



MEMORANDUM

TO: MIRA Board of Directors
FROM: Donald S. Stein
DATE: October 4, 2019
RE: Notice of Regular Board Meeting

There will be a regular meeting of the Board of Directors of the Materials Innovation and Recycling Authority (MIRA) *on Wednesday, October 9, 2019 at 9:30 a.m. in the Board Room at 200 Corporate Place, Suite 202, Rocky Hill, CT. 06067.*

- I. Pledge of Allegiance
- II. Public Comment – 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.
- III. Review and Approve – September 18, 2019 Board Meeting Minutes (*Attachment 1*).
- IV. Finance Committee Report.
 - a. Board action will be sought for Resolution establishing the CSWS Major Maintenance Reserve (*Attachment 2*).
 - b. Discussion of proposed Fiscal Year 2021 Budget Development Schedule (*Attachment 3*).
- V. OS & HR Committee Report
- VI. Policies and Procurement Committee Report:
 - a. Board action will be sought for Resolution Regarding contract with environmental engineering firm to undertake abandonment of groundwater monitoring wells (*Attachment 4*).
 - b. Board action will be sought for Resolution Regarding Market Driven Purchase of Solid Waste Disposal Capacity associated with Diversion of Municipal Solid Waste from MIRA's CSWS (*Attachment 5*).
 - c. Board action will be sought for Resolution Regarding Purchase of a Caterpillar 966M Wheel Loader for the Waste Processing Facility (*Attachment 6*).
 - d. Board action will be sought for Resolution Regarding an Agreement with TG Advisors, Inc., to undertake a root cause analysis of the Turbine 5 rotor failures (*Attachment 7*).
- VII. Chairman and President's Report
 - a. Attached Supplemental Information / Other Matters
 - b. Discussion of Proposed 2020 Board and Committee Meeting Schedule (*Attachment 8*).
- VIII. Executive Session will be held to discuss pending litigation, security matters, feasibility estimates and evaluations, personnel matters, trade secrets and pending RFP's.

TAB 1

MATERIALS INNOVATION AND RECYCLING AUTHORITY

FIVE HUNDRED AND FIVE

September 18, 2019

A Regular Board meeting of the Materials Innovation and Recycling Authority Board of Directors was held on Wednesday, September 18, 2019 in the Board Room at Suite 202, 200 Corporate Place, Rocky Hill, CT 06067. Those present were:

Directors:

Chairman Stein
Vice-Chairman Dick Barlow
John Adams
Edward Bailey
Carl Fortuna, Jr.
Jim Hayden
Bob Painter
Patricia Widlitz (present via telephone/arrived at 10am in person)
Thomas Swarr, CSWS Project Ad Hoc
Luke Bronin, CSWS Project Ad Hoc (in person at 9:50am)

Present from MIRA:

Tom Kirk, President
Mark Daley, Chief Financial Officer
Laurie Hunt, Director of Legal Services
Peter Egan, Director of Operations and Environmental Affairs
Jeffrey Duvall, Director of Budgets & Forecasting
Thomas Gaffey, Director of Recycling & Enforcement
Christopher Shepard, Environmental Compliance Manager
Cheryl Kaminsky, Manager of Accounting and Financial Reporting
Vicki Arnum, Buyer/Administrative Assistant

Public Present:

Ann Catino, General Counsel, Halloran & Sage
John Pizzimenti, USA Hauling
John Doyle, Doyle, D'Amore & Balducci

Chairman Stein called the meeting officially to order at 9:31 a.m. and said that 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. As there were no members of the public who wished to address the Board, the meeting commenced.

APPROVAL OF THE JULY 1ST, 2019, BOARD MEETING MINUTES

Chairman Stein requested a motion to approve the minutes of the July 1, 2019 Board meeting. Director Adams made the motion which was seconded by Director Barlow.

The motion previously made and seconded was approved by roll call. Chairman Stein, Vice-Chairman Barlow, Director Adams, Director Bailey, Director Hayden, Director Painter, and Director Widlitz voted yes. Director Fortuna abstained.

Directors	Aye	Nay	Abstain
Chairman Stein	X		
Vice Chairman Barlow	X		
John Adams	X		
Edward Bailey	X		
Carl Fortuna, Jr			X
Jim Hayden	X		
Bob Painter	X		
Pat Widlitz	X		

APPROVAL OF THE JULY 17, 2019, BOARD MEETING MINUTES

Chairman Stein requested a motion to approve the minutes of the July 17, 2019 Board meeting. Director Barlow made the motion which was seconded by Director Adams.

The motion previously made and seconded was approved by roll call. Chairman Stein, Vice-Chairman Barlow, Director Adams, Director Bailey, Director Hayden, Director Painter, Director Widlitz, Ad Hoc Member Swarr and Ad Hoc Member Bronin voted yes. Director Fortuna abstained.

Directors	Aye	Nay	Abstain
Chairman Stein	X		
Vice Chairman Barlow	X		
John Adams	X		
Edward Bailey	X		
Carl Fortuna, Jr			X
Jim Hayden	X		
Bob Painter	X		
Pat Widlitz	X		
Ad Hoc Members	Aye	Nay	Abstain
Tom Swarr, CSWS Ad Hoc	X		
Luke Bronin, CSWS Ad Hoc	X		

APPROVAL OF THE AUGUST 14, 2019, BOARD MEETING MINUTES

Chairman Stein requested a motion to approve the minutes of the August 14, 2019 Board meeting. Director Barlow made the motion which was seconded by Director Adams.

