the MRC and Fiberight contains the following milestone in Article IV: "Provide updated process flow diagram, mass, energy and water balances, facility design plans, estimates of capital costs and operating expenses, and a project pro forma and supporting assumptions and information. Provide sufficient detail to enable evaluation and verification of the feasibility of the project at the proposed performance levels and tip fees by an independent engineer/reviewer." (the Feasibility Milestone). After reviewing the pro forma and ancillary information provided by Fiberight, CRMC advised that "[I]n light of the findings presented herein, the remaining project risks notwithstanding, CRMC recommends that the Board find, and advise Fiberight, that the Feasibility Milestone has been achieved." Letter to the MRC Board of Directors from CommonWealth Resource Management Corporation (CRMC) dated 2 October 2015.

[2] Http://mrcmaine.org/wp-content/uploads/2015/12/MRC-2015-Annual-Membership-Meeting-Presentation-FNL.pdf. See page 15 and surrounding slides.

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To complete the review, CRMC performed both external and internal validations of the Fiberight Pro Forma. For the external validation, CRMC obtained information from entities other than, and independent of, Fiberight, regarding MSW composition, product production rates, prices for recovered materials and products, arrangements for product sales, and the basis for, and benchmark measures of, projected capital costs and annual operating costs. CRMC then compared information from the Fiberight Pro Forma with the information obtained from the external sources. For the internal validation, CRMC reviewed in detail the algorithms in the Excel spreadsheet provided by Fiberight. To verify every calculation and input, CRMC then created its own Excel spreadsheet model (the CRMC Pro Forma) of Fiberight's revenues, expenses, capital investment and returns. The CRMC Pro Forma takes into account the Fiberight Pro Forma projections of incoming MSW quantities; material flows and recovery rates; product production rates, prices and costs; approaches to financing; and rebates to Joining Members. The CRMC Pro Forma was used to evaluated Fiberight's revenues and expenses for the levels of MSW deliveries described below:

- A base case analysis with MSW deliveries of 181,500 tons per year (the Base Case), which is based on a delivery commitment of 150,000 tons per year from the MRC and over 31,000 tons per year from commercial haulers. This case assumes that the Fiberight Facility is built at a scale large enough to serve MSW generated throughout the region historically served by the MRC.
- A sensitivity case with MSW deliveries of 110,000 tons per year (the Low MSW Case), which is based on a delivery commitment of 92,000 tons per year from the MRC and 18,000 tons per year from commercial haulers.[3] This case assumes that Fiberight would modify the facility to serve the municipalities that have signed Joinder Agreements by mid-2016, but would not necessarily provide capacity to serve municipalities that do not sign Joinder Agreements by mid-2016 should they seek to return to the MRC at a later date.

The summary results of the CRMC Pro Forma for the Base Case and the Low MSW Case for the first ten operating years of the initial term are provided as attachments to this letter. Note that the summary results rely in part on proprietary information from Fiberight that CRMC has reviewed pursuant to a Non-Disclosure Agreement, but has not disclosed herein or in the attachments.

The results show that, for the Base Case:

[3] In the Low MSW Case, the MRC and Fiberight would modify applicable agreements to provide a delivery commitment to Fiberight of less than 150,000 tons per year.

- Operating revenues are projected to exceed project operating expenses by a significant margin in every year over the initial 15-year term, even when material and product prices are estimated conservatively and market prices for materials are not subject to escalation. In the first full year of operation, for example, revenues (net of rebates) would be $21.0 million, which would exceed the first-year operating expenses of $10.7 million. In this case, the project would have earnings before interest, depreciation, amortization and taxes (EBITDA) projected to be $10.3 million in the first year and positive in every year over the project term.
- Annual revenue from tip fees alone ($12.7 million in the first year) would exceed annual operating expenses in every year, even if revenues from products are assumed to be zero.
- Fiberight projects that the capital cost of the facility would be $78.7 million exclusive of the value of the investment tax credit (ITC). The internal rate of return on that capital cost, for a case with no debt, would be in the range of seven percent to eleven percent, depending on the basis for utilization of the ITC. Under one scenario reviewed by CRMC, leveraging the equity investment with debt could raise the internal rate of return to 17.8 percent.
- The returns supported by the Base Case are sufficiently attractive to support Fiberight's statements of receiving proposals to provide the required financing.

In addition, for the Low MSW Case:

- As in the Base Case, operating revenues are projected to exceed project operating expenses by a significant margin in every year over the initial 15-year term, although the absolute values of revenues and expenses are reduced for the Low MSW Case as compared to the Base Case. For example, in the first full year of operation, revenues (net of rebates) for the Low MSW Case would be $12.6 million, which would exceed the first-year operating expenses of $7.1 million. In this case, the project would have positive EBITDA projected to be $5.6 million in the first year and projected to be positive in every year.
- Annual revenue from tip fees alone ($7.7 million in the first year) would exceed annual operating expenses in every year, even if revenues from products are assumed to be zero.
- Fiberight projects that the capital cost of the facility would be $35.3 million. The downsized facility would include the same front-end processing equipment as the Base Case, but would not include equipment to generate electricity on-site and would have reduced capacity for hydrolysis and anaerobic digestion. The down-sized facility would not be eligible for the ITC. The internal rate of return for the project is projected to be in the range of eleven to fourteen percent depending on the degree of leveraging with debt. These values indicate that investment in the facility under the Low MSW Case would have returns comparable to the Base Case. Indeed, the downsized facility contemplated under the Low MSW Case, although it would not be capable of serving all municipalities that are currently MRC members, might offer investors comparable returns for a reduced level of investment as compared to the facility contemplated under the Base Case.

Based on the above, CRMC confirms (consistent with its findings from October 2015) that the Facility, if constructed, operated and maintained in accordance with proposal technical performance levels and projected revenues and costs, would generate positive cash flows and a positive return on investment. These results are indicated for both the Base Case and the Low MSW Case.

The remainder of this letter presents more detail on the basis for the Fiberight Pro Forma in light of the external and internal validation process. The first section presents and discusses the data, input values and relationships that form the basis for the Fiberight Pro Forma in general and the Base Case in particular. The second section presents and discusses the changes in assumptions that provide the basis for the Low MSW Case as compared to the Base Case. The last section provides a summary of the findings from the analysis.

The Basis for the Base Case

1. MSW composition. In the Fiberight Pro Forma, Fiberight uses a significantly more refined analysis of the composition of the MSW to be received at the Fiberight Facility as compared to prior analyses reviewed by CRMC. The Fiberight Pro Forma includes four calculations of the products that would be produced from incoming MSW using four different assumptions for MSW composition corresponding to each of the four calendar quarters of a typical year. The MSW composition input values used for the analysis are based on composition studies of Maine MSW performed by the University of Maine in the summer and fall, as calibrated and verified by comparison with other available public data on seasonal variations in the composition of MSW and single-sort recyclables in the northeast. To supplement the data from composition studies, Fiberight had multiple loads of MSW from Maine delivered to its processing facility in Lawrenceville, Virginia. Fiberight has also correlated data from these sources with data on aggregate characteristics of MSW (such as composition and moisture content of residuals streams, and ferrous metal recovery rates) and various residuals streams from operating facilities in the Northeast.

   Based on our review, the data on MSW composition used in the Fiberight Pro Forma provide a reasonable basis for representing the MSW likely to be delivered to the Fiberight Facility.

2. Mass balance and product production. The Fiberight facility would process incoming MSW in order to recover recyclable materials (old corrugated cardboard and other recovered paper products, plastics such as PET, HDPE, mixed rigid plastics and films, metals such as ferrous and aluminum, and glass); convert soluble and insoluble organics, including cellulose, to bio-methane and other products; produce processed engineered fuel (PEF) for sale to off-site customers; and manage the remaining materials as residuals for landfill disposal. Fiberight has provided information and data in support of an updated process flow diagram and mass

balance to track the flow of MSW components through the Fiberight facility to the various products and residual materials. The data and parameter values for the mass balance begin with the MSW composition data, with the impacts of processing on the flow of materials at each step derived from Fiberight's experience with its pilot facility in Lawrenceville, Virginia, as well as from data provided by equipment manufacturers.

