

Materials Innovation Recycling Authority
Regular Board of Directors Meeting
Oct. 27, 2016
9:30 AM

I. Pledge of Allegiance

II. Public Portion

A ½ hour public portion will be held and the Board will accept written testimony and allow individuals to speak for a limit of three minutes. The regular meeting will commence if there is no public input.

III. Minutes

1. Board Action will be sought for Approval of the Regular Sept. 22, 2016, Board Meeting Minutes (Attachment 1).

IV. Policies & Procurement Report

2. Board Action will be sought for the Resolution Approving the Contracting of Ash Transportation and Disposal Services for the CSWS (Attachment 2).
3. Board Action will be sought for the Resolution Concerning the Sale of 1410 Honey Spot Road, Ext. Stratford CT (Attachment 3).
4. Discussion – Southeast Project Service Agreement.

V. Finance Committee Report

5. Review Key Drivers for FY 2018 Operating and Capital Budget Development (Attachment 4).

VI. Chairman and President's Reports

6. Board Action will be sought for the Resolution Regarding Repair and Upgrade of the Solar EGF at the Hartford Landfill (Attachment 5).

VII. Executive Session

An Executive Session will be held to discuss pending litigation, trade secrets, personnel matters, security matters, pending RFP's, pending RFP responses for the Sale of Property in Stratford, real estate matters, and feasibility estimates and evaluations including Strategic Plan updates.

Materials Innovation and Recycling Authority

200 Corporate Plaza, Rocky Hill CT

Telephone (860)757-7700 - Fax (860)757-7743

MEMORANDUM

TO: MIRA Board of Directors

FROM: Moira Kenney, Assistant HR Manager/Board Administrator

DATE: Oct. 21, 2016

RE: Notice of Regular Board Meeting

There will be a Regular Meeting of the Materials Innovation and Recycling Authority Board of Directors on Thurs. Oct. 27, 2016, at 9:30 a.m. The meeting will be available to the public in the Board Room at 211 Murphy Road, Hartford, CT 06114.

Please notify this office of your attendance at (860) 757-7787 at your earliest convenience.

TAB 1

MATERIALS INNOVATION AND RECYCLING AUTHORITY

FOUR HUNDRED AND SEVENTIETH

SEPT. 22, 2016

A regular meeting of the Materials Innovation and Recycling Authority Board of Directors was held on Thurs. Sept. 22, 2016, in the Board Room at 211 Murphy Rd. Hartford, CT 06103. Those present were:

Directors: Chairman Don Stein
Vice-Chairman Dick Barlow (present by telephone beginning 10:35 a.m.)
John Adams
Marilynn Cruz-Aponte
Ralph Eno
Jim Hayden
Bob Painter
Andy Nunn (present by telephone beginning 10:35 a.m.)
Scott Shanley
Patricia Widlitz

Present from MIRA in Hartford:

Tom Kirk, President
Mark Daley, Chief Financial Officer
Jeffrey Duvall, Director of Budgets and Forecasting
Thomas Gaffey, Director of Recycling and Enforcement
Laurie Hunt, Director of Legal Services
Roger Guzowski, Contract and Procurement Manager
Chris Shepard, Environmental Compliance Manager
Moira Kenney, Assistant HR Manager/Board Administrator

Others Present: Ann Catino, Esq., Halloran & Sage; Doug Cohen, Esq., Lee Sawyer, CT DEEP, John Pizzimenti, USA Hauling.

Chairman Stein called the meeting to order at 9:34 a.m. and said a quorum was present.

PUBLIC PORTION

Chairman Stein said the agenda allowed for a public portion in which the Board would accept written testimony and allow individuals to speak for a limit of three minutes.

APPROVAL OF THE REGULAR JUNE 28, 2016, BOARD MEETING MINUTES

Chairman Stein requested a motion to approve the minutes of the regular June 28, 2016, Board Meeting. Director Adams made the motion which was seconded by Director Eno.

The motion to approve the minutes was approved by roll call. Chairman Stein, Director Adams, Director Cruz-Aponte, Director Hayden, Director Eno, Director Painter, and Director Widlitz voted yes. Director Shanley abstained.

Directors	Aye	Nay	Abstain
Chairman Stein	X		
Marilyn Cruz-Aponte	X		
John Adams	X		
Jim Hayden	X		
Ralph Eno	X		
Bob Painter	X		
Scott Shanley			X
Patricia Widlitz	X		

APPROVAL OF THE SPECIAL AUG. 5, 2016, BOARD MEETING MINUTES

Chairman Stein requested a motion to approve the minutes of the special Aug. 5, 2016, Board Meeting. Director Adams made the motion which was seconded by Director Shanley.

The motion to approve the minutes was approved by roll call. Chairman Stein, Director Adams, Director Hayden, Director Eno, Director Painter, Director Shanley and Director Widlitz voted yes. Director Cruz-Aponte abstained.

Directors	Aye	Nay	Abstain
Chairman Stein	X		
Marilyn Cruz-Aponte			X
John Adams	X		
Jim Hayden	X		
Ralph Eno	X		
Bob Painter	X		
Scott Shanley	X		
Patricia Widlitz	X		

APPROVAL OF THE SPECIAL AUG. 30, 2016 BOARD MEETING MINUTES

Chairman Stein requested a motion to approve the minutes of the special Aug. 30, 2016, Board Meeting. Director Shanley made the motion which was seconded by Director Cruz-Aponte.

The motion to approve the minutes as amended was approved unanimously by roll call. Chairman Stein, Director Adams, Director Cruz-Aponte, Director Hayden, Director Eno, Director Painter, Director Shanley and Director Widlitz voted yes.

Directors	Aye	Nay	Abstain
Chairman Stein	X		
Marilyn Cruz-Aponte	X		
John Adams	X		
Jim Hayden	X		
Ralph Eno	X		
Bob Painter	X		
Scott Shanley	X		
Patricia Widlitz	X		

RESOLUTION ADOPTING AND APPROVING MIRA'S ANNUAL INDEPENDENT AUDIT FOR FISCAL YEAR 2016

Chairman Stein requested a motion on the resolution above. Director Shanley made the motion which was seconded by Director Hayden.

RESOLVED, That the Board hereby accepts the Annual Financial Report for the Fiscal Year Ending June 30, 2016, substantially as discussed and presented at this meeting.

Director Shanley said this item was discussed in detail and approved at the Finance Committee meeting. Mr. Daley said the audit is an unmodified and clean audit. He said after the Finance Committee meeting two further checklist items were completed. Mr. Daley said the contingencies note was completed and all of the information required from outside counsel was also completed and submitted. Mr. Daley said a clarification in the MD&A requested by Director Shanley concerning the impact of the volatility of the prices and non-participating town tip fees was also provided.

Mr. Daley provided a summary of the results of the audit. He said MIRA had an operating loss after depreciation and non-operating expenses of \$17.3 million for FY'16, a 40% greater loss than FY'15. Mr. Daley said the balance sheet is showing \$156.6 million in total assets less total liabilities of \$14.5 million which leaves a net position of \$142.1 million which is \$17.3 million less than the year prior.

Mr. Daley said the management discussion and analysis outlines the key factors which are influencing performance this year. He said the end of the Southeast Project was a large influence as the wind down of the project caused a \$12.1 million reduction in operating revenues and a \$6.3 million reduction in operating expenses along with a distribution net of \$5.9 million to SCRRRA.

Mr. Daley said the other large influence to performance is the declining non-disposal fee revenue within CSWS of \$3.6 million on top of a decline in energy revenue experienced last year of \$8.8 million. He said energy revenues, non-participating town tip fees and recycling revenues have all declined. Mr. Daley said the most significant factor adversely affecting MIRA is the CSWS business model and its reliance on non-disposal fee revenues to keep tip fees for participating towns below the opt-out. He said low energy revenues and tip fees from non-municipal customers are problematic and are currently being worked on by management.

Mr. Daley said in terms of energy MIRA has adopted a new process to lock in energy prices in a fixed hedge process. He said in terms of the non-participating town tip fees recommendations from the auditors and consultants have been made and should be pursued. Mr. Daley said there are examples in the MD&A of the hypothetical impact of changes in these non-disposal fee revenues on participating town tip fees.

Mr. Daley said the use of the tip fee stabilization fund to mitigate these factors is noted as well as the expansion of the use of the fund this year, which allows all of the income from Property Division to flow to the fund and the use of the fund to supplement the CSWS improvement fund and operating account. He said the budget schedule for FY 2018 contains an initial step to lay out key bench marks for the budget process to examine the impact of continued declines in non-disposal fee revenue and what may need to be done.