The motion previously made and seconded was approved by roll call. Chairman Stein, Vice-Chairman Barlow, Director Adams, Director Bailey, Director Hayden, Director Painter, Director Widlitz, Ad Hoc Member Swarr and Ad Hoc Member Bronin voted yes. Director Fortuna abstained.

Directors	Aye	Nay	Abstain
Chairman Stein	X		
Vice Chairman Barlow	X		
John Adams	X		

Edward Bailey	X		
Carl Fortuna, Jr			X
Jim Hayden	X		
Bob Painter	X		
Pat Widlitz	X		
Ad Hoc Members	Aye	Nay	Abstain
Tom Swarr, CSWS Ad Hoc	X		
Luke Bronin, CSWS Ad Hoc	X		

FINANCE COMMITTEE:

REVIEW AND RECOMMEND RESOLUTION REGARDING ACCEPTING THE AUTHORITY’S FISCAL YEAR 2019 ANNUAL FINANCIAL REPORT.

Chairman Stein requested a motion on the above referenced item. The motion to approve was made by Director Hayden and seconded by Director Painter.

RESOLVED: That the Board of Directors hereby accepts the Fiscal Year 2019 Annual Financial Report as discussed and presented in this meeting.

Mr. Daley informed the Committee that the Fiscal Year 2019 draft Audited Financial Report was presented to the Finance Committee last week. Mike VanDeventer of Mahoney & Sabol was present to review the audit results. Mr. Daley took the Committee through the financial and economic results in detail. With respect to audit results, Mahoney & Sabol is issuing a clean, unmodified opinion and further noted no instances of non-compliance with laws or material weaknesses in internal controls. Mr. Daley said that the next step is to receive the legal letters from our outside counsels so that the contingencies note can be finalized as close to audit production as possible. The draft note is highlighted in the draft report.

Mr. Daley said, we will also provide an update on any subsequent events to Mahoney Sabol; but we don’t expect any at this time. MIRA will need to execute our management representation letter and then file the report by September 30, 2019. With regard to finances and economics, the management discussion and analysis included in the report fully documents the

most challenging year MIRA has faced from operational, financial and redevelopment perspectives.

Mr. Daley said, operationally our turbine failure and repair schedule left us with no capacity for three months, one functioning turbine for four months and two functioning turbines for 5 months. During the five months of two turbine operations, our boiler availability was only 73%. Poor plant performance resulted in the need to divert 111,693 tons of waste in 2019, equating to a 22% drop in waste processed and a 25% drop in energy generation.

Mr. Daley said financial impacts were substantial, especially relative to budget, and are fully documented in the report along with the steps taken to manage the challenge financially. Those steps included declaring Force Majeure events under Hauler contracts and MSAs, stopping Non-participating deliveries, and assessing additional cost recovery. Furthermore, we reallocated operating and capital resources for diversion and repairs, increased the subsidy of CSWS through the Tip Fee Stabilization fund and Property Division General Fund, drew down CSWS operating accounts, and aggressively developed business interruption, extra expense and property damage insurance claims. MIRA also received insurance proceeds in a structured manner to reimburse the reserves drawn upon, starting with Property Division general fund, and restructured the CSWS business model moving forward to provide more flexibility and efficiency when necessary to reduce deliveries.

Mr. Daley said we have been reporting the status of the redevelopment process as part of our economic outlook over the last several years. This year we report that MIRA resolved the project structuring challenges that have slowed progress on the CSWS redevelopment by executing an MOU with SRRT that established a staged development framework with refurbishment of the waste to energy facility as the priority, a capacity and revenue sharing model, performance guarantees, public governance, authority finance of WTE, SRRT finance of the MBT, and strict deadlines to move forward with a term sheet and Comprehensive Development Agreement.

Furthermore, Mr. Daley said, with respect to the Fiscal Year 2019 audited financial performance, total operating revenue actually increased by 3.6 million or 4.9% for the year. CSWS member service charges actually increased by \$5.7 million, that's 22.5% for the year. The deliveries of the member towns were up by 12% because of the addition of Newington and East Hartford's change to a Long Term Tier 1 MSA. We also increase the Tip Fee by \$4 and we imposed additional cost recovery in the fourth quarter of \$9.35 a ton, which brought in about \$1.1 million; those three things combined to increase member service charges by \$5.7 million. Energy revenues increased by \$2.75 million, or 9% for the year; that's all attributed to the Property Division capacity payments, which increased by roughly \$3.4 million. CSWS energy revenues were down by roughly \$660,000, which actually is not bad under the circumstances. Energy generation was down 25% for the year, but that was largely offset by legislatively enhanced Class II Renewable Energy Credits.

Mr. Daley said Non-participating service charges were down \$4.5 million or 32% due to the status of the plant. Deliveries were down 38.5% compared to last year. However, all of the deliveries of non-participating waste came in under the hauler contracts at the highest price; there

were zero tons of discounted waste in Fiscal Year 2019. In addition, deliveries to a transfer station paid a \$2 per ton surcharge. Non-operating revenue increased by \$8 million and that's all attributed to the booking of the insurance proceeds from the turbine failures. MIRA had \$11.6 million in insurance proceeds for business interruption, extra expense and property damage. \$7.9 million for business interruption/extra expense and \$3.7 million for property damage totals \$11.6 million in insurance proceeds for this year, in comparison to \$3.7 million last year in a matter of *CRRA v. Lay*.