An important feature of the Fiberight technology is the ability to produce multiple products from fibrous and cellulosic components of MSW. Depending on the market value of the product, Fiberight can design and operate its facility to:

(i) maximize conversion of fibrous and cellulosic material in incoming MSW to bio-methane (also known as bio-gas);
(ii) convert all or a portion of these materials to cellulose products for sale to off-site end-users;
(iii) convert a portion of these materials to post-hydrolysis solids (PHS) -- a biomass material that, if permitted, might be suitable for use as a fuel for on-site gasifiers and boilers to generate process steam or to run a steam turbine to generate electricity, both for on-site use;
(iv) blend a portion of these materials with plastic film to create a processed engineered fuel product (PEF) that can be sold off-site as a fuel product; and/or
(v) convert a portion of these materials to industrial sugar products or organic acid products with potential markets in the Northeast.

Indeed, Fiberight is investigating all of these options; has provided CRMC with draft letters of intent with potential purchasers of the bio-gas, clean cellulose product and PEF; and has provided information related to potential future sales of an industrial sugar product. The mass balance algorithms in the Fiberight Pro Forma provide the capability to model the economic impacts of all of these options.

Per the mass balance, in the Base Case, the Fiberight facility is projected to recover materials and products as shown in the table below. Years 1 through 4 would involve maximum production of bio-gas from cellulose to take full advantage of existing and available federal incentives for production of pipeline gas from renewable sources (the D-3 RINs). Years 5 through 15, after the RINs program is scheduled to expire, would involve production of a fiber-based product under an arrangement that might be implemented earlier if necessary. The mass balance does not project the production of industrial sugars or organic acids, since those markets, although offering potential for significant revenue and margins, are still emerging and not sufficiently defined at this time to be included in a conservative projection. Other allocations between bio-gas, PEF, cellulose products, industrial sugar products and organic acid products are possible depending on future market conditions and the actual paths for emergence of the markets for industrial sugar products and organic acid products.

Product	*Years 1 through 4*	*Years 5 through 15*
Old corrugated cardboard (OCC) and other recovered paper	12,948 tons per year	12,948 tons per year
Plastics (PET, HDPE and mixed rigids)	15,603 tons per year	15,603 tons per year
Metals (aluminum, ferrous and other)	6,989 tons per year	6,989 tons per year
Glass	10,388 tons per year	10,388 tons per year
Processed fuel (PEF)	27,597 tons per year	27,597 tons per year
Bio-gas (and RINs in Years 1 through 4 only)	205,400 MMBtu per year from food waste and cellulose	68,673 MMBtu per year from food waste only
Other fiber products	11,271 tons per year	29,503 tons per year

Based on CRMC's review, the mass balance in the Fiberight Pro Forma provides a reasonable basis for projecting the products that would be recovered or produced by the Fiberight Facility as part of an evaluation of the economic feasibility of the Facility.

3. Energy and water balances. For the Base Case, the Fiberight Facility is designed to incorporate an on-site gasifier/boiler and steam turbine to generate electricity, steam and hot water on an ongoing basis to meet on-site needs for thermal energy and a portion of internal needs for electricity. The gasifier/boiler would be fueled either by natural gas, bio-gas, and/or, if permitted, a portion of the PHS not sold for its material value, not converted to PEF, and not converted to bio-methane. Fiberight has provided information and data to support an updated energy balance to evaluate electricity, steam and hot water loads at the Facility, along with supporting information on the operating conditions for the gasifier/boiler and the steam turbine, and uses of the steam and hot water. The Base Case provides data on projected demand for and costs of water supplies and wastewater treatment services, and for purchases of supplemental electricity through a grid connection (in the Base Case, Fiberight would not generate on-site all of the electricity to be used by its facility), consistent with the identified needs for electricity supply, water supply and wastewater disposal.

   Based on CRMC's review, the energy and water balances in the Fiberight Pro Forma provide a reasonable basis for an evaluation of the economic feasibility of the Facility.

4. Arrangements and prices for recovered materials. Fiberight has been working with the Maine Resource Recovery Association (MRRA) to evaluate prices for recycled materials recovered in central Maine. MRRA provides assistance with the marketing of recyclable and reusable materials to town-level recycling programs throughout Maine (www.mrra.net). Fiberight would also take advantage of mill-direct pricing for recovered metals through a

blanket arrangement available through an investment partner and the facility operator, Covanta Energy, LLC (Covanta).

The Fiberight Pro Forma and the CRMC Pro Forma, in all cases, use the following prices for sales of recovered material, which prices reflect historically-low prices for commodities prevalent in early 2016 per advice of MRRA:

Product	*Price*
OCC	$85 per ton
PET #1 bottles	$180 per ton
HDPE #2 containers	$480 per ton
Mixed rigid plastics	$40 per ton
Aluminum used beverage containers	$1,100 per ton
Ferrous beverage containers and other metals	$40 per ton

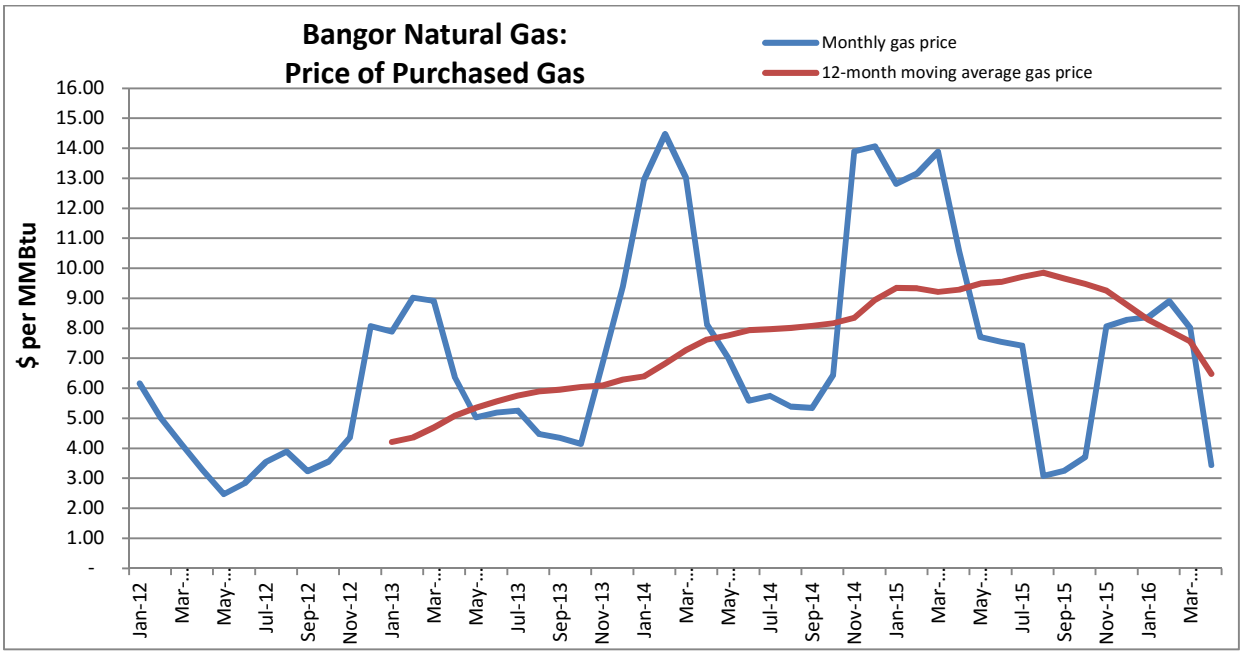
5. Arrangements and prices for products. The products to be sold can be divided into two categories: bio-gas and the related attribute product known as renewable identification numbers (D-3 RINs, or RINs); and other products that include glass, PEF, the cellulose product and industrial sugar and organic acid products.