Mr. Daley noted the viability of the tip fee stabilization fund is largely dependent on the CT DEEP's with its phased compliance program for the jets. He said DEEP has advanced this regulation toward adoption which will allow MIRA to continue to operate the jets. Mr. Daley said DEEP seems to be on track for success with the regulation scheduled for action by the General Assembly's LRRC on November 10, 2016, at which point it moves to US EPA. Director Shanley asked what the timeline is approximately for the EPA. Mr. Shepard replied that the EPA has already reviewed and provided comments to the regulation. He said it is DEEP's intention to get the regulation in place January first.

Mr. Daley said the MD&A discusses how MIRA is \$10.4 million under budget in operating revenue, which was addressed with a reduction to the operating expenses budget and increased reliance on the tip fee stabilization fund and in doing so increasing the capital funding available to NAES for the resource recovery facility by over \$2 million.

Mr. Daley noted that education services terminated in June of 2016. He thanked Ms. Krishna and her team for their effort and work on the audit. He said the additional contingencies piece contains two new notes, one on the municipal service agreement opt-out provisions and one on the status of the jets trading order.

The motion previously made and seconded was approved unanimously by roll call. Chairman Stein, Director Adams, Director Cruz-Aponte, Director Hayden, Director Eno, Director Painter, Director Shanley and Director Widlitz voted yes.

Directors	Aye	Nay	Abstain
Chairman Stein	X		
Marilyn Cruz-Aponte	X		
John Adams	X		
Jim Hayden	X		
Ralph Eno	X		
Bob Painter	X		
Scott Shanley	X		
Patricia Widlitz	X		

RESOLUTION DISTRIBUTING ADDITIONAL SURPLUS FUNDS OF THE SOUTHEAST PROJECT TO THE SOUTHEASTERN REGIONAL RESOURCE RECOVERY AUTHORITY

Chairman Stein requested a motion on the resolution noted above. The motion was made by Director Shanley and seconded by Director Hayden.

WHEREAS, by resolution adopted at its October 22, 2015 meeting, the Materials Innovation and Recycling Authority (MIRA) Board of Directors approved the transfer of flow of funds responsibility for its Southeast Project to the Southeastern Connecticut Regional Resource Recovery Authority (SCRRRA) subject to a sequence of events, the development of release of liability documents and required concurrences as outlined in a September 30, 2015 letter attached to such resolution; and

WHEREAS, by resolution adopted at its November 19, 2015 meeting, the MIRA Board of Directors authorized the President to enter into proposed release of liability documents with SCRRRA and Covanta, which release of liability documents were generally limited in scope to MIRA's action of transferring responsibility for Southeast Project flow of funds management to SCRRRA, and to transfer such flow of funds responsibilities in accordance with those documents; and

WHEREAS, by resolution adopted at its March 24, 2016 meeting, the MIRA Board of Directors authorized the distribution of \$5,691,971.43 to SCRRRA and retained \$1,140,000 in MIRA's Southeast Project Closure Reserve for potential expenses related to various end of Project activities; and

WHEREAS, at its March 24, 2016 meeting, the MIRA Board of Directors resolved that the funds retained by MIRA would be reviewed when amendments and release documents related to the Southeast Project's Bridge and Management Agreement and Service Agreement releasing MIRA from all cost and liability associated with the Southeast Project, preserving MIRA's rights to use excess capacity of the RRF, preserving MIRA's rights to inspect waste received at the Preston facility, and preserving MIRA's right to reacquire the RRF on behalf of the State were satisfactorily concluded but not later than the September 2016 Board meeting; and

WHEREAS, at its July 28, 2016 meeting, the Board of Directors authorized the President to enter into contracts with SCRRRA that satisfactorily meets the aforementioned terms between SCRRRA and MIRA, but said contracts have not yet been executed; and

WHEREAS, MIRA staff have reviewed and considered MIRA's accrued expenses and ongoing liabilities associated with the Southeast Project and have recommended reducing the Southeast Project Closure Reserve Requirement to the amount of \$100,000 which represents the following:

- **Outside Counsel for Ongoing Closeout Activity -** **\$ 15,000**
- **Administrative Direct Costs (bank / audit) -** **\$ 50,000**
- **Allocated Personnel (post FY 2016) -** **\$ 35,000**

NOW THEREFORE, be it

RESOLVED: That upon execution of the Termination, Assignment, Authority Rights, and Release, Consent and Indemnification Agreement; execution of the Solid Waste Management Services Contract; receipt of acceptable insurance endorsements pursuant to SCRRRA's landfill coverage; and verification of an adequate Montville Landfill post-closure reserve, management is authorized to distribute to SCRRRA the sum of \$986,562.68 representing funds available in the Southeast Project Closure Reserve in excess of the Southeast Project Closure Reserve Requirement.

Mr. Kirk said this resolution finalizes the expiration of the project and will provide the last substantial distribution to SCRRRA (of just under \$1 million). He said the final signatures from SCRRRA and Covanta are still pending however the language was agreed upon by all parties prior to the copies going out for signature.

Mr. Daley said if MIRA does not utilize the remaining \$100,000 that will be returned to SCRRRA as well. He said there are a few known outside counsel bills still outstanding. Mr. Daley said the administrative direct costs will be a contingency as SCRRRA may need further outside audits when closing out the project. He said the allocated personnel will be determined by the Board in terms of FY'17 activity. Mr. Daley said there was not anything budgeted for the Southeast project for internal administrative effort which was substantial and so \$35,000 was reserved if needed.

The motion previously made and seconded was approved unanimously by roll call. Chairman Stein, Director Adams, Director Cruz-Aponte, Director Hayden, Director Eno, Director Painter, Director Shanley, and Director Widlitz voted yes.

Directors	Aye	Nay	Abstain
Chairman Stein	X		
Marilyn Cruz-Aponte	X		
John Adams	X		
Jim Hayden	X		
Ralph Eno	X		
Bob Painter	X		
Scott Shanley	X		
Patricia Widlitz	X		

PRESIDENT'S REPORT

Mr. Kirk said in the reporting period all facilities operated within environmental, public health and safety requirements. He said for the first month of reporting in FY'17 revenue was 20% below budget. He said the plant ran fairly well in term of capacity utilization and included 10 days of boiler cleaning which although scheduled reduced boiler availability. Mr. Kirk said availability of the boilers otherwise continues to be good, however throughput of waste or capacity utilization continues to be a problem and is focused mainly on back end issues.

Mr. Kirk said in July there was a three day cold iron outage (in which everything was shut down) caused by a fire deluge system, a valve designed to release when there is a serious fire and drench the waste facility. He said the valve failed and did in fact drench the facility and shut the plant down. Mr. Kirk said there were also a couple of instances when MIRA's environmental permits required the plant to reduce the rate of production. He explained the permits limit the temperature increases to the river when it is used for cooling purposes. Mr. Kirk said as a result several days of processing were pulled back to limit those temperatures increases.

Mr. Kirk said MIRA is 32% below budget for pricing and additional 11% below budget in production. He said there was a real impact to revenue as a result of production shortfalls and this will be an important consideration for setting tip fees in FY'18.

Mr. Kirk said there continues to be sufficient fuel to keep the plant at capacity. He said recycling revenues from tonnage receipts for July were favorable although it is important to note that recycling commodity prices are extraordinarily soft such that revenues are very low.

Mr. Kirk said MIRA continues to support the CT DEEP's RFP resource re-discovery process.

Mr. Kirk said the MIRA Board sent a letter to all CSWS customers correcting some of the mis-information regarding the Murtha Culina/Harrington FOIA lawsuit. He said the Hartford solar landfill facility is currently off line due to a mechanical failure. Mr. Kirk said management is currently in discussions with the warranty provider to fix the issue and cover the costs. He said it is important to both MIRA and the City of Hartford to get this project back on line soon.

Mr. Kirk said MIRA's investment in and commitment of time to the jets has provided dividends. He said on August 11, 2016, there was an op-four event which is when unique rules governing ISO New England participating generators are introduced. A particular rule involves capacity and failure to run during an OP-4 event. He explained when the equipment fails to run properly ISO takes back part of the failed generator's capacity payment and distributes the funds to the equipment which does run as demanded, in this case MIRA's jets, which operated without issue, received a \$69,000 bonus check.