Mr. Daley said operating expenses before depreciation increased by \$10.4 million, or 18%. There's really two main factors behind that. Solid waste operations were up \$8.5 million, or 16.5%; that's attributed to the diversions of the 112,000 tons of waste at \$12 million. Furthermore, he said, savings in other areas include waste transport and ash of \$3.6 million. Maintenance and utilities increased by \$1.9 million over last year. There were two main reasons for the increase. First, MIRA purchased energy from the grid to process waste when the plant was down. This allowed us to densify waste and increase storage capacity while turbine repairs were underway, but increased utilities expense by \$0.78 million. We have also reached the end of the book value useful life of major components of the waste to energy facility which has the effect of reducing capitalized expenses and increasing maintenance costs.

Mr. Daley added that depreciation expense increased \$17.6 million, or 82% and that is also related to the end of the book value useful life of major components of the waste to energy facility. For example, in Fiscal Year 2019, \$15.3 million in current year boiler work had to be fully depreciated and this was a major factor contributing to this increase. In terms of the bottom line, the Authority generated \$9.97 million in income before depreciation in Fiscal Year 2019. After depreciation and net non-operating revenue our net position declined by \$17.6 million.

Mr. Daley said Cheryl Kaminsky did a great job taking over the fourth quarter after Deepa Krishna resigned and closed the year and coordinated all aspects of the audit while training others hired or promoted to the vacated positions.

Chairman Stein said the audit is very commendable. The report from the auditor indicates that MIRA's management of financing and accounting is being performed properly, in accordance with good accounting principles and procedures.

The motion previously made and seconded was approved unanimously by roll call. Chairman Stein, Vice-Chairman Barlow, Director Adams, Director Hayden, Director Bailey, Director Fortuna, Director Painter, and Director Widlitz voted yes.

Directors	Aye	Nay	Abstain
Chairman Stein	X		
Vice Chairman Barlow	X		
John Adams	X		

Edward Bailey	X		
Carl Fortuna Jr	X		
Jim Hayden	X		
Bob Painter	X		
Pat Widlitz	X		

POLICIES AND PROCUREMENT COMMITTEE

REVIEW AND RECOMMEND RESOLUTION REGARDING PURCHASE OF DISCRETE EMISSION REDUCTION CREDITS (DERCS).

Chairman Stein requested a motion on the above referenced item. The motion to approve was made by Director Adams and seconded by Director Bailey.

RESOLVED: That the President is hereby authorized to enter into an agreement for the purchase of Discrete Emission Reduction Credits (DERCs) from Pfizer, Inc. to ensure compliance with nitrogen oxide (NOx) emissions limitations applicable to the South Meadow Station Jet Turbine Facility.

Mr. Egan said this is the purchase of 15 Emission Reduction Credits, 14 of which will give MIRA what we need for the final five months that we will be permitted to operate the Jet Turbine Facility under the Trading Order. There are three organizations in the state of Connecticut that produce these credits, which theoretically would be available for purchase by MIRA. Two of those three organizations were not inclined to want to sell any at this time. Pfizer was, so we went ahead and arranged the purchase of these Emission Reduction Credits. The total amount is \$54,500, which is below what we have in the Property Division budget for this purchase. MIRA will buy seven 2018 vintage credits that were manufactured in the ozone season for \$4,000 each, seven that were created in a non-ozone season for \$3,500 each, and one 2017 vintage, which was \$2,000.

The motion previously made and seconded was approved unanimously by roll call. Chairman Stein, Vice-Chairman Barlow, Director Adams, Director Fortuna, Director Bailey, Director Hayden, Director Painter, Director Widlitz voted yes.

Directors	Aye	Nay	Abstain
Chairman Stein	X		
Vice Chairman Barlow	X		
John Adams	X		

Edward Bailey	X		
Carl Fortuna, Jr	X		
Jim Hayden	X		
Bob Painter	X		
Pat Widlitz	X		
Ad Hoc Members	Aye	Nay	Abstain
Tom Swarr, CSWS Ad Hoc			
Luke Bronin, CSWS Ad Hoc			

REVIEW AND RECOMMEND RESOLUTION REGARDING MARKET DRIVEN PURCHASE OF SOLID WASTE DISPOSAL CAPACITY ASSOCIATED WITH DIVERSION OF MUNICIPAL SOLID WASTE FROM MIRA'S CSWS.

Chairman Stein requested a motion on the above referenced item. The motion to approve was made by Director Adams and seconded by Director Bailey.

WHEREAS: From time-to-time MIRA must divert waste from the CSWS due to elevated MSW inventory levels at the CSWS Resource Recovery Facility (RRF) that may occur periodically; Now therefore, be it

RESOLVED: that the President is authorized to enter into market driven purchases of transportation and disposal services in accordance with the requisitions included in Table 1 substantially as discussed and presented at this meeting.

Mr. Kirk said this is an acknowledgment of a market-based purchase of services for disposal and transportation associated with the diversions required due to our most recent turbine outage -- Turbine 5 had to be removed from site for continued repairs.