   Bio-gas and RINs. Fiberight would deliver bio-methane, upgraded to bio-gas, by injection into the Loring pipeline, owned by Bangor Natural Gas, which crosses the Fiberight facility site. Bangor Natural Gas has indicated to CRMC that it can accept bio-gas that has been (i) upgraded to be compatible within the ranges of quality of gas obtained from the Maritimes Pipeline in terms of heating value, specific gravity, WOBBE number[4], and composition of methane and other gasses; and (ii) pressurized properly for injection into the pipeline. Given the likely composition of the bio-gas, the availability of standard skid-mounted equipment to upgrade bio-gas to pipeline quality, and statements from Bangor Natural Gas regarding the capability of the Loring Pipeline to accept bio-gas at the levels proposed, CRMC has seen no significant technical barrier to acceptance of the bio-gas product into the pipeline system.

   Upon physical acceptance, the bio-gas can be sold directly to Bangor Natural Gas for resale to customers receiving bundled services; to a third-party competitive gas supplier for resale; or directly to retail customers. CRMC understands that Fiberight is currently in active discussions with multiple potential buyers of the bio-gas, and has reviewed draft term sheets for sale of all of the bio-gas to a competitive gas supplier. The draft term sheets would link

[4] The WOBBE number is a measure of gas interchangeability in terms of Btu per cubic foot divided by the square root of the specific gravity in order to account for heat output at constant pressure through a given orifice size.

the purchase price of the bio-gas to a local index such as the purchased cost of gas to Bangor Natural Gas as shown below for the period from January 2012 through May 2016.



As shown, the 12-month moving average gas price has stayed above $6.00 per MMBtu despite the abnormally warm 2015-16 winter and recent declines in oil and natural gas prices, and with much higher prices during winter months than spring and summer months. On a monthly basis, prices have stayed above a monthly average price of $3.00 per MMBtu.

The Fiberight Pro Forma and the CRMC Pro Forma, in all cases, use an annual average price of $3.00 per MMBtu (without escalation) for sales of bio-gas, which price reflects the historically-low prices for natural gas prevalent in early 2016.

RINs are an attribute product that were created as part of a program to accelerate the use of fuels derived from renewable sources pursuant to the federal Energy Policy Act of 2005, the federal Energy Independence and Security Act of 2007, and the implementing regulations of the U.S. Environmental Protection Agency (the USEPA). Under the program, products derived from MSW may qualify as renewable biomass if the USEPA has approved a plan for removal of recyclable materials from the MSW under procedures set forth in 40 CFR 80.1450(b)(1)(viii). The program is authorized to continue through 2022. RINs are traded nationally by purchasers that have a regulatory obligation to buy the RINs and by brokers and other entities that provide placement services for the ultimate purchasers.[5]

[5] See the USEPA website at https://www.epa.gov/renewable-fuel-standard-program.

The Fiberight process was approved as a pathway that qualifies as renewable biomass eligible for creation of D-3 RINs by the USEPA in June 2012. Generation of D-3 RINs from the facility in Hampden would involve initial confirmation that the separation plan for the facility conforms to the pathway that the USEPA has already approved for the Fiberight technology, as well as ongoing verification of compliance with the conditions of the initial confirmation. Such confirmation would rely on the prior approval of the pathway for creation of D-3 RINs as a precedent.

CRMC understands that Fiberight is currently in active discussions with multiple potential buyers of the RINs. The draft term sheets for sale of bio-gas that CRMC has seen would also have that buyer purchase all RINs from the Fiberight Facility pursuant to a complicated pricing formula. In current markets, the draft term sheet reviewed by CRMC would result in RIN sales at prices in the range of $14.00 to $20.00 per MMBtu depending on market conditions. The Fiberight Pro Forma and the CRMC Pro Forma, in all cases, use an annual average price of $14.21 per MMBtu (without escalation) for sales of D-3 RINs originating at the Facility through 2022. This price reflects a conservative value of the market price for D-3 RINs prevalent in early 2016 as it would flow to Fiberight under the formula in the draft term sheet.

Other products. The other products addressed herein include glass, PEF and the cellulose products. Industrial sugar products and organic acid products are not addressed herein, because the markets for such products are considered emerging and, although promising, are not yet sufficiently defined at this time to be included in a conservative projection. Note that the summary pro forma was developed in part through reliance on proprietary information from Fiberight that was provided pursuant to a Non-Disclosure Agreement with CRMC; consequently, detailed information about the other products, which is considered proprietary and sensitive, is not disclosed here.

Regarding the individual other products:

- Glass. CRMC reviewed a draft arrangement under which Fiberight can arrange for beneficial re-use of its clean recovered glass at no cost. The arrangement, which appears credible, is incorporated into the Fiberight Pro Forma and the CRMC Pro Forma.

- PEF. CRMC reviewed draft arrangements and draft term sheets for supply and sale of PEF to either of two different companies, with slightly different specifications for each company. Though neither arrangement is final, there is reasonable evidence of demand for and technical ability to accept and purchase the PEF, as well as an economic rationale for the purchaser to be interested in such purchases. Based on the information reviewed,

the Fiberight Pro Forma and the CRMC Pro Forma, in all cases, incorporate revenues from sales of PEF at a price of not less than $20 per ton.

- Cellulose product. CRMC reviewed draft arrangements and a term sheet for supply and sale of a cellulose product to a business that would accept it starting in 2018. CRMC also consulted with a representative of the University of Maine having knowledge of the product and the purchaser. In addition, Fiberight identified a second potential purchaser of the product in Maine having a facility currently in commercial operation that could accept the cellulose product immediately upon its generation by Fiberight, although a draft term sheet was not provided for such purchaser. Though neither arrangement is final, there is reasonable evidence of demand for and technical ability for Fiberight to produce and sell the product, as well as an economic rationale for the purchasers to be interested in such purchases. Based on the information reviewed, the Fiberight Pro Forma and the CRMC Pro Forma, in all cases, incorporate revenues from sales of the cellulose product a price of not less than $50 per ton. Note that the cellulose might also be converted to bio-gas by use of the hydrolysis process, which would provide similar value to Fiberight, if the first purchaser is not operational when anticipated and the second purchaser does not purchase the product.

- Industrial sugar products. CRMC reviewed correspondence between Fiberight and a potential purchaser of an industrial sugar product. CRMC also consulted with a representative of the University of Maine having knowledge of the product and the purchaser, and with others involved with these emerging markets. There is reasonable evidence of demand for and technical ability to accept and purchase the product, as well as an economic rationale for the purchaser to be interested in such purchases. Due to the emerging nature of this market, however, the Base Case analysis assumes that cellulose would be made into bio-gas rather into the industrial sugar product for the first four years, when the RINs incentives are in effect. After the RINs incentives expire, the Fiberight Pro Forma and the CRMC Pro Forma, in all cases, incorporate revenues from sales of the product at a price of not less than $50 per ton, based on its value as cellulose. This approach leaves four years for the product market to develop and for Fiberight to develop its capability to manufacture and sell the product, and provides a conservative value for revenues from product sales for the purposes of this review.

6. Rebates to the Joining Members. Under the project agreements[6], the MRC would receive rebates from Fiberight for distribution to the Joining Members on a quarterly basis. The rebate amount would be based on the sum of (a) 30 percent of tip fee revenues in excess of those from 180,000 tons per year at $70 per ton escalating with inflation; and (b) 30 percent

[6] See Section 5.3 and Exhibit F of the Master Waste Supply Agreement and Section 4.3 of the Joinder Agreements.

of product revenues in excess of $5.825 million per year escalating with inflation. Applying the formula to the Base Case, rebates are projected to begin in the range of $5 to $8 per ton, resulting in net disposal costs after the rebate in the range of $62 to $65 per ton. After the first year, the Base Case indicates that rebates would decline each year, which results from the conservative assumptions that (a) the baselines in the rebate formula are escalated with inflation; and (b) the product prices not covered by contracts have not been escalated with inflation, but, to be conservative, have been set throughout the initial term on the basis of current depressed values without escalation. Actual rebates would depend on actual prices.