Mr. Kirk addressed questions he received at a Committee meeting concerning 2016 production issues. He said further documentation will be provided prior to budget discussion for 2018. Mr. Kirk explained shortfalls in revenue are generally associated with four categories: power price, power production, commodities prices for recycling and tipping fees. He said the power price is what it is, however power production can be improved with funds spent on maintenance but requires a balance with maintenance spending against anticipated returns which is complicated by not knowing the price of power.

Mr. Kirk reviewed several handouts with the Board which detailed boiler and turbine issues and power production. He said availability for the boilers was fairly good given the age of the facility and management's goals are running 85% of the time with greater than 85% capacity. Mr. Kirk said the budget targets for availability have been met as a result of prior spending on pressure parts. He said however capacity goals were missed by about 4%. Mr. Kirk said management's focus and concern is on improving the air pollution control system and the bag house, a giant filter at the end of the plant in order to improve capacity throughput.

Mr. Kirk reviewed the steam turbine graph. He said there is very little operations impact in a turbine and very little can be changed or adjusted to make the turbine run better. He said the key is how long it has been since its last outage. Mr. Kirk reviewed the last outage dates with the Board and a discussion on the impacts of recent capital improvements was undertaken.

EXECUTIVE SESSION

Chairman Stein requested a motion to enter into Executive Session to discuss real estate matters. The motion was made by Director Painter and seconded by Director Shanley and was approved unanimously.

Chairman Stein asked the following people to join the Directors in the Executive Session:

Tom Kirk
Mark Daley
Peter Egan
Roger Guzowski
Chris Shepard
Laurie Hunt
Ann Catino, Esq.

The Executive Session began at 10:35 a.m. and concluded at 12:05 a.m. Chairman Stein noted that no votes were taken in Executive Session.

The motion previously made and seconded was approved unanimously by roll call. Chairman Stein, Director Adams, Director Cruz-Aponte, Director Hayden, Director Eno, Director Painter, Director Shanley and Director Widlitz voted yes.

Directors	Aye	Nay	Abstain
Chairman Stein	X		
Marilyn Cruz-Aponte	X		
John Adams	X		
Jim Hayden	X		
Ralph Eno	X		
Bob Painter	X		
Bob Painter	X		
Scott Shanley	X		
Patricia Widlitz	X		

The meeting was reconvened at 12:05 a.m. The door was opened, and the Board Secretary and all members of the public were invited back in for the continuation of public session.

RESOLUTION REGARDING A SUBORDINATION AGREEMENT WITH THE CITY OF HARTFORD AND THE GREATER HARTFORD FLOOD COMMISSION ASSOCIATED WITH THE SOUTH MEADOWS STATION SITE

Chairman Stein requested a motion on the resolution noted above. The motion was made by Director Eno and seconded by Director Adams.

RESOLVED: That the President is hereby authorized to execute a subordination agreement with the City of Hartford (“City”) and the Greater Hartford Flood Commission (“GHFC”) to subordinate existing City and GHFC interests in the South Meadows Station site to an Environmental Land Use Restriction (ELUR), substantially as presented and discussed at this meeting.

Chairman Stein, Vice-Chairman Barlow, Director Adams, Director Hayden, Director Eno, Director Painter, Director Nunn, Director Shanley, and Director Widlitz voted yes. Director Cruz-Aponte abstained.

Directors	Aye	Nay	Abstain
Chairman Stein	X		
Vice-Chairman Barlow	X		
Marilyn Cruz-Aponte			X
John Adams	X		
Jim Hayden	X		
Ralph Eno	X		
Bob Painter	X		
Andy Nunn	X		
Scott Shanley	X		
Patricia Widlitz	X		

ADJOURNMENT

Vice-Chairman Barlow requested a motion to adjourn the meeting. The motion to adjourn was made by Director Eno seconded by Director Cruz-Aponte and was approved unanimously

The motion to adjourn was approved unanimously by roll call. Chairman Stein, Vice-Chairman Barlow, Director Adams, Director Cruz-Aponte, Director Hayden, Director Eno, Director Nunn , Director Painter, Director Shanley, Director Widlitz voted yes.

Directors	Aye	Nay	Abstain
Chairman Stein	X		
Vice-Chairman Barlow	X		
Marilyn Cruz-Aponte	X		
John Adams	X		
Jim Hayden	X		
Ralph Eno	X		
Bob Painter	X		
Andy Nunn	X		
Patricia Widlitz	X		

There being no other business to discuss, the meeting adjourned at 12:06 a.m.

Respectfully Submitted,

A handwritten signature in black ink, appearing to be 'MK', followed by a long, sweeping horizontal line that extends to the right.

Moira Kenney

Assistant HR Manager/Board Administrator

TAB 2

**RESOLUTION REGARDING TRANSPORTATION AND DISPOSAL OF ASH
RESIDUE FROM THE CSWS RESOURCE RECOVERY FACILITY**

WHEREAS, MIRA owns and operates the CSWS Resource Recovery Facility located in the South Meadows section of Hartford; and

WHEREAS, MIRA requires the services of a qualified firm to dispose of ash residue from the CSWS Resource Recovery Facility at properly-permitted disposal facility(ies) (or beneficial use facility), and to oversee the safe transportation of ash residue from the CSWS Resource Recovery Facility to the disposal facility(ies)(or beneficial use facility[ies]); and

WHEREAS, MIRA has undertaken the “Competitive Process” required under its Procurement Policies and Procedures;

THEREFORE, BE IT RESOLVED, That the President is hereby authorized to execute an agreement with Wheelabrator Technologies Inc., and its wholly owned subsidiaries Wheelabrator Putnam Inc. and Wheelabrator Environmental Systems, Inc., to provide transportation and disposal services for ash residue from the CSWS Resource Recovery Facility, substantially as presented and discussed at this meeting.

Agreement Summary
Agreement For
Transportation And Disposal Of Ash Residue From The CSWS Resource Recovery Facility

Presented to Board of Directors:	October 27, 2016
Facilities:	CSWS Resource Recovery Facility
Recommended Contractor:	Wheelabrator Technologies Inc., and its wholly owned subsidiaries Wheelabrator Putnam Inc. and Wheelabrator Environmental Systems, Inc.
Commencement Date:	January 1, 2017
Base Term:	<ul style="list-style-type: none"> Base Term is 2.5 years (From January 1, 2017 to June 30, 2019).
Term Extensions:	<ul style="list-style-type: none"> Five individual one year extension periods.
Scope of Services:	<ul style="list-style-type: none"> Contractor shall transport (via subcontractor) from the CSWS RRF and dispose of all Ash Residue from the CSWS RRF to a Designated Ash Disposal Facility which is permitted and licensed to accept such Ash Residue pursuant to this Agreement.
Contract Dollar Value:	<ul style="list-style-type: none"> Contractor is paid on a per-ton basis for transportation and disposal of ash residue generated by the RRF. Transportation and disposal prices are attached hereto as Table 2a. Prices are subject to a fuel surcharge, effective upon the commencement date. The expected impact of those fuel surcharges, based on historic diesel fuel prices, is attached as Table 2b.
Other Pertinent Provisions:	<ul style="list-style-type: none"> MIRA shall make all Ash Residue available to the Contractor, but nothing in the Agreement should be construed as a guarantee or warranty of a particular amount of tonnage during any particular period of time. Wheelabrator has offered a \$1/ton discount on the disposal price throughout the term of the Agreement (base term and extension periods), if at the time MIRA executes the Agreement, it simultaneously executes all of the extension periods (effectively making the term 7 ½ years) (Note: Tables 2 and 2b do not reflect this dollar discount. The impact of this discount is discussed in Table 3). Management recommends accepting this discount.
Budget Status:	Monies have been appropriated in the FY17 budget to cover the Ash Residue T&D services.

EXECUTIVE SUMMARY

MIRA's current agreement for the disposal of ash residue from the CSWS Resource Recovery Facility (the "CSWS RRF") terminates on December 31, 2016. On July 19, 2016 MIRA issued a Request for Proposals ("RFP"), with a response deadline date of September 7, 2016.

This is to request approval of MIRA's Board of Directors for the President to enter into an agreement with Wheelabrator Technologies Inc., and its wholly owned subsidiaries Wheelabrator Putnam Inc. and Wheelabrator Environmental Systems, Inc., (one or more of whom is hereafter collectively referred to as "Wheelabrator") to provide transportation and disposal services for ash residue from the CSWS RRF substantially as discussed.

BACKGROUND

Prior to RFP

In April 2016, MIRA engaged HDR via a Request For Service ("RFS") as part of their on-call Engineering Services Agreement to provide technical assistance prior to MIRA issuing an RFP for ash disposal. The goals of the RFS were to:

- Explore practicable alternatives for transportation and disposal of ash
- Develop a practical target radius within which MIRA should focus the RFP (see attached map)
- Develop a list of existing permitted facilities
- Identify any practicable market-ready alternatives to landfilling within the target area
- Review options and pricing structures which may be financially favorable to MIRA.