Mr. Kirk said that we are now operating under our 2020 waste disposable contracts with our private haulers. Pursuant to those contracts, we declared an impairment period, which allows us to pass on the costs of these diversions to our customers after a two week notice, if the hauler chooses to continue delivering non-participating waste. (Obviously, they are also given the option of not delivering such waste if they have a better option.) That worked out pretty well for us, though a hardship on our customers, -- but it was not a cost that had to be socialized into their regular tipping fee moving forward.

The motion previously made and seconded was approved unanimously by roll call. Chairman Stein, Vice-Chairman Barlow, Director Adams, Director Fortuna, Director Bailey, Director Hayden, Director Painter, Director Widlitz, Ad Hoc Member Swarr and Ad Hoc Member Bronin voted yes.

Directors	Aye	Nay	Abstain
Chairman Stein	X		
Vice Chairman Barlow	X		
John Adams	X		
Edward Bailey	X		
Carl Fortuna, Jr	X		
Jim Hayden	X		
Bob Painter	X		
Pat Widlitz	X		
Ad Hoc Members	Aye	Nay	Abstain
Tom Swarr, CSWS Ad Hoc	X		
Luke Bronin, CSWS Ad Hoc	X		

REVIEW AND RECOMMEND RESOLUTION REGARDING SIGNATORY AUTHORITY FOR ENVIRONMENTAL REGULATORY AND COMPLIANCE SUBMITTALS.

Chairman Stein requested a motion on the above referenced item. The motion to approve was made by Director Adams and seconded by Director Bailey.

RESOLVED: Pursuant to Conn. Gen. Stat. Section 22a-277(c) the board hereby authorizes the President to delegate to Peter W. Egan, Director of Operations and Environmental Affairs, as duly authorized representative of the Authority, the authority to sign regulatory and permit-required applications, reports and other applicable information submitted by the Authority to the Connecticut Department of Energy & Environmental Protection, in connection with air, water, and solid waste compliance and permitting programs, substantially as presented and discussed at this meeting. This delegation of authority, in the President's opinion, would be appropriate for the prompt and orderly transaction of the business of the Authority.

Mr.Kirk said this is a return to prior standard operating procedures, having Peter Egan authorized by me to be a signatory for certain environmental reports required by permits.

The motion previously made and seconded was approved unanimously by roll call. Chairman Stein, Vice-Chairman Barlow, Director Adams, Director Fortuna, Director Bailey, Director Hayden, Director Painter, and Director Widlitz voted yes.

Directors	Aye	Nay	Abstain
Chairman Stein	X		
Vice Chairman Barlow	X		
John Adams	X		
Edward Bailey	X		
Carl Fortuna, Jr	X		
Jim Hayden	X		
Bob Painter	X		
Pat Widlitz	X		
Ad Hoc Members	Aye	Nay	Abstain
Tom Swarr, CSWS Ad Hoc			
Luke Bronin, CSWS Ad Hoc			

CHAIRMAN AND PRESIDENTS REPORT

Mr. Kirk presented the Board with information on operations and financial data, reflecting the performance of the organization for the reporting period through June 30 & July 31st, 2019. He said the facility operated without any public health and safety risk throughout the period. Mr. Kirk provided a brief update on the turbine issues, repairs, property insurance and business expenses.

EXECUTIVE SESSION

Chairman Stein requested a motion to enter into Executive Session to discuss pending litigation and pending RFP responses, potential lease of MIRA real estate, trade secrets, personnel matters, security matters, and feasibility estimates and evaluations. The motion was made by Director Bailey and seconded by Director Hayden. Chairman Stein requested that the following people remain for the Executive Session, in addition to the Board members:

Tom Kirk
 Mark Daley
 Peter Egan
 Laurie Hunt
 Ann Catino, Legal Counsel

The motion previously made and seconded was approved unanimously. Chairman Stein, Vice-Chairman Barlow, Director Adams, Director Fortuna, Director Bailey, Director Hayden, Director Painter, Director Widlitz, Ad Hoc Member Swarr and Ad Hoc Member Bronin voted yes.

Directors	Aye	Nay	Abstain
Chairman Stein	X		
Vice Chairman Barlow	X		
John Adams	X		
Edward Bailey	X		
Carl Fortuna, Jr	X		
Jim Hayden	X		
Bob Painter	X		
Pat Widlitz	X		
Ad Hoc Members	Aye	Nay	Abstain
Tom Swarr, CSWS Ad Hoc	X		
Luke Bronin, CSWS Ad Hoc	X		

The Executive Session commenced at 10:22 a.m.

The meeting was reconvened at 11:53 a.m. The door was opened, and the Board Secretary and all members of the public (of which there were none) were invited back in for the continuation of public session. Chairman Stein noted that no votes were taken.

ADJOURNMENT

Chairman Stein requested a motion on the above-referenced item. The motion was made by Director Adams and seconded by Director Hayden.

The motion previously made and seconded was approved unanimously. Chairman Stein, Vice-Chairman Barlow, Director Adams, Director Fortuna, Director Bailey, Director Hayden, Director Painter, Director Widlitz, Ad Hoc Member Swarr and Ad Hoc Member Bronin voted yes.

Directors	Aye	Nay	Abstain
Chairman Stein	X		
Vice Chairman Barlow	X		
John Adams	X		
Edward Bailey	X		
Carl Fortuna, Jr	X		
Jim Hayden	X		
Bob Painter	X		
Pat Widlitz	X		
Ad Hoc Members	Aye	Nay	Abstain
Tom Swarr, CSWS Ad Hoc	X		
Luke Bronin, CSWS Ad Hoc	X		

There being no other business to discuss, the meeting adjourned at 11:54 a.m.