7. Estimates of operating expenses. The facility would be operated for Fiberight by a corporate affiliate of Covanta Energy, LLC (Covanta). Covanta, which is one of the world's leading owners and operators of waste processing facilities, operates and maintains more than 50 energy-from-waste facilities and process more than 20 million tons of MSW per year. Per the draft terms of its agreement with Fiberight, within budgeted costs, Covanta would hire, train and maintain staff for the Facility, procure materials and supplies as needed, arrange for equipment maintenance through staff or outside contractors, provide administrative and general services, and comply with performance standards, all in exchange for a fee for O&M services. Fiberight would pay for residuals disposal costs at the rate in the residuals agreement with Crossroads Landfill, and would pay for supplemental electricity, water supply and wastewater services at commercial tariff rates. Covanta would limit its exposure to operating cost overruns through reliance on the process sufficiency insurance to reimburse claimed losses for failure to achieve certain measures of guaranteed performance as discussed in Note 7 and Section 8 below. Covanta would procure property value and liability insurance for the facility under its blanket policy.

   The Fiberight Pro Forma for the Base Case provides a line-item build-up of budgeted operating costs for the Base Case that includes the following:

   - Labor costs are based on a staffing plan for 67.5 full-time equivalent workers (FTEs), including 39 FTEs in the MRF (18 pickers), 22 FTEs in the process area, and 6.5 FTEs management and salaried positions, with a 40-percent mark-up for benefits and with allowances for overtime and bonuses. Labor costs are escalated at a rate above inflation.
   - Equipment O&M costs are based on allowances for parts, materials and outside services consistent with an overall cost of $6.00 per ton of MSW processed.
   - Enyzme and additive costs, and expenses for supplies and other materials, are based on incoming waste composition; experience with enzyme and additive supply costs and consumption rates from Fiberight's Lawrenceville facility; and guarantees of enzyme performance from the supplier, Novozymes, which is a global biotechnology company from Denmark with annual revenues on the order of $USD 8 billion per year.

- Residuals disposal costs are based on the facility mass balance and on the cost of residuals disposal under the agreement with the Crossroads Landfill.
- Utility service consumption rates are estimated based on the facility's mass and energy balances, with electricity imported to the extent not generated on-site; water supplied consistent with processing needs accounting for the moisture content of MSW (above 30 percent by weight); and wastewater service for water not recycled or evaporated.
- Insurance and other overhead costs are based on estimates that appear reasonable based on comparison with similar costs for other waste processing facilities.

Other costs accounted for in the Fiberight Pro Forma include transportation costs for products, residuals, and supplies and for MSW under back-haul arrangements; rolling stock leases; property taxes[7]; site lease payments to the MRC; an annual allowance for deductible process insurance costs; and a contingency allowance.

For the Base Case, the all-in costs of operation and maintenance, including overhead costs, are $58.70 per ton. These costs are consistent with the operating expenses of other mixed-MSW processing facilities of comparable scale and complexity for which operating cost data are available, including data submitted to the MRC in responses to the Request for Expressions of Interest (the RFEI).

8. Initial capital costs and allowance for continuing capital investment. The Base Case incorporates an all-in estimate of initial capital costs of $78.7 million as follows:

Equipment and installation	$51.3 million
Building and site improvements	$6.5 million
Subtotal, facility costs	$57.8 million
Construction contingency	$6.9 million
Subtotal, facility costs with contingency	$64.7 million
Soft costs (development, engineering, procurement, construction management)	$11.0 million
Process sufficiency insurance[8]	$3.0 million
Total project cost	$78.7 million

[7] The town would assess Fiberight for property taxes on the building. Equipment value is excluded from the basis for assessment under the state Business Equipment Tax Exemption (BETE) program.

[8] The process sufficiency insurance would be offered by an established insurance company with an A rating for financial strength from A.M. Best. Fiberight would pay a substantial premium for the policy prior to construction. The policy would provide reimbursement over an initial 10-year term for claimed losses for failure to achieve certain measures of guaranteed performance arising from improper design, improper engineering, improper installation, improper construction or improper output estimation. Detailed terms are in the process of being negotiated.

The costs are based on undiscounted retail quotes for 14 equipment area supply packages that comprise the facility, along with separate cost estimates for utility connections and systems, balance of plant items and installation. Fiberight has had its cost estimates, which are tied to a substantial 3D design effort, reviewed by a large (revenues of over $5.5 billion per year) multi-national engineering, procurement and construction (EPC) contractor that would manage the project through construction completion. The EPC contractor would provide a guaranteed maximum price and a guaranteed schedule, with a shared savings arrangement and a bonus and penalty structure that would be funded from the contingency allowance. A substantial portion of the equipment area supply packages would be assembled by Maine-based contractors.

The estimates of the capital cost for the Facility provided in the Fiberight Pro Forma, and used in the CRMC Pro Formas, are developed in sufficient detail to support investor evaluation of the Facility, and appear consistent with the capital costs of other mixed-MSW processing facilities of comparable scale for which operating cost data are available.

For any facility of the type proposed by Fiberight, the MRC is well aware that there will be an ongoing need for investments in capital improvements, major maintenance projects and equipment replacement. The Fiberight Pro Forma and the CRMC Pro Forma include, in all cases, an allowance of two percent of the installed equipment costs starting in year four to allow for such investments to be funded from cash flow.

9. Approach to financing. CRMC is aware that Fiberight has solicited and received offers to provide financing for the Fiberight Facility from multiple private entities through a mix of tax equity, private equity and debt. CRMC has not reviewed such proposals, which are reasonably considered proprietary, and is not in a position to evaluate the nature of the financing offers that Fiberight has received to date. For the purposes of this letter, in addition to the calculations of EBITDA, capital cost, an allowance for ongoing equipment replacement, and net cash flow, CRMC also refers to calculations not shown in the attachments of project internal rates of return, based on cases that ascribe varying value to the ITC and that improve the return on equity by leveraging the cash flows with debt levels tied to contracted revenues from Joining Members. For the Base Case, as an example, the unleveraged internal rates of return would range between seven and eleven percent depending on the value ascribed to the ITC. Leveraging on the basis of 50 percent debt (since tip fees from Joining Members would comprise about 50 percent of the revenue stream) could increase the internal rate of return to as much as 18.4 percent.

No pro forma, no matter how attractive, can provide certainty that a project will receive financing, or can assure that project characteristics and performance will be evaluated by

providers of financing as sufficient to support financial closure on the necessary schedule and on terms acceptable to all involved entities. Nonetheless, the returns supported by the Base Case appear sufficiently attractive to support Fiberight's statements that it has received proposals from investors with strong interest in providing the required financing.

The Basis for the Low MSW Case

CRMC notes the following differences between (i) the basis for the Base Case as described above; and (ii) the basis for the Low MSW Case (see also the table provided below):

- MSW deliveries. MSW deliveries from Joining Members are reduced from 150,000 tons per year for the Base Case to 92,000 tons per year for the Low MSW Case, with the balance of deliveries provided by commercial haulers in each case.
- MSW composition. The Base Case and Low MSW Case use the same basis for the composition of incoming MSW.
- Mass, energy and water balances and product production. Generally, in the Low MSW Case, the quantities of recovered materials, processed fuel, other products and residuals are reduced compared to the Base Case in proportion to tonnage. For the Low MSW Case, however, Fiberight would install hydrolysis and anaerobic digestion (AD) equipment with reduced capacity; as a result, the facility would have less capacity to produce bio-gas and would produce relatively more of the cellulose product. Fiberight would also divert materials into the processed engineered fuel product that might otherwise be processed into post-hydrolysis solids.
- Prices for recovered materials and products. The Base Case and Low MSW Case all use the same values of prices for recovered materials and products.
- Operations and maintenance costs. The projections of operations and maintenance costs for the Low MSW Case are built up on the basis of changes in individual line-items that reflect the extent to which the costs (i) are fixed; (ii) vary with the amount of tonnage being processed; or (iii) reflect changes in the approach to operations that correspond to the level of MSW deliveries. In this context:
  - Labor costs. The overall labor costs for the Low MSW Case reflects a staff of 42.4 FTEs, mostly by reducing the number of material picker shifts from two to one, decreasing the number of operators of back-end equipment (based on experience at the Lawrenceville facility) and reducing the number of utility personnel. The cost per ton of labor does not change appreciably between the Base Case and the Low MSW Case.
  - Equipment O&M costs. Equipment O&M costs for the MRF equipment would be reduced in proportion to the tons processed. Equipment O&M costs overall would be reduced to the extent the facility would not incorporate equipment to generate electricity on-site, and the facility would incorporate reduced capacity for the hydrolysis and AD equipment.