HDR provided a technical memo (the "Memo") in June 2016. The Memo identified a 300 mile target radius to advertise the RFP. As part of the RFS, HDR contacted 40 landfills within that radius to obtain contact information and determine their level of interest in accepting ash residue. Responses and contact info were provided to MIRA in the Memo. HDR did not discover any viable alternatives to landfilling but the Memo did recommend that MIRA consider options to use the ash as alternative daily cover (ADC) in an MSW landfill, where allowed, as a potentially cost-effective beneficial use as opposed to disposing in an ash landfill. The Memo also identified the following options to consider in the RFP:

- Soliciting transportation and disposal separately
- Looking at additional metal separation from the ash.

RFP Process

MIRA issued the RFP in July 2016. The term of the contract includes a 2.5 year base term (from January 1, 2017 through June 30, 2019). In addition there are five (5) successive one-year extension periods at MIRA's sole option.

To maximize the number of respondents who could participate in this RFP, MIRA structured the RFP in a way that:

- Allowed firms to submit proposals for transportation, disposal, or both
- Allowed firms to submit proposals to accept all the ash or increments of 1/3 of the ash (1/3, 2/3, etc.) to maximize number of potential respondents
- Specified that ash may be suitable for ADC and provided ash characterization information for firms that wanted to pursue the ADC option
- Provided for on-site storage of empty trailers or other support space upon request
- Provided for extended ash loading hours upon request.

The President identified Mark Daley, CFO; Peter Egan, Director of Operations and Environmental Affairs; David Bodendorf, Senior Environmental Engineer; Chris Shepard, Environmental Compliance Manager; and Roger Guzowski, Contract and Procurement Manager to review responses to this RFP.

Advertising the RFP

MIRA issued the RFP in July 2016. In addition to advertising on MIRA website and DAS state contracting portal:

- MIRA directly contacted all of the disposal facilities identified in the HDR report as potentially having capacity to notify them of the RFP (e-mail with link to MIRA website)
- Advertised the RFP in Waste 360 a leading nationwide provider of information and education to the solid waste, recycling, organics, and sustainable communities
- Arranged with Bobit Media, the world's largest fleet publisher and publisher of Heavy Duty Trucking Magazine and several other fleet publications to e-mail advertisement regarding the RFP to a targeted list of 2,500 of their transportation-firm subscribers in the Northeast.

DISCUSSION

RFP Responses

MIRA received responses in September 2016 from 4 firms:

- Casella Waste Systems and their wholly owned subsidiary New England Waste Systems of New York
- Covanta Sustainable Solutions
- Riccelli Enterprises
- Wheelabrator Technologies Inc., and its wholly owned subsidiaries Wheelabrator Putnam Inc. and Wheelabrator Environmental Systems, Inc.

<i>Table 1: Overview</i>			
Respondent	Portion of ash (all, 1/3, 2/3)	Proposed disposal sites (and roundtrip distance)	Transporter
Casella	All or 2/3	Split evenly between Ontario County LF (Western NY – 630 mile round trip) and Clinton County LF (Northern NY - 544 mile round trip)	Buffalo Fuel Corp (NY)
Covanta	All Ash	<ul style="list-style-type: none"> • Reserved right to send to any permitted site that complies with applicable laws at Covanta's sole discretion without regard for any sites identified in RFP. 	Willimantic Waste Paper, Inc. (CT)

ADDITIONAL CONSIDERATIONS

Wheelabrator has offered a \$1/ton discount on the disposal price throughout the term of the Agreement (base term and extension periods), if at the time MIRA executes the Agreement, it simultaneously executes all of the extension periods (effectively making the term 7 ½ years).

The savings to MIRA would be as follows:

<i>Table : Potential Savings During Extension Years</i>		
	Tons during period (assuming 170,000 tons/year)	Savings to MIRA during period (@\$1/ton)
For period from January 1, 2017 – June 30, 2017 (6 months)	85,000	\$85,000
For period from July 1, 2017 – June 30, 2018	170,000	\$170,000
For period from July 1, 2018 – June 30, 2019	170,000	\$170,000
For extension year 1 (7/1/2019 through 6/30/2020)	170,000	\$170,000
For extension year 2 (7/1/2020 through 6/30/2021)	170,000	\$170,000
For extension year 3 (7/1/2021 through 6/30/2022)	170,000	\$170,000
For extension year 4 (7/1/2022 through 6/30/2023)	170,000	\$170,000
For extension year 5 (7/1/2023 through 6/30/2024)	170,000	\$170,000
Total throughout entire term including all extension years		\$1,275,000

As noted in the attached map of disposal facilities, there are limited disposal options within 100 mile radius. As such there is a limited likelihood that a viable alternative develops within 100 mile radius of the CSWS RRF during the term of this Agreement. As such, there is a likelihood that MIRA would ultimately execute many if not all of the extension periods. Thus, given the discount to MIRA, Management recommends accepting this alternative and executing all of the extension periods at the time we execute the Agreement.

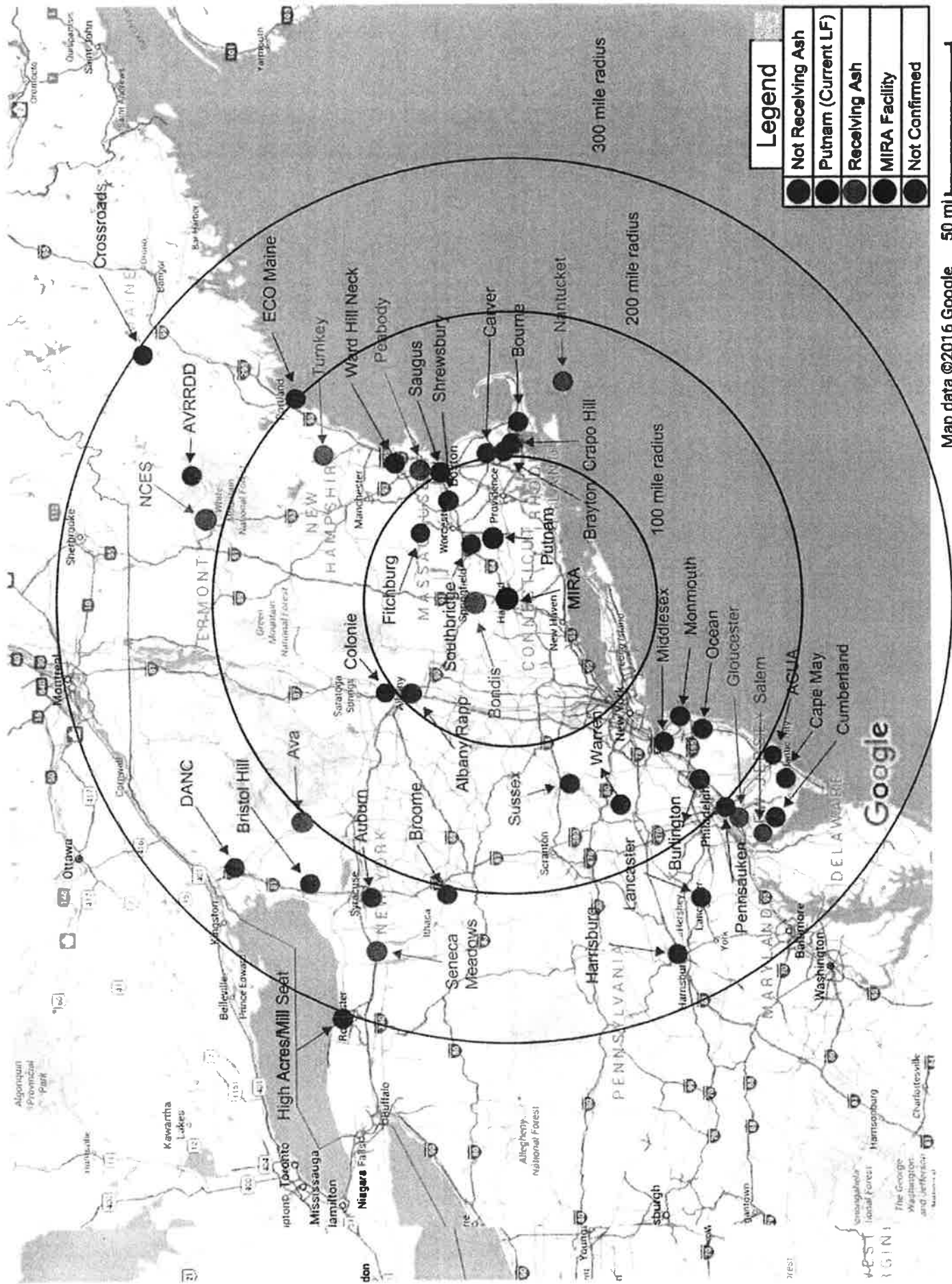


Table 2A: Prices for 100% of Ash Residue

(including annual cost escalation as allowed for in BEP)