Respectfully Submitted,

Kanchan Arora
Consultant

TAB 2

**RESOLUTION FOR THE MATERIALS INNOVATION AND RECYCLING AUTHORITY BOARD OF DIRECTORS
REGARDING ESTABLISHING THE CSWS MAJOR MAINTENANCE RESERVE**

WHEREAS, This Board has previously established the CSWS Improvement Fund as part of the Authority's Property Division for the purpose of funding and reporting CSWS capital expenses and fixed asset improvements; and

WHEREAS, Substantial components of the resource recovery facility have reached or are nearing their book value end of useful life and have been or will be fully depreciated which means that expenditures for these elements are no longer capital and should be expensed to the CSWS Division; and

WHEREAS, To properly record and track these CSWS expenses, a new CSWS Major Maintenance Reserve needs to be created within the CSWS Division and funded pursuant to applicable components of the adopted Fiscal Year 2020 budget.

NOW THEREFORE, be it

RESOLVED: That management is authorized to establish and create a CSWS Major Maintenance Reserve within the Authority's CSWS Division and the State's Short Term Investment Fund (STIF); and

FURTHER RESOLVED: The CSWS Major Maintenance Reserve shall be funded pursuant to the Authority's Flow of Funds Procedure in applicable amounts of the adopted Fiscal Year 2020 CSWS Improvement Fund Budget as shown on Exhibit A attached hereto; and

FURTHER RESOLVED: That management is authorized, subject to the adopted Fiscal Year 2020 CSWS Improvement Fund Budget, to transfer funds between the CSWS Major Maintenance Reserve and the CSWS Improvement Fund as needed to fund actual operating and capital expenses incurred.

Capital and Expense Distribution For The FY 2020 CSWS Improvement Fund Contributions

	CSWS Improvement	Major Maintenance	Adopted Budget
	Fund	Reserve	
	<u>Capitalized (PD)</u>	<u>Expensed (CSWS)</u>	<u>Total</u>
Waste Processing Facility:			
Conveyor refurbishment	\$ -	\$ 800,000	\$ 800,000
Purchase new loader	\$ 600,000	\$ -	\$ 600,000
Concrete repair of tip floor	\$ -	\$ 340,000	\$ 340,000
Building and site repairs	\$ -	\$ 310,000	\$ 310,000
Trommel and shredder refurbishment	\$ -	\$ 205,000	\$ 205,000
Office refurbishment	\$ -	\$ 100,000	\$ 100,000
New terminator rotor	\$ 60,000	\$ -	\$ 60,000
Total WPF	\$ 660,000	\$ 1,755,000	\$ 2,415,000
Power Block:			
	<u>Capitalized (PD)</u>	<u>Expensed (CSWS)</u>	<u>Total</u>
Bag house repairs	\$ -	\$ 1,870,000	\$ 1,870,000
Primary/secondary super heaters	\$ -	\$ 2,800,000	\$ 2,800,000
Turbine 5&6 oil conditioner replacement	\$ 200,000	\$ -	\$ 200,000
Inlet/outlet duct repairs	\$ -	\$ 2,200,000	\$ 2,200,000
Tubes/water walls	\$ -	\$ 1,500,000	\$ 1,500,000
Auger bin, scrubber inlet scrolls & grate repairs	\$ -	\$ 875,000	\$ 875,000
Other	\$ -	\$ 1,681,000	\$ 1,681,000
Total PBF	\$ 200,000	\$ 10,926,000	\$ 11,126,000
Transfer Stations			
	<u>Capitalized (PD)</u>	<u>Expensed (CSWS)</u>	<u>Total</u>
Roof repairs	\$ -	\$ 50,000	\$ 50,000
Tip floor & concrete repairs	\$ -	\$ 105,000	\$ 105,000
Other	\$ -	\$ 75,000	\$ 75,000
Total Transfer Stations	\$ -	\$ 230,000	\$ 230,000
Total	\$ 860,000	\$ 12,911,000	\$ 13,771,000