- Materials and supplies. Use and cost of enzymes, additives and materials are adjusted in proportion to product production.
- Utility costs. In the Low MSW Case, Fiberight would purchase rather than generate electricity, resulting in much higher costs to purchase electricity and to purchase gas rather than recovering waste heat, but with disproportionately reductions in water use and wastewater generation due to less use of make-up water for the boiler and condenser. Overall utility costs are higher for the Low MSW Case than the Base Case, because the increases in purchased electricity and natural gas costs more than offset the savings in avoided water purchase and wastewater service charges; however, the increases are more than justified by the reduction in capital costs as compared to the Base Case.
- Residuals disposal costs, which are driven by the mass and energy balances, are adjusted in proportion to tons processed.
- Overhead costs are reduced slightly in the Low MSW Case as compared to the Base Case, but by less than the ratio of the reduction in MSW being processed.

- Capital costs. For the Low MSW Case, the capital cost estimate is $35.3 million as shown:

Equipment and installation	$22.3 million
Building and site improvements	$5.0 million
Subtotal, facility costs	$27.3 million
Construction contingency	$3.0 million
Subtotal, facility costs with contingency	$30.3 million
Soft costs (development, engineering, procurement, construction management)	$3.6 million
Process sufficiency insurance	$1.4 million
Total project cost	$35.3 million

For the Low MSW Case, the capital costs for equipment and installation reflect the decision not to install equipment for electricity generation on-site; the reduced capacity of the hydrolysis equipment and AD system, and re-purposing of certain equipment now at the Fiberight facility in Lawrenceville, Virginia, that would be relocated to the Hampden site. These changes also lead to significant reductions in engineering, procurement costs and construction management costs and time requirements.

- Rebates. The MRC and Fiberight have already begun discussions regarding how the rebate formula would be modified to preserve an appropriate level of anticipated rebates for the Low MSW Case. The CRMC Pro Forma, which uses conservative product prices without escalation, reflects rebates in the range of $3.00 to $4.00 per ton in the early years.
- Approach to financing. For the Low MSW Case, which would not be eligible for the ITC, the internal rate of return for the project is projected to be in the range of eleven to fourteen percent depending on the degree of leveraging with debt. Similar to the Base Case, the returns supported by the Low MSW Case appear sufficiently attractive to support Fiberight's statements that it has received proposals from investors with strong interest in providing the

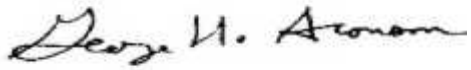
required financing. Indeed, the downsized facility being contemplated under the Low MSW Case, although it would not be capable of serving all municipalities that are currently MRC members, might offer investors equivalent of higher overall returns for a reduced level of investment as compared to the facility contemplated under the Base Case.

Summary of Findings

Based on the above, CRMC confirms that the Facility, if constructed, operated and maintained in accordance with proposal technical performance levels and projected revenues and costs, would generate positive cash flows and a positive return on investment. The returns supported by the Base Case and the Low MSW Case are sufficiently attractive to support Fiberight's statements of having received strong and viable proposals to provide the required financing. This statement is based on the following findings discussed previously:

- The data on MSW composition provide a reasonable basis for representing the range of compositions of MSW likely to be delivered to the Fiberight Facility.
- The mass, energy and water balances provide a reasonable basis for projecting the products that would be recovered or produced by the Fiberight Facility as part of an evaluation of the economic feasibility of the Facility.
- The Fiberight Pro Forma use prices for sales of recovered material that reflect historically-low prices for commodities prevalent in early 2016, and prices for sales of recovered products that are consistent with information provided by potential purchasers.
- The all-in costs of operation and maintenance, including overhead costs, are consistent with the operating expenses of other mixed-MSW processing facilities of comparable scale for which operating cost data are available.
- The capital cost estimates for the Facility are consistent with capital costs of other mixed-MSW processing facilities of comparable scale for which operating cost data are available.
- The Fiberight Pro Forma includes an allowance for ongoing investments in capital improvements, major maintenance projects and equipment replacement.