	Pricing Components (all prices per ton)	Respondent(s)				
		Covanta	Casella/NE Waste		Ricelli	Wheelabrator
		Any landfill	Ontario County	Clinton County Landfill	Ontario County	Pulnam
For period from January 1, 2017 – June 30, 2017 (6 months)	Base Transportation Price (roundtrip)	not provided	\$ 59.09	\$ 54.55	\$ 70.00	\$ 15.50
	Disposal Price	not provided	\$ 27.00	\$ 27.00	\$ 25.00	\$ 46.50
	Combined T&D	\$ 70.57	\$ 86.09	\$ 81.55	\$ 95.00	\$ 62.00
	T&D for 85,000 tons (1/2 year)	\$ 5,998,450.00	\$ 7,317,650.00	\$ 6,931,750.00	\$ 8,075,000.00	\$ 5,270,000.00
For period from July 1, 2017 – June 30, 2018	Base Transportation Price (roundtrip)	not provided	\$ 59.19	\$ 54.55	\$ 71.00	\$ 15.50
	Disposal Price	not provided	\$ 27.68	\$ 27.00	\$ 26.00	\$ 46.50
	Combined T&D	\$ 72.26	\$ 86.87	\$ 81.55	\$ 97.00	\$ 62.00
	T&D for 170,000 tons	\$ 12,284,825.60	\$ 14,767,900.00	\$ 13,863,500.00	\$ 16,490,000.00	\$ 10,540,000.00
For period from July 1, 2018 – June 30, 2019	Base Transportation Price (roundtrip)	not provided	\$ 60.57	\$ 55.91	\$ 72.00	\$ 15.81
	Disposal Price	not provided	\$ 27.68	\$ 27.68	\$ 27.00	\$ 48.01
	Combined T&D	\$ 74.00	\$ 88.25	\$ 83.59	\$ 99.00	\$ 63.82
	T&D for 170,000 tons	\$ 12,579,661.41	\$ 15,002,500.00	\$ 14,210,300.00	\$ 16,830,000.00	\$ 10,849,400.00
For extension year 1 (7/1/2019 through 6/30/2020)	Base Transportation Price (roundtrip)	not provided	\$ 62.08	\$ 57.31	\$ 73.00	\$ 16.13
	Disposal Price	not provided	\$ 28.37	\$ 28.37	\$ 28.00	\$ 49.45
	Combined T&D	\$ 75.77	\$ 90.45	\$ 85.68	\$ 101.00	\$ 65.58
	T&D for 170,000 tons	\$ 12,981,573.29	\$ 15,376,500.00	\$ 14,565,600.00	\$ 17,170,000.00	\$ 11,148,600.00
For extension year 2 (7/1/2020 through 6/30/2021)	Base Transportation Price (roundtrip)	not provided	\$ 63.63	\$ 58.74	\$ 74.00	\$ 16.45
	Disposal Price	not provided	\$ 29.08	\$ 29.08	\$ 29.00	\$ 50.94
	Combined T&D	\$ 77.59	\$ 92.71	\$ 87.82	\$ 103.00	\$ 67.39
	T&D for 170,000 tons	\$ 13,190,731.05	\$ 15,760,700.00	\$ 14,929,400.00	\$ 17,510,000.00	\$ 11,456,300.00
For extension year 3 (7/1/2021 through 6/30/2022)	Base Transportation Price (roundtrip)	not provided	\$ 65.23	\$ 60.21	\$ 75.00	\$ 16.78
	Disposal Price	not provided	\$ 29.80	\$ 29.80	\$ 30.00	\$ 52.46
	Combined T&D	\$ 79.45	\$ 95.03	\$ 90.01	\$ 105.00	\$ 69.24
	T&D for 170,000 tons	\$ 13,507,308.59	\$ 16,155,100.00	\$ 15,301,700.00	\$ 17,850,000.00	\$ 11,770,800.00
For extension year 4 (7/1/2022 through 6/30/2023)	Base Transportation Price (roundtrip)	not provided	\$ 66.86	\$ 61.71	\$ 76.00	\$ 17.11
	Disposal Price	not provided	\$ 30.55	\$ 30.55	\$ 31.00	\$ 54.04
	Combined T&D	\$ 81.36	\$ 97.41	\$ 92.26	\$ 107.00	\$ 71.15
	T&D for 170,000 tons	\$ 13,831,484.00	\$ 16,559,700.00	\$ 15,684,300.00	\$ 18,190,000.00	\$ 12,095,500.00
For extension year 5 (7/1/2023 through 6/30/2024)	Base Transportation Price (roundtrip)	not provided	\$ 68.53	\$ 63.26	\$ 77.00	\$ 17.46
	Disposal Price	not provided	\$ 31.31	\$ 31.31	\$ 32.00	\$ 55.12
	Combined T&D	\$ 83.31	\$ 99.84	\$ 94.57	\$ 109.00	\$ 72.58
	T&D for 170,000 tons	\$ 14,163,439.61	\$ 16,972,800.00	\$ 16,076,900.00	\$ 18,530,000.00	\$ 12,338,600.00
Subtotal for base period		\$ 30,862,937.01	\$ 37,088,050.00	\$ 35,005,550.00	\$ 41,395,000.00	\$ 26,659,400.00
Subtotal for extension years		\$ 67,574,536.54	\$ 80,824,800.00	\$ 76,557,800.00	\$ 89,250,000.00	\$ 58,809,800.00
Total for base period and all extension years		\$ 98,437,473.55	\$ 117,912,850.00	\$ 111,563,350.00	\$ 130,645,000.00	\$ 85,469,200.00

Covanta does not specify CPI index in their proposal. Assumes 2.4% CPI projected annual average as projected by the Congressional Budget Office for 2018-2026

Tabel 2B: Impact of Fuel Surcharges on price (assuming 100% of ash residue)

Pricing Components (all prices per ton)	Respondent(s)									
	Covanta (Ward Neck) Distance est from HDR report	Covanta (Bondi's Island) Distance est from HDR report	Covanta (Peabody) Distance est from HDR report	Casella/NE Waste (Ontario County)	Casella/NE Waste (Clinton County)	Ricelli (Cumberland County)	Wheelabrator (Putnam)	Wheelabrator (Shrewsbury)	Roundtrip Distance (miles)	Fuel Surcharge per ton per \$0.10 change in fuel (from \$3.40/gallon)
	240	60	240	630	540	600	96	116		
Base price (assumes fuel price of \$3.40/gallon) - For period from January 1, 2017 – June 30, 2017	not provided	not provided	not provided	\$ 59.09	\$ 54.55	\$ 70.00	\$ 15.50	\$ 15.50		
	not provided	not provided	not provided	\$ 27.00	\$ 27.00	\$ 25.00	\$ 46.50	\$ 46.50		
	\$ 70.57	\$ 70.57	\$ 70.57	\$ 86.09	\$ 81.55	\$ 95.00	\$ 62.00	\$ 62.00		
Current Price with Fuel Surcharge (based on most current rate published July 2016)	\$ 68.41	\$ 70.03	\$ 68.41	\$ 80.42	\$ 76.69	\$ 89.60	\$ 61.14	\$ 60.96		
Fuel Surcharge Cone Of Uncertainty - applying a range from the highest monthly index price over last 10 years to the lowest monthly index price over the last 10 years - From July 2006 - June 2016)	\$ 74.17	\$ 71.47	\$ 74.17	\$ 95.54	\$ 89.65	\$ 104.00	\$ 63.44	\$ 63.74		
	\$ 67.93	\$ 69.91	\$ 67.93	\$ 79.16	\$ 75.61	\$ 88.40	\$ 60.94	\$ 60.72		

TAB 3

ATTACHMENT -- 3

Materials Innovation and Recycling Authority Board of Directors
Resolution Concerning the Sale of 1410 Honey Spot Road, Ext. Stratford CT
October 27, 2016 Board Meeting

WHEREAS, the Materials Innovation and Recycling Authority (the "Authority") has previously determined that it is in its best interest to dispose of certain surplus property including the land and buildings located at 1410 Honey Spot Road, Ext. in Stratford CT and comprising a presently vacant recycling facility (the "Property"); and

WHEREAS, the Authority has previously had and an independent appraisal of the market value of the Property conducted by a professional appraisal firm (Wellspeak Dugas & Kane) effective January 29, 2008 and prepared in conformance with the Uniform Standards of Professional Appraisal Practice; and

WHEREAS, the Authority has recently had a second independent appraisal of the current market value of the Property conducted by a professional appraisal firm (Vimini Associates) effective December 23, 2015 and prepared in conformance with the Uniform Standard of Professional Appraisal Practice and the Appraisal Institute; and

WHEREAS, management of the Authority has received and considered multiple offers to purchase the Property, and based upon the written appraisals obtained, recommends proceeding with the sale of the Property to AMEC of Norwalk CT generally in accordance with the terms of their offer dated October 14, 2016.