TAB 3

**MATERIALS INNOVATION AND RECYCLING AUTHORITY
FISCAL YEAR 2021 OPERATING AND CAPITAL BUDGET SCHEDULE**

DRAFT

PROJECTS / DIVISIONS	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20
Pre-Budget Activities						
<input checked="" type="checkbox"/> HR Committee Meeting - review of personnel services budgets		10/09/19				
Authority Budget						
Send out budget template to all departments	09/27/19					
Budget template due to Finance		10/14/19				
<input checked="" type="checkbox"/> Finance Package (Nov 2019)			11/01/19			
FINAL Draft presented at the MIRA Finance Committee Meeting			11/06/19			
FINAL Draft presented at the MIRA Board Meeting			11/13/19			
Adopted by the MIRA Board of Directors			11/13/19			
Property Division (PD) & Landfill Division (LD)						
Send operating budget template to Operations	10/11/19					
NAES Budget due to Operations		10/14/19				
NAES Budget Review Meeting with Operations		10/28/19				
Operations to submit proposed operating & backup support to Finance			11/04/19			
Finance to forward proposed budget to Operations for review			11/11/19			
Operations to sign-off on proposed budget & forward to Finance			11/18/19			
<input checked="" type="checkbox"/> Finance Package (Dec 2019)			11/27/19			
FINAL Draft presented at the MIRA Finance Committee Meeting				12/04/19		
FINAL Draft presented at the MIRA Board Meeting				12/11/19		
Adopted by the MIRA Board of Directors				12/11/19		
Connecticut Solid Waste System (CSWS)						
Send out operating budget template to Operations	10/11/19					
NAES Budget due to Operations		10/14/19				
NAES Budget Review Meeting with Operations		10/28/19				
Operations to submit proposed operating budget & backup support			11/04/19			
Operations to submit proposed capital budget & backup support			11/04/19			
Finance to forward proposed budgets to Operations for review			11/11/19			
Operations to sign-off on proposed budgets & forward to Finance			11/18/19			
<input checked="" type="checkbox"/> Finance Package (Dec 2019)			11/27/19			
UPDATE presented at the MIRA Finance Committee Meeting				12/04/19		
UPDATE presented at the MIRA Board Meeting				12/11/19		
<input checked="" type="checkbox"/> Finance Package (Jan 2020)					01/03/20	
PROPOSED Draft presented at the MIRA Finance Committee Meeting					01/08/20	
PROPOSED Draft presented at the MIRA Board Meeting					01/15/20	
<input checked="" type="checkbox"/> Finance Package (Feb 2020)					01/31/20	
FINAL Draft presented at the MIRA Finance Committee Meeting						02/05/20
FINAL Draft sent to the MIRA Board						02/07/20
FINAL Draft presented at the MIRA Board Meeting						02/12/20
Final Budget to be adopted by the MIRA Board of Directors						02/12/20
Deadline to Approve Budget and Tip Fee						02/29/20

TAB 4

**RESOLUTION REGARDING AN AGREEMENT WITH TRC
ENVIRONMENTAL CORPORATION (“TRC”) FOR ABANDONMENT OF
MONITORING WELLS IN NORTH FRANKLIN AND WINDHAM,
CONNECTICUT**

WHEREAS, in 2008 and 2009, as part of an ash landfill site suitability investigation (the “investigation”), MIRA installed certain groundwater monitoring wells, piezometers and production wells (the “wells”) on property in North Franklin and Windham, CT; and

WHEREAS, the investigation was suspended indefinitely in 2009; and

WHEREAS, Public Act 14-94, among other things, removed MIRA’s condemnation authority, thereby diminishing MIRA’s ability to site a new landfill; and

WHEREAS, pursuant to RCSA Sec 25-168-56, MIRA is required to properly abandon the wells to prevent them from becoming or causing contamination of the environment; and

WHEREAS, MIRA allocated \$90,000 in the Mid Connecticut Post Project Closure Reserve for the purpose of abandoning the wells;

NOW, THEREFORE, BE IT:

RESOLVED: That the Board of Directors authorizes the President to enter into a Request for Services with TRC in the amount of \$55,600 for the proper abandonment of the wells; and

FURTHER RESOLVED: That the Board of Directors authorizes the President to pay TRC \$55,600 from the Mid Connecticut Post Project Closure Reserve for the abandonment of the wells, substantially as discussed and presented at this meeting;

Materials Innovation and Recycling Authority

Contract Summary for Contract Entitled

Request for Services for Well Abandonment Project, North Franklin and Windham, CT

Presented to the MIRA Board on:	October 9, 2019
Vendor/ Contractor(s):	TRC Environmental Corporation
Effective date:	Upon Execution
Contract Type/Subject matter:	Request for Services for abandonment of groundwater monitoring wells, piezometers, and production wells in North Franklin and Windham, CT
Facility Affected:	NA
Term:	Fiscal Year 2020
Contract Dollar Value:	\$55,600
Term Extensions:	NA
Scope of Services:	TRC will provide all labor and materials to properly abandon and document groundwater monitoring wells, piezometers, and production wells in North Franklin and Windham, CT.
Other Pertinent Provisions:	None

Materials Innovation and Recycling Authority Agreement for Abandonment of Wells in North Franklin and Windham, Connecticut

October 9, 2019

Executive Summary

This is to request Board of Directors authorization for the President to enter into an Agreement with TRC Environmental Corporation for the abandonment of monitoring wells on property in North Franklin and Windham, CT, which site was formerly the subject of a geophysical investigation by MIRA for the possible development of an ash residue landfill.

Discussion

General

In 2008 and 2009, as part of an ash landfill site suitability investigation, MIRA installed certain monitoring wells, piezometers and production wells (the “wells”) on property in North Franklin and Windham, CT. In total, 34 wells were installed. Since that time, the wells have remained largely undisturbed and it is now prudent to properly abandon each well to prevent vandalism and potential contamination from entering groundwater.

In 2019, MIRA negotiated access agreements with the two property owners upon who’s land the wells are installed, for the purpose of abandoning the wells.

Solicitation Process

MIRA developed and issued a scope of work, and requested pricing for the project from three of its pre-qualified environmental engineering consultants on August 28, 2019. Included in the price request was a list of the wells that included construction information, coordinate locations, and photographs of the site conditions. MIRA also offered the consultants an opportunity to visit the property and observe the site conditions in person. Two of the three consultants accepted the offer to visit the site and spent several hours with MIRA personnel inspecting the site.

On September 18, 2019, MIRA received proposals from each of the consultants. The consultants and their prices are listed in the table below.