Sincerely,



George H. Aronson, Principal
Attachments

A Base Case Pro Forma
B Low MSW Case Pro Forma

Municipal Review Committee, Inc.		Attachment A Base Case Prof Forma			181,500	tons per year									
Fiberight Maine Facility	2-Jun-16														
				0	1	2	3	4	5	6	7	8	9	10
Quantities/Mass Balance															
MSW suppliers	tph	tpd													
Joinder MSW	25.8	413	Tons/y		150,645	150,645	150,645	150,645	150,645	150,645	150,645	150,645	150,645	150,645
Other MSW	5.3	85	Tons/y	181,500	30,855	30,855	30,855	30,855	30,855	30,855	30,855	30,855	30,855	30,855
Other (SSR)			Tons/y		4,680	4,680	4,680	4,680	4,680	4,680	4,680	4,680	4,680	4,680
	31.1	497			186,180	186,180	186,180	186,180	186,180	186,180	186,180	186,180	186,180	186,180
Recovered materials		MSW %	SSR %											
OCC and recovered paper		5.2%	75.0%		12,948	12,948	12,948	12,948	12,948	12,948	12,948	12,948	12,948	12,948
PETE #1 bottles		1.4%	1.0%	15,603	2,640	2,640	2,640	2,640	2,640	2,640	2,640	2,640	2,640	2,640
HDPE #2 bottles		1.7%	3.0%		3,261	3,261	3,261	3,261	3,261	3,261	3,261	3,261	3,261	3,261
Mixed rigids		5.3%	1.0%		9,702	9,702	9,702	9,702	9,702	9,702	9,702	9,702	9,702	9,702
Aluminum UBC		0.4%	0.2%	6,989	797	797	797	797	797	797	797	797	797	797
Ferrous UBC		2.6%	3.8%		4,938	4,938	4,938	4,938	4,938	4,938	4,938	4,938	4,938	4,938
Other metals		0.7%			1,254	1,254	1,254	1,254	1,254	1,254	1,254	1,254	1,254	1,254
		17.4%	84.0%		35,540	35,540	35,540	35,540	35,540	35,540	35,540	35,540	35,540	35,540
Processed fuel		15.2%	0.0%		27,597	27,597	27,597	27,597	27,597	27,597	27,597	27,597	27,597	27,597
Back-end process materials														
Cellulose (dry)		16.3%			29,503	29,503	29,503	29,503	29,503	29,503	29,503	29,503	29,503	29,503
Food waste (dry)		4.9%			8,884	8,884	8,884	8,884	8,884	8,884	8,884	8,884	8,884	8,884
Moisture		31.8%			57,749	57,749	57,749	57,749	57,749	57,749	57,749	57,749	57,749	57,749
Residuals														
Glass/ceramics		5.5%	7.0%		10,388	10,388	10,388	10,388	10,388	10,388	10,388	10,388	10,388	10,388
Other		8.9%	9.0%		16,519	16,519	16,519	16,519	16,519	16,519	16,519	16,519	16,519	16,519
		100.0%	100.0%		186,180	186,180	186,180	186,180	186,180	186,180	186,180	186,180	186,180	186,180
Other products														
Bio-gas	food waste	7.73	MMBtu/ton		68,673	68,673	68,673	68,673	68,673	68,673	68,673	68,673	68,673	68,673
Bio-gas	cellulose	7.61	MMBtu/ton		138,746	138,746	138,746	138,746	-	-	-	-	-	-
	AD annual max	205,000	MMBtu/year		205,000	205,000	205,000	205,000	68,673	68,673	68,673	68,673	68,673	68,673
RINs	through year	4	MMBtu/y		205,000	205,000	205,000	205,000	-	-	-	-	-	-
Other product 1	confidential	38%	tons/y	LOI	11,271	11,271	11,271	11,271	11,271	11,271	11,271	11,271	11,271	11,271
Other product 2			tons/y	LOI	-	-	-	-	18,232	18,232	18,232	18,232	18,232	18,232
Industrial sugars and organic acid products				to come										
Prices and Costs														
MSW														
Joinder MSW	$ 70.00	2.5%	$/ton	MRC	$ 70.00	$ 71.75	$ 73.54	$ 75.38	$ 77.27	$ 79.20	$ 81.18	$ 83.21	$ 85.29	$ 87.42
Other MSW	$ 70.00	2.5%	$/ton	Haulers	$ 70.00	$ 71.75	$ 73.54	$ 75.38	$ 77.27	$ 79.20	$ 81.18	$ 83.21	$ 85.29	$ 87.42
Other (SSR)	$ 35.00	2.5%	$/ton	In region	$ 35.00	$ 35.88	$ 36.77	$ 37.69	$ 38.63	$ 39.60	$ 40.59	$ 41.60	$ 42.64	$ 43.71
Materials			$/ton											
OCC	$ 85.00	0.0%	$/ton	MRRA	$ 85.00	$ 85.00	$ 85.00	$ 85.00	$ 85.00	$ 85.00	$ 85.00	$ 85.00	$ 85.00	$ 85.00
Other recovered paper	$ 40.00	0.0%	$/ton	MRRA	$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00
PETE #1 bottles	$ 180.00	0.0%	$/ton	MRRA	$ 180.00	$ 180.00	$ 180.00	$ 180.00	$ 180.00	$ 180.00	$ 180.00	$ 180.00	$ 180.00	$ 180.00
HDPE #2 bottles	$ 480.00	0.0%	$/ton	MRRA	$ 480.00	$ 480.00	$ 480.00	$ 480.00	$ 480.00	$ 480.00	$ 480.00	$ 480.00	$ 480.00	$ 480.00
Mixed rigids	$ 40.00	0.0%	$/ton	MRRA	$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00
Aluminum UBC	$ 1,100.00	0.0%	$/ton	Covanta	$ 1,100.00	$ 1,100.00	$ 1,100.00	$ 1,100.00	$ 1,100.00	$ 1,100.00	$ 1,100.00	$ 1,100.00	$ 1,100.00	$ 1,100.00
Ferrous UBC and other	$ 40.00	0.0%	$/ton	Covanta	$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00
Glass	$ -	0.0%	$/ton	Confidential	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Processed fuel	$ 20.00	0.0%	$/ton	LOI	$ 20.00	$ 20.00	$ 20.00	$ 20.00	$ 20.00	$ 20.00	$ 20.00	$ 20.00	$ 20.00	$ 20.00
Other products														
Bio-gas	$ 3.00	0.0%	$/MMBtu	LOI	$ 3.00	$ 3.00	$ 3.00	$ 3.00	$ 3.00	$ 3.00	$ 3.00	$ 3.00	$ 3.00	$ 3.00
RINs	$ 14.21	0.0%	$/MMBtu	LOI	$ 14.21	$ 14.21	$ 14.21	$ 14.21	$ -	$ -	$ -	$ -	$ -	$ -
Other products	$ 50.00	0.0%	$/ton	LOI	$ 50.00	$ 50.00	$ 50.00	$ 50.00	$ 50.00	$ 50.00	$ 50.00	$ 50.00	$ 50.00	$ 50.00
Industrial sugars and organic acid products				To come										
Residuals cost	$ 47.00	3.0%	$/ton	net of haul	$ 47.00	$ 48.41	$ 49.86	$ 51.36	$ 52.90	$ 54.49	$ 56.12	$ 57.80	$ 59.54	$ 61.32

Municipal Review Committee, Inc.			**Attachment A Base Case Prof Forma**				**181,500**	**tons per year**							
Fiberight Maine Facility		2-Jun-16													
					0	1	2	3	4	5	6	7	8	9	10
Revenues															
MSW															
Joinder MSW				$000		10,545	10,809	11,079	11,356	11,640	11,931	12,229	12,535	12,848	13,169
Other MSW				$000	12,705	2,160	2,214	2,269	2,326	2,384	2,444	2,505	2,567	2,632	2,697
Other (SSR)				$000		164	168	172	176	181	185	190	195	200	205
MRF material products															
OCC and other recovered paper				$000		1,008	1,008	1,008	1,008	1,008	1,008	1,008	1,008	1,008	1,008
PETE #1 bottles				$000		475	475	475	475	475	475	475	475	475	475
HDPE #2 bottles				$000		1,565	1,565	1,565	1,565	1,565	1,565	1,565	1,565	1,565	1,565
Mixed rigids				$000		388	388	388	388	388	388	388	388	388	388
Aluminum				$000		877	877	877	877	877	877	877	877	877	877
Ferrous UBC and other				$000		248	248	248	248	248	248	248	248	248	248
Processed fuel				$000		552	552	552	552	552	552	552	552	552	552
Other products															
Bio-gas				$000		615	615	615	615	206	206	206	206	206	206
RINs				$000		2,914	2,914	2,914	2,914	-	-	-	-	-	-
Other products				$000		564	564	564	564	1,475	1,475	1,475	1,475	1,475	1,475
Industrial sugar and organic acid products				$000											
Total operating revenues				$000		22,074	22,396	22,726	23,064	20,999	21,354	21,718	22,091	22,474	22,866
Rebates to Joining Members				$000		(1,095)	(1,053)	(1,010)	(967)	(198)	(152)	(105)	(57)	(38)	(39)
Revenues net of rebates				$000		20,979	21,343	21,715	22,097	20,801	21,202	21,613	22,034	22,436	22,827
Expenses															
Labor		4,433	3.00%	$000	*Covanta*	4,433	4,566	4,703	4,844	4,989	5,139	5,293	5,452	5,615	5,784
Equipment O&M		1,089	2.50%	$000	*Covanta*	1,089	1,116	1,144	1,173	1,202	1,232	1,263	1,294	1,327	1,360
Supplies (incl. enzymes)		1,444	2.50%	$000	*Novozymes*	1,444	1,480	1,517	1,555	1,594	1,634	1,674	1,716	1,759	1,803
Fuel, equipment		245	2.50%	$000	*Covanta - use*	245	251	257	264	270	277	284	291	299	306
Utilities		352	2.50%	$000	*Covanta - use*	352	360	370	379	388	398	408	418	429	439
Residuals disposal			3.00%	$000	*Crossroads LF*	776	800	824	848	874	900	927	955	984	1,013
Transportation		438	2.50%	$000	*Listed*	438	449	460	471	483	495	508	520	533	547
Rolling stock leases		150	2.50%	$000	*Listed*	150	154	158	162	166	170	174	178	183	187
Insurance		200	2.50%	$000	*allowance*	200	205	210	215	221	226	232	238	244	250
Admin and general		320	2.50%	$000	*allowance*	320	328	336	345	353	362	371	380	390	400
Prop tax (exclude equip val - BETE)		228	2.50%	$000	*assessor*	228	233	239	245	251	257	264	270	277	284
Site lease		125	0.00%	$000	*Site Lease*	125	125	125	125	125	125	125	125	125	125
Financing insurance		172	0.00%	$000	*Energi*	172	172	172	172	172	172	172	172	172	172
Fee, contingency and other		700	2.50%	$000	*Covanta*	700	718	735	754	773	792	812	832	853	874
Total expenses		*$ 58.79*	*per ton MSW*			10,671	10,957	11,250	11,551	11,861	12,180	12,507	12,843	13,189	13,544
Operating gain (EBITDA)				$000		10,308	10,386	10,465	10,546	8,940	9,022	9,106	9,191	9,247	9,282
Operating gain (EBITDA)				$000		10,308	10,386	10,465	10,546	8,940	9,022	9,106	9,191	9,247	9,282
Capital cost		2.50%		$000	(78,670)										
Equipment replacement		2.00%	4			-	-	-	(1,275)	(1,307)	(1,339)	(1,373)	(1,407)	(1,442)	(1,478)
Net cash flow				$000	(78,670)	10,308	10,386	10,465	9,271	7,633	7,683	7,733	7,784	7,804	7,804
Project IRR range unleveraged		7.0%	10.9%	$000	(63,453)	10,308	10,386	10,465	9,271	7,633	7,683	7,733	7,784	7,804	7,804
Rebates to Joining Members															
Tip fee revenues						12,705	13,023	13,348	13,682	14,024	14,375	14,734	15,102	15,480	15,867
Baseline tip fee revenues			$ 70.00	180,000	2.50%	12,600	12,915	13,238	13,569	13,908	14,256	14,612	14,977	15,352	15,736
Tip fees to be shared				$000		105	108	110	113	116	119	122	125	128	131
A Share for rebate				$000	30%	32	32	33	34	35	36	37	37	38	39
Material/product revenues				125,000		9,369	9,373	9,378	9,382	6,975	6,980	6,984	6,989	6,994	6,999
Baseline material/product revenues			$ 31.67	180,000	2.50%	5,825	5,971	6,120	6,273	6,430	6,590	6,755	6,924	7,097	7,275
Other revenues to be shared				$000		3,544	3,403	3,258	3,109	546	389	229	65	-	-
B Share for rebate				$000	30%	1,063	1,021	977	933	164	117	69	20	-	-
Total rebate (A + B)				$000		1,095	1,053	1,010	967	198	152	105	57	38	39
Total rebate (A + B)				$/ton		$ 7.27	$ 6.99	$ 6.71	$ 6.42	$ 1.32	$ 1.01	$ 0.70	$ 0.38	$ 0.25	$ 0.26
Net disposal cost after rebate				**$/ton**		**$ 62.73**	**$ 64.76**	**$ 66.84**	**$ 68.97**	**$ 75.95**	**$ 78.19**	**$ 80.48**	**$ 82.83**	**$ 85.03**	**$ 87.16**