NOW, THEREFORE, BE IT:

RESOLVED: That the President is authorized to enter into a Purchase and Sale Agreement providing for the sale of the Property to AMEC upon the terms and conditions discussed at this meeting; and

FURTHER RESOLVED, that the President is authorized to enter into a Lease Agreement providing for AMEC's use and occupancy of the Property pending closing of the sale upon the terms and conditions discussed at this meeting; and

FURTHER RESOLVED, that the President is authorized to close the sale of the Property and deposit the net proceeds thereof, including lease payments, into the General Fund of the Authority's Property Division.

TAB 4

MATERIALS INNOVATION AND RECYCLING AUTHORITY



Implementing
sustainable materials
management and
renewable energy
processes

**FISCAL YEAR 2018
OPERATING
& CAPITAL
BUDGET DEVELOPMENT**

**Key Drivers, Trends
and Challenges**

**October 27, 2016
Board Meeting**

Key Drivers

▶ Connecticut Solid Waste System

- ▶ Waste Flow
- ▶ Energy
- ▶ Non Participating Waste
- ▶ Recycling
- ▶ Operating Expenses

▶ Summary Key Drivers (FY 2016 Actual vs. FY 2017 Adopted Budget)

▶ Potential Strategic Plan Modifications for FY 2018 and FY 2019 (Executive Session)

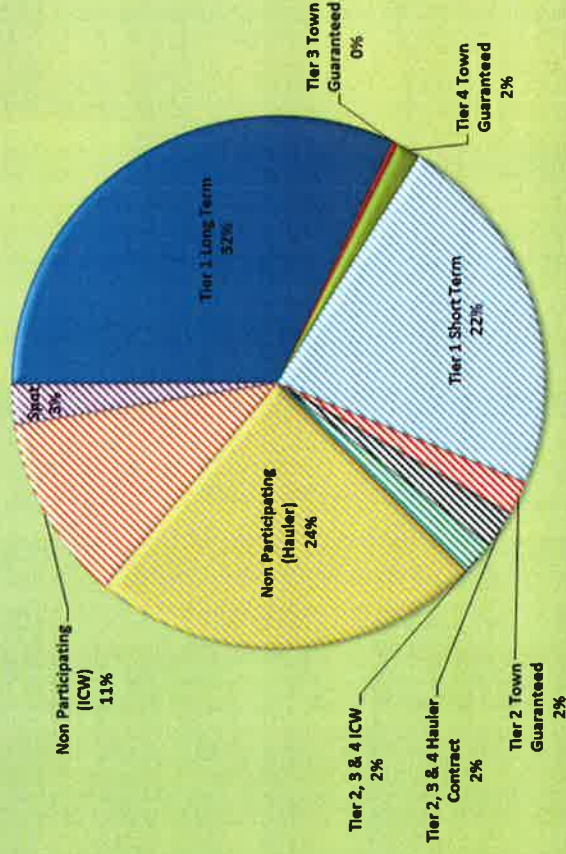
▶ Feedback

CSWS WASTE FLOW

- Total actual MSW deliveries were 143,233 tons (6.7%) under budget over the last three years.
- Tier town guaranteed deliveries were 13,239 (1.2%) under budget over the last three years.
- Hauler contract waste (in excess of tier town guaranteed deliveries) has grown significantly.
- 66% of MSW deliveries in FY 2016 are under contracts expiring 6/30/2017 or spot. A major assumption for FY 2018 budget development is that these deliveries continue within existing contract pricing structure.

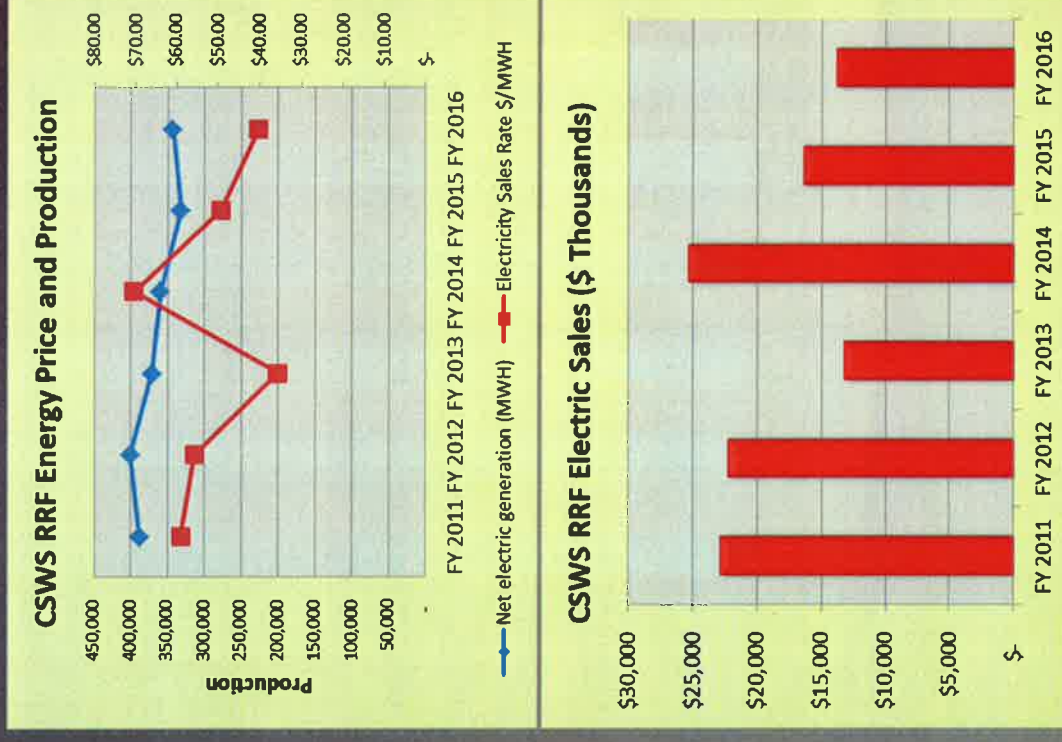
CSWS Waste Flow (MSW Deliveries)					Change (FY 2014 - FY 2016)		
Contract	FY 2014	FY 2015	FY 2016		Tons	Percent	
Tier 1 Long Term	203,979	198,114	204,511		531	0.3%	
Tier 3 Town Guaranteed	2,524	2,481	2,413		(110)	-4.4%	
Tier 4 Town Guaranteed	-	-	9,502		9,502	n/a	
Tier 1 Short Term	145,936	144,931	141,998		(3,937)	-2.7%	
Tier 2 Town Guaranteed	25,736	25,423	13,214		(12,522)	-48.7%	
Tier 2, 3 & 4 Hauler Contract	14,265	17,247	14,591		326	2.3%	
Tier 2, 3 & 4 ICW	23,001	16,152	13,138		(9,863)	-42.9%	
Non Participating (Hauler)	79,342	145,771	151,500		72,158	90.9%	
Non Participating (ICW)	139,515	75,966	72,407		(67,107)	-48.1%	
Spot	41,316	26,202	15,581		(25,734)	-62.3%	
Total Actual	675,614	652,286	638,856		(36,757)	-5.4%	
Total Budget	708,000	711,000	691,000		(17,000)	-2.4%	
Total Variance	(32,386)	(58,714)	(52,144)		n/a	n/a	

FY 2016 CSWS Waste Deliveries - 66% Under Contract Expiring 6/30/2017 (Hatched Categories)