PROPOSER	PRICE
TRC	\$55,600
TIGHE & BOND	\$59,900
BLUE RIVER	\$64,575

MIRA staff reviewed the proposals and found each to include all of the work required to properly abandon and document such abandonment for submission to the local health district. The low price proposer, TRC, is familiar with the site as staff who worked on the installation of the wells in 2008 and 2009 are proposed to manage the abandonment project. Therefore, MIRA believes that TRC is capable of performing the work.

Financial Summary

The \$55,600 to undertake these activities will be taken from MIRA's Mid Connecticut Post Project Closure Reserve. This account has adequate funds for this expenditure.

TAB 5

RESOLUTION REGARDING MARKET DRIVEN PURCHASES OF DISPOSAL CAPACITY AND TRANSPORTATION SERVICES FOR THE DIVERSION OF MUNICIPAL SOLID WASTE FROM MIRA'S CONNECTICUT SOLID WASTE SYSTEM (CSWS)

WHEREAS: From time-to-time MIRA must divert waste from the CSWS due to elevated MSW inventory levels at the CSWS Resource Recovery Facility (RRF) that may occur periodically; Now therefore, be it

RESOLVED: that the President is authorized to enter into market driven purchases of transportation and disposal services in accordance with the requisition included in Table 1 substantially as discussed and presented at this meeting.

Materials Innovation & Recycling Authority

Summary for Market Driven Purchase Of Municipal Solid Waste Disposal Capacity

Presented to the MIRA Board on:	October 9, 2019
Vendor/ Contractor(s):	Babylon Recycling Center
Effective date:	July 9, 2019
Contract Type/Subject matter:	Market Driven Purchase for Transportation and Disposal of Diverted/Exported Municipal Solid Waste (MSW) from the Connecticut Solid Waste System (CSWS)
Facilities Affected:	CSWS Waste Processing Facility (WPF)
Term:	Direct-delivery (bypass) of MSW from Bloomfield on 7/9/19
Purchase Dollar Value:	\$1,406.45
Amendment(s):	Not applicable
Term Extensions:	Not applicable
Scope of Services:	See Table 1 for summary of services and destination facilities for each requisition
Other Pertinent Provisions:	This is a "Market Driven Purchase" in accordance with Section 5.11 (Market Driven Purchases and Sales) of MIRA's Procurement Policies and Procedures

Materials Innovation & Recycling Authority

Summary for Market Driven Purchase Of Municipal Solid Waste Disposal Capacity and Transportation Services

October 9, 2019

Historically, MSW has been diverted from MIRA's CSWS due to 1) elevated MSW inventory levels, which occur as a result of reduced processing rates at the CSWS Resource Recovery Facility (RRF) due to poor boiler and/or turbine performance, and/or 2) desire to enter a planned outage with reduced inventory so that the facility maximizes its surge capacity during the outage, and/or 3) a catastrophic event that brings the plant down (unscheduled Cold Iron). MSW is diverted to ensure that inventory levels do not create permit compliance and/or safety issues.

Due to an unexpected repair to Turbine 5, MIRA had to divert MSW from the CSWS via the Market Driven Purchase provision of MIRA's procurement policies and procedures during July and August, 2019 (hereafter in this memo the "Q1 Diversion"). In addition to the market driven purchases which the Board approved in the September, 2019 meeting; there was also the market driven purchase of direct-diversion (bypass) disposal capacity shown in Table 1 below which the Board is authorizing via this resolution. Board approval of these expenditures will be reconciled to expenditure information in MIRA's purchasing system.

Table 1: Via this resolution, the Board is authorizing the following purchases in accordance with the Market Driven Purchase Provision in Section 5.11 of MIRA's Procurement Policies and Procedures

Firm	Destination	Total PO amount	Notes
Babylon Recycling Center	Babylon Recycling Center	\$1,406.45	Direct delivery of Bloomfield MSW on 7/9/19.

The Market Driven Purchase provision of MIRA's procurement policies and procedures recognize that MIRA needs to purchase certain services in a short time period. The export/diversion of waste is clearly listed in MIRA's procurement policies and procedures as an example of services for which the Market Driven Purchase provision is applicable. When MIRA determines that a market driven purchase is necessary, such market driven purchase shall be reported to the Board as soon as practicable and obtain Board approval.

Discussion

On June 28, 2019, MIRA solicited price quotes from firms for alternate MSW disposal or transportation & disposal services during the Q1 Diversion as specified at the September Board Meeting. In addition, Management authorized the direct-diversion (bypass) of MSW from Bloomfield for one day (approximately 12 tons) as part of the effort to manage MSW inventory levels and vehicle traffic at the CSWS Waste Processing Facility ("WPF") as the diversions were commencing.

Financial Summary

These diversions were undertaken in accordance with Section 5.11 (Market Driven Purchases and Sales) of MIRA's Procurement Policies and Procedures. In accordance with these policies and procedures, MIRA staff is seeking Board of Directors approval for these Market Driven Purchases.

Diversions costs are paid out of the CSWS Operating Budget.

Purchase order amounts are shown in Table 1.

Under the terms of the new One Year Solid Waste And Recyclables Delivery Agreements with the haulers, MIRA provided notice to the haulers that the facility was impaired on July 1 and that effective July 15, the haulers could either curtail deliveries consistent with an impairment-reduced delivery cap, or could continue to deliver and pay a bypass charge for each ton of waste they delivered above their impairment-reduced delivery cap.