Municipal Review Committee, Inc.			**Attachment B Low MSW Case Prof Forma**				**110,550**	**tons per year**							
Fiberight Maine Facility	2-Jun-16														
					0	1	2	3	4	5	6	7	8	9	10
Quantities/Mass Balance															
MSW suppliers	tph	tpd													
Joinder MSW	15.7	251	Tons/y			91,757	91,757	91,757	91,757	91,757	91,757	91,757	91,757	91,757	91,757
Other MSW	3.2	51	Tons/y	110,550		18,794	18,794	18,794	18,794	18,794	18,794	18,794	18,794	18,794	18,794
Other (SSR)			Tons/y			4,680	4,680	4,680	4,680	4,680	4,680	4,680	4,680	4,680	4,680
	18.9	303				115,230	115,230	115,230	115,230	115,230	115,230	115,230	115,230	115,230	115,230
Recovered materials		MSW %	SSR %												
OCC and recovered paper		5.2%	75.0%			9,259	9,259	9,259	9,259	9,259	9,259	9,259	9,259	9,259	9,259
PETE #1 bottles		1.4%	1.0%	9,595		1,626	1,626	1,626	1,626	1,626	1,626	1,626	1,626	1,626	1,626
HDPE #2 bottles		1.7%	3.0%			2,041	2,041	2,041	2,041	2,041	2,041	2,041	2,041	2,041	2,041
Mixed rigids		5.3%	1.0%			5,928	5,928	5,928	5,928	5,928	5,928	5,928	5,928	5,928	5,928
Aluminum UBC		0.4%	0.2%	4,330		489	489	489	489	489	489	489	489	489	489
Ferrous UBC		2.6%	3.8%			3,077	3,077	3,077	3,077	3,077	3,077	3,077	3,077	3,077	3,077
Other metals		0.7%				764	764	764	764	764	764	764	764	764	764
		17.4%	84.0%			23,184	23,184	23,184	23,184	23,184	23,184	23,184	23,184	23,184	23,184
Processed fuel		15.2%	0.0%			16,809	16,809	16,809	16,809	16,809	16,809	16,809	16,809	16,809	16,809
Back-end process materials															
Cellulose (dry)		16.3%				17,970	17,970	17,970	17,970	17,970	17,970	17,970	17,970	17,970	17,970
Food waste (dry)		4.9%				5,411	5,411	5,411	5,411	5,411	5,411	5,411	5,411	5,411	5,411
Moisture		31.8%				35,174	35,174	35,174	35,174	35,174	35,174	35,174	35,174	35,174	35,174
Residuals															
Glass/ceramics		5.5%	7.0%			6,455	6,455	6,455	6,455	6,455	6,455	6,455	6,455	6,455	6,455
Other		8.9%	9.0%			10,227	10,227	10,227	10,227	10,227	10,227	10,227	10,227	10,227	10,227
		100.0%	100.0%			115,230	115,230	115,230	115,230	115,230	115,230	115,230	115,230	115,230	115,230
Other products															
Bio-gas	food waste	7.73	MMBtu/ton			41,828	41,828	41,828	41,828	41,828	41,828	41,828	41,828	41,828	41,828
Bio-gas	cellulose	7.61	MMBtu/ton			25,239	25,239	25,239	25,239	-	-	-	-	-	-
	AD annual max	63,500	MMBtu/year			63,500	63,500	63,500	63,500	41,828	41,828	41,828	41,828	41,828	41,828
RINs	through year	4	MMBtu/y			63,500	63,500	63,500	63,500	-	-	-	-	-	-
PHS to processed fuel				LOI		1,658	1,658	1,658	1,658	1,658	1,658	1,658	1,658	1,658	1,658
Other product 1	confidential	82%	tons/y	LOI		14,653	14,653	14,653	14,653	14,653	14,653	14,653	14,653	14,653	14,653
Other product 2			tons/y	LOI		-	-	-	-	3,317	3,317	3,317	3,317	3,317	3,317
Industrial sugars and organic acid products				to come											
Prices and Costs															
MSW															
Joinder MSW	$ 70.00	2.5%	$/ton	MRC		$ 70.00	$ 71.75	$ 73.54	$ 75.38	$ 77.27	$ 79.20	$ 81.18	$ 83.21	$ 85.29	$ 87.42
Other MSW	$ 70.00	2.5%	$/ton	Haulers		$ 70.00	$ 71.75	$ 73.54	$ 75.38	$ 77.27	$ 79.20	$ 81.18	$ 83.21	$ 85.29	$ 87.42
Other (SSR)	$ 35.00	2.5%	$/ton	In region		$ 35.00	$ 35.88	$ 36.77	$ 37.69	$ 38.63	$ 39.60	$ 40.59	$ 41.60	$ 42.64	$ 43.71
Materials			$/ton												
OCC	$ 85.00	0.0%	$/ton	MRRA		$ 85.00	$ 85.00	$ 85.00	$ 85.00	$ 85.00	$ 85.00	$ 85.00	$ 85.00	$ 85.00	$ 85.00
Other recovered paper	$ 40.00	0.0%	$/ton	MRRA		$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00
PETE #1 bottles	$ 180.00	0.0%	$/ton	MRRA		$ 180.00	$ 180.00	$ 180.00	$ 180.00	$ 180.00	$ 180.00	$ 180.00	$ 180.00	$ 180.00	$ 180.00
HDPE #2 bottles	$ 480.00	0.0%	$/ton	MRRA		$ 480.00	$ 480.00	$ 480.00	$ 480.00	$ 480.00	$ 480.00	$ 480.00	$ 480.00	$ 480.00	$ 480.00
Mixed rigids	$ 40.00	0.0%	$/ton	MRRA		$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00
Aluminum UBC	$ 1,100.00	0.0%	$/ton	Covanta		$ 1,100.00	$ 1,100.00	$ 1,100.00	$ 1,100.00	$ 1,100.00	$ 1,100.00	$ 1,100.00	$ 1,100.00	$ 1,100.00	$ 1,100.00
Ferrous UBC and other	$ 40.00	0.0%	$/ton	Covanta		$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00	$ 40.00
Glass	$ -	0.0%	$/ton	Confidential		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Processed fuel	$ 20.00	0.0%	$/ton	LOI		$ 20.00	$ 20.00	$ 20.00	$ 20.00	$ 20.00	$ 20.00	$ 20.00	$ 20.00	$ 20.00	$ 20.00
Other products															
Bio-gas	$ 3.00	0.0%	$/MMBtu	LOI		$ 3.00	$ 3.00	$ 3.00	$ 3.00	$ 3.00	$ 3.00	$ 3.00	$ 3.00	$ 3.00	$ 3.00
RINs	$ 14.21	0.0%	$/MMBtu	LOI		$ 14.21	$ 14.21	$ 14.21	$ 14.21	$ -	$ -	$ -	$ -	$ -	$ -
Other products	$ 50.00	0.0%	$/ton	LOI		$ 50.00	$ 50.00	$ 50.00	$ 50.00	$ 50.00	$ 50.00	$ 50.00	$ 50.00	$ 50.00	$ 50.00
Industrial sugars and organic acid products				To come											
Residuals cost	$ 47.00	3.0%	$/ton	net of haul		$ 47.00	$ 48.41	$ 49.86	$ 51.36	$ 52.90	$ 54.49	$ 56.12	$ 57.80	$ 59.54	$ 61.32