CSWS ENERGY

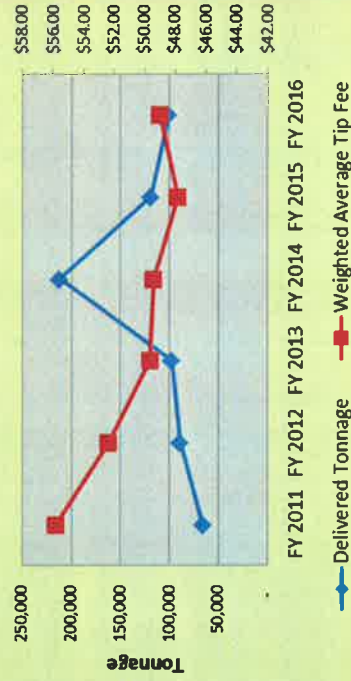
- CSWS resource recovery facility energy production has been in decline (45,028 MWH or 11.6% from FY 2011 to FY 2016).
- MIRA has undertaken major overhaul work to address this decline. Production increased from 332,092 MWH in FY 2015 to 343,429 FY 2016 (3.4%).
- The net yield (price) MIRA receives for its CSWS resource recovery facility power has also been in decline. Price declined from \$58.95 / MWH in FY 2011 to \$40.26 / MWH in FY 2016 (31.7%).
- Price and production have significantly impacted CSWS resource recovery facility energy revenue. Revenue declined from \$22.9 million in FY 2011 to \$13.8 million in FY 2016 (39.6%).
- Current price and production estimates indicate the FY 2018 budget may need to reflect a significant reduction in energy revenue from the current FY 2018 Strategic Plan level.



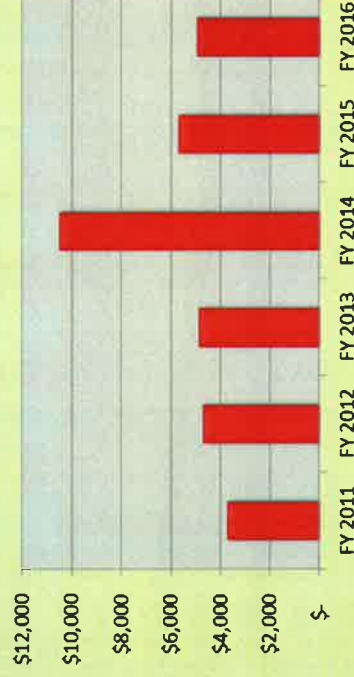
CSWS NON-PARTICIPATING WASTE

- ▲ In transition from MidConn, CSWS has increasingly relied on "Non-Participating" waste to fully utilize plant capacity. Non-Participating Waste represents deliveries not priced at Municipal Service Agreement tier levels.
- ▲ Non-Participating waste deliveries increased from 66,302 tons in FY 2011 to 101,127 tons in FY 2016 (52.5%) and spiked in FY 2014.
- ▲ Tip fees for Non-Participating waste decreased from \$55.78 / ton in FY 2011 to \$49.00 / ton in FY 2016 (12.2%).
- ▲ Deliveries and tip fees combined to produce an increase in revenue from Non-Participating Waste from \$3.7 million in FY 2011 to \$5.0 million in FY 2016 (34.0%) including the spike in FY 2014.
- ▲ Non-Participating waste is defined as Non Disposal Fee Revenue in the CSWS Business Model.
- ▲ Relying on lower priced non-participating waste puts pressure on municipal tip fees (which are capped). This in turn causes increased reliance on the CSWS Tip Fee Stabilization Fund.
- ▲ Current price and delivery values indicate the FY 2018 budget may need to reflect a significant reduction in non-participating waste revenue from the current FY 2018 Strategic Plan level.

Non-Participating Waste Deliveries and Tip Fee

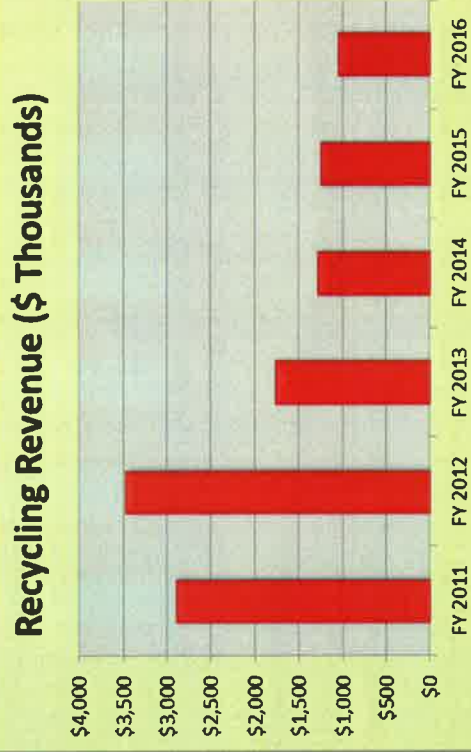
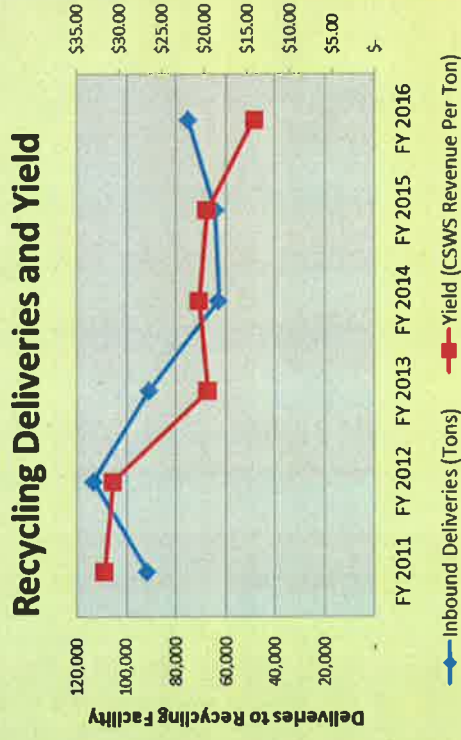


Non-Participating Waste Revenue (\$ Thousands)