Municipal Review Committee, Inc.			**Attachment B Low MSW Case Prof Forma**				**110,550**	**tons per year**							
Fiberight Maine Facility		2-Jun-16													
					0	1	2	3	4	5	6	7	8	9	10
Revenues															
MSW															
Joinder MSW				$000		6,423	6,584	6,748	6,917	7,090	7,267	7,449	7,635	7,826	8,021
Other MSW				$000	7,739	1,316	1,348	1,382	1,417	1,452	1,488	1,526	1,564	1,603	1,643
Other (SSR)				$000		164	168	172	176	181	185	190	195	200	205
MRF material products															
OCC and other recovered paper				$000		694	694	694	694	694	694	694	694	694	694
PETE #1 bottles				$000		293	293	293	293	293	293	293	293	293	293
HDPE #2 bottles				$000		980	980	980	980	980	980	980	980	980	980
Mixed rigids				$000		237	237	237	237	237	237	237	237	237	237
Aluminum				$000		538	538	538	538	538	538	538	538	538	538
Ferrous UBC and other				$000		154	154	154	154	154	154	154	154	154	154
Processed fuel				$000		369	369	369	369	369	369	369	369	369	369
Other products															
Bio-gas				$000		191	191	191	191	125	125	125	125	125	125
RINs				$000		902	902	902	902	-	-	-	-	-	-
Other products				$000		733	733	733	733	899	899	899	899	899	899
Industrial sugar and organic acid products				$000											
Total operating revenues				$000		12,993	13,191	13,393	13,601	13,012	13,230	13,453	13,683	13,917	14,158
Rebates to Joining Members				$000		(351)	(322)	(292)	(261)	-	-	-	-	-	-
Revenues net of rebates				$000		12,642	12,869	13,101	13,340	13,012	13,230	13,453	13,683	13,917	14,158
Expenses															
Labor		2,702	3.00%	$000	*Covanta*	2,702	2,783	2,867	2,953	3,042	3,133	3,227	3,324	3,423	3,526
Equipment O&M		663	2.50%	$000	*Covanta*	663	680	697	714	732	750	769	788	808	828
Supplies (incl. enzymes)		356	2.50%	$000	*Novozymes*	356	365	374	383	393	403	413	423	434	444
Fuel, equipment		149	2.50%	$000	*Covanta - use*	149	153	157	161	165	169	173	177	182	186
Utilities		954	2.50%	$000	*Covanta - use*	954	978	1,002	1,027	1,053	1,079	1,106	1,134	1,162	1,191
Residuals disposal			3.00%	$000	*Crossroads LF*	481	495	510	525	541	557	574	591	609	627
Transportation		266	2.50%	$000	*Listed*	266	273	280	287	294	301	309	316	324	332
Rolling stock leases		150	2.50%	$000	*Listed*	150	154	158	162	166	170	174	178	183	187
Insurance		150	2.50%	$000	*allowance*	150	154	158	162	166	170	174	178	183	187
Admin and general		270	2.50%	$000	*allowance*	270	277	284	291	298	305	313	321	329	337
Prop tax (exclude equip val - BETE)		228	2.50%	$000	*assessor*	228	233	239	245	251	257	264	270	277	284
Site lease		125	0.00%	$000	*Site Lease*	125	125	125	125	125	125	125	125	125	125
Financing insurance		172	0.00%	$000	*Energi*	172	172	172	172	172	172	172	172	172	172
Fee, contingency and other		420	2.50%	$000	*Covanta*	420	431	441	452	464	475	487	499	512	525
Total expenses		*$ 64.10*	*per ton MSW*			7,086	7,272	7,463	7,659	7,860	8,067	8,280	8,498	8,723	8,954
Operating gain (EBITDA)				$000		5,555	5,597	5,639	5,681	5,152	5,163	5,174	5,184	5,194	5,204
Operating gain (EBITDA)				$000		5,555	5,597	5,639	5,681	5,152	5,163	5,174	5,184	5,194	5,204
Capital cost		2.50%		$000	(35,257)										
Equipment replacement		2.00%	4			-	-	-	(602)	(617)	(632)	(648)	(664)	(681)	(698)
Net cash flow				$000	(35,257)	5,555	5,597	5,639	5,079	4,535	4,531	4,526	4,520	4,514	4,507
Project IRR range unleveraged		11.2%													
Rebates to Joining Members															
Tip fee revenues						7,739	7,932	8,130	8,334	8,542	8,755	8,974	9,199	9,429	9,664
Baseline tip fee revenues			$ 70.00	150,000	2.50%	10,500	10,763	11,032	11,307	11,590	11,880	12,177	12,481	12,793	13,113
Tip fees to be shared				$000		-	-	-	-	-	-	-	-	-	-
A Share for rebate				$000	30%	-	-	-	-	-	-	-	-	-	-
Material/product revenues				125,000		5,255	5,259	5,263	5,267	4,470	4,475	4,479	4,484	4,489	4,494
Baseline material/product revenues			$ 31.67	125,000	2.50%	4,083	4,185	4,290	4,397	4,507	4,620	4,735	4,854	4,975	5,100
Other revenues to be shared				$000		1,171	1,073	973	870	-	-	-	-	-	-
B Share for rebate				$000	30%	351	322	292	261	-	-	-	-	-	-
Total rebate (A + B)				$000		351	322	292	261	-	-	-	-	-	-
Total rebate (A + B)				$/ton		$ 3.83	$ 3.51	$ 3.18	$ 2.84	$ -	$ -	$ -	$ -	$ -	$ -
Net disposal cost after rebate				**$/ton**		**$ 66.17**	**$ 68.24**	**$ 70.36**	**$ 72.54**	**$ 77.27**	**$ 79.20**	**$ 81.18**	**$ 83.21**	**$ 85.29**	**$ 87.42**