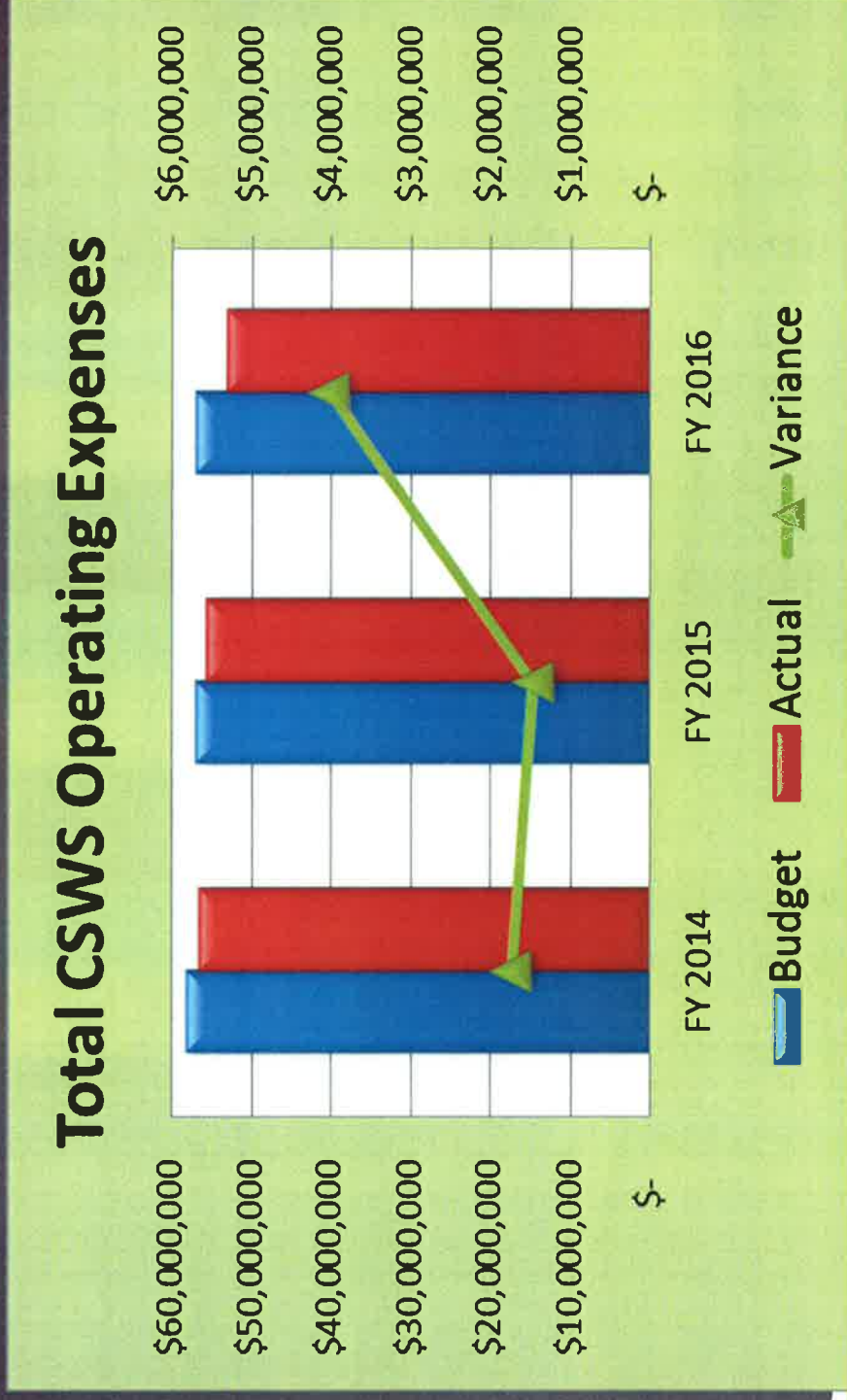


CSWS RECYCLING

- While CSWS recycling deliveries have declined overall from 91,608 tons in FY 2011 to 75,107 tons in FY 2016 (18.0%), deliveries have been rebounding for the last two years.
- The yield MIRA receives for its recycled material (total revenue per ton) has declined from \$31.72 per ton in FY 2011 to \$14.15 per ton in FY 2016 (55.4%).
- Deliveries and yield have significantly impacted CSWS recycling revenue. Recycling revenue declined from \$2.9 million in FY 2011 to \$1.1 million in FY 2016 (63.4%).
- Underlying factors for this decline include:
 - MIRA's evolution from the Bridgeport, Southwest and MidConn projects.
 - Recent / steep decline in recycling commodity sales markets.
 - Change in contract operation of recycling facility.
- Current price and delivery values indicate the FY 2018 budget may not produce a recycling rebate (same as FY 2017 adopted budget) and may need to reflect a significant reduction in revenue from other recovered products from the current FY 2018 Strategic Plan level



CSWS BUDGET VS. ACTUAL OPERATING EXPENSE



SUMMARY COMPARISON OF KEY DRIVERS

- Potential Strategic Plan Updates for FY 2018 and FY 2019:

- MSW Deliveries
- Energy Generation
- Recycling Revenue
- Operating Expenses
- Tip Fees and Tip Fee Stabilization Funding

	FY 2016 Actual	FY 2017 Budget	Variance (FY 2016 - FY 2017)
Resource Recovery Facility Operations			
MSW Deliveries			
Aggregate Tons	371,638	378,500	(6,862)
Hauler Contract	166,091	142,800	23,291
Other Contract	85,546	95,000	(9,454)
Spot	32,385	98,700	(66,315)
Municipal Bulky	1,299	3,000	(1,701)
Total MSW Deliveries	656,959	718,000	(61,041)
Total MSW to RDF Production Rate	96.283%	98.747%	-2.463%
Total RDF	632,542	709,000	(76,458)
RDF to KWH Production Rate	542.93	543.02	(0.08)
Energy Production	343,428,940	385,000,000	(41,571,060)
Contract / Non Contract Energy Price	\$ 0.04025	\$ 0.04344	(0.0032)
RDF to Ash Production Rate	26.72%	25.11%	1.61%
Ash to Disposal	169,006	178,000	(8,994)
Ash Disposal Cost Per Ton	\$ 57.53	\$ 58.29	\$ (0.76)
Recycling Operations			
CSWS Sourced Recyclables	56,734	50,000	6,734
FCR Sourced Recyclables	18,373	10,000	8,373
Total Recycling Deliveries	75,107	60,000	15,107

TAB 5

RESOLUTION REGARDING REPAIR AND UPGRADE OF THE SOLAR EGF AT THE HARTFORD LANDFILL

WHEREAS, the Authority owns and operates a Solar Electricity Generating Facility (“Solar EGF”) at the Hartford Landfill; and

WHEREAS, the Solar EGF suffered a malfunction on or about August 14, 2016; and

WHEREAS, the Authority and its I&M Contractor, E. T. & L. Corporation (“ET&L”) investigated the malfunction and discovered damage consistent with a power surge that was likely caused by a lightning strike; and

WHEREAS, the Authority’s insurer has inspected the damage and the repair estimate, and recommends the Authority proceed with repairs and the installation of additional surge protection and grounding for the Solar EGF; and

WHEREAS, the repairs are estimated to cost \$86,050 and recommended protective measures are estimated to cost \$15,000; and

NOW, THEREFORE, BE IT:

RESOLVED: That the Board of Directors authorizes the President to contract with ET&L to coordinate and pay for the required repairs and recommended protective measures substantially discussed and presented at this meeting.

Materials Innovation and Recycling Authority

Contract Summary for Contract Entitled

N/A (Purchase Order)

Presented to the MIRA Board on:	October 27, 2016
Vendor/ Contractor(s):	ET&L Corp.
Effective date:	Upon Issuance of Purchase Order
Contract Type/Subject matter:	Purchase Order Agreement for repair and recommended surge protection for Solar EGF
Facility Affected:	Hartford Landfill Solar EGF
Original Contract:	N/A
Term:	N/A (repairs expected to take 3 weeks)
Contract Dollar Value:	\$101,000 (based on repair estimate and expected cost of recommended additional surge protection work)
Amendment(s):	None
Term Extensions:	N/A
Scope of Services:	ET&L Corp. will coordinate and manage repair and upgrade work through various appropriate subcontractors. MIRA pays ET&L for all work.
Other Pertinent Provisions:	None

Materials Innovation and Recycling Authority Hartford Landfill Solar EGF Repair

October 27, 2016

Executive Summary

This is to request authorization by the Board of Directors for the President to enter into a Purchase Order Agreement with ET&L Corporation for the purpose of repairing damage to the Solar EGF that was caused by an apparent lightning strike, and for installing protective measures to minimize the risk of another electrical surge.

Discussion

During the overnight hours between August 13, 2016 and August 14, 2016, MIRA's Solar EGF at the Hartford landfill suffered a malfunction causing it to trip off-line. On Monday, August 15, MIRA Staff discovered what initially appeared to be a communication error with the Solar EGF. Subsequent inspection and testing by MIRA and ET&L over the next several weeks revealed a catastrophic failure within the DC side of Inverter 1, and a failure within Transformer 2. These failures resulted in both halves of the one megawatt facility tripping off-line. The damage to the system was consistent with damage caused by a surge of electricity.

Due to the timing of the electrical surge, frequent lightning activity near the landfill at the time of the outage, and a lack of evidence that would support an equipment malfunction, the malfunction was believed to be caused by a lightning strike. On September 2, 2016, MIRA filed a claim with its insurance carriers through its broker, Beecher Carlson.

On October 6, 2016, the insurance adjuster for the claim sent an engineer to inspect the Solar EGF and the damaged equipment. The engineer agreed that the damage was consistent with a lightning strike and that MIRA should proceed with repairs. Furthermore, the engineer recommended additional protective measures be installed on the Solar EGF to minimize the likelihood of such damage in the future.

ET&L has provided MIRA with an estimate of \$86,050 for administration and repair of the damaged equipment. ET&L also provided information indicating the installation of additional surge protection and grounding consistent with the recommendation of the adjuster's engineer could be completed for \$15,000 or less.

Repair Schedule

ET&L estimates the repair of the system to be complete within approximately three weeks of receiving notice to proceed from MIRA.

Financial Summary

Repair cost of the Solar EGF is estimated at \$86,050. Installation of additional surge protection and grounding is estimated at \$15,000. These costs will result in an initial, out of pocket expenditure by MIRA of approximately \$101,000. MIRA will be reimbursed by its insurer for the repair cost, less a \$50,000 deductible. As per MIRA's Site Access Agreement with the City of Hartford, the City is responsible for one half of the costs associated with the system, in this case, one half of the \$50,000 deductible. This results in a final out of pocket expense of \$25,000 to MIRA.

In addition, MIRA will be reimbursed by its insurer for lost energy and REC revenue as of September 27, 2016 (the date upon which MIRA's insurer began compensating for lost revenue). This equates to approximately \$630/day during the month of October and \$440/day during the month of November based on expected generation.