TAB 6

**RESOLUTION REGARDING THE
AUTHORIZATION AND EXECUTION OF A
GOVERNMENTAL EQUIPMENT LEASE-
PURCHASE AGREEMENT WITH CATERPILLAR**

WHEREAS, the Materials Innovation and Recycling Authority (the "Authority"), a body politic and corporate, constituting a public instrumentality and political subdivision of the State of Connecticut, is authorized to purchase, acquire and lease personal property for use in its facilities and operations, and to enter into contracts in connection therewith; and

WHEREAS, the Authority desires to lease, purchase, and finance a Caterpillar 966M Wheel Loader from Caterpillar Financial Services Corporation and an authorized Caterpillar dealer ("Caterpillar") by entering into a Governmental Equipment Lease-Purchase Agreement (the "Agreement") with Caterpillar;

NOW, THEREFORE, it is hereby

RESOLVED: That i) the Agreement, including all schedules and exhibits attached thereto, is approved in substantially the form presented and discussed at this meeting, with any Approved Changes (as defined below), ii) the Authority enter into the Agreement with Caterpillar, and iii) the Agreement when executed will constitute a binding obligation of the Authority; and

Further RESOLVED: That changes may be made by the President to the form of the Agreement in accordance with the Authority's policies and procedures (the "Approved Changes"), and that the signing of the Agreement and any related documents is conclusive evidence of the approval of the changes; and

Further RESOLVED: That the President of the Authority, Thomas D. Kirk, be and he hereby is, authorized, directed and empowered, on behalf of the Authority, to i) sign and deliver the Agreement to Caterpillar, together with any related documents, and ii) take or cause to be taken all action which he deems necessary or advisable to acquire the Caterpillar 966M Wheel Loader, including the signing and delivery of the Agreement and related documents; and

Further RESOLVED: That the Corporate Secretary of the Authority is authorized to attest to these resolutions.

Materials Innovation and Recycling Authority

Contract Summary for Contract entitled

Governmental Equipment Lease-Purchase Agreement Purchase of a 966M Wheel Loader CSWS Waste Processing Facility

Presented to the MIRA Board on: October 9, 2019

Vendor/ Contractor(s): Caterpillar Financial Services Corporation

Effective date: Upon Execution

Contract Type/Subject matter: Lease-to-Purchase Agreement.

Facility (ies) Affected: Waste Processing Facility

Term: Twelve months, beginning in October 2019

Contract Dollar Value: \$532,434.21. This total price includes the purchase price of \$521,495.00, and interest of \$10,939.21 (12 months at 3.85%)

Amendment(s): Not applicable

Term Extensions: Not applicable

Scope of Services: Purchase of a New Caterpillar 966M Wheel Loader.

Other Pertinent Provisions: N/A

**Materials Innovation and Recycling Authority
CSWS Waste Processing Facility**

**Equipment Lease-Purchase Agreement
966M Wheel Loader**

October 9, 2019

Executive Summary

This is to request that the MIRA Board of Directors authorize the President to execute a Governmental Equipment Lease-Purchase Agreement with Caterpillar Financial Services Corporation in order to purchase a Caterpillar 966M Wheel Loader. This piece of Equipment will be used at the Waste Processing Facility.

Discussion

NAES Corporation has identified a new Caterpillar 966M Wheel Loader available for purchase. The Wheel Loader is brand new, and has a standard warranty of 12 months on the full machine, and an extended warranty of 48 months or 8,000 hours on the powertrain and hydraulic system. It is equipped with the standard Caterpillar “trash package.”

Such an equipment purchase as this would usually be undertaken directly by NAES using funds from the CSWS Improvement Fund (i.e., capital budget), and the piece of equipment would be purchased outright, with MIRA taking title to the machine.

MIRA had included \$600,000 in the FY2020 CSWS Improvement Fund budget for purchase of a new wheel loader. However, these funds were redirected to support the repair of Turbine 5 very early in the fiscal year and are no longer available for purchase of a new wheel loader.

Consequently, since the funds are no longer available in the CSWS Improvement Fund, management proposed to undertake the lease-to-purchase option, making 11 monthly payments of \$44,369.52 and 1 monthly payment of \$44,227.62 from the approved NAES operating and maintenance budget for the WPF, after which the wheel loader will be fully paid and title will pass to MIRA. The interest rate associated with the lease is 3.85%.

NAES and MIRA personnel have reviewed the FY2020 WPF O&M budget and have identified certain activities that will be curtailed, modified, or not undertaken, making sufficient funds available within the existing budget to accommodate the lease-to-purchase payments.

Significantly, MIRA – rather than NAES - is the party that needs to be on the Lease-Purchase Agreement because MIRA is the party to which the title will pass when the purchase is completed. (Pursuant to our contract with NAES, title to MIRA's equipment cannot be held by NAES; accordingly, NAES cannot enter into this lease-purchase agreement.) The monthly payments will be made by NAES, and will be disbursed from the Funds that MIRA transfers to NAES each month for WPF O&M activities.

Financial Summary

This expenditure was not included in the FY2020 NAES O&M budget for the Waste Processing Facility; however, NAES and MIRA have reviewed this budget and have identified certain activities that will be curtailed, modified, or not undertaken in order to ensure adequate funds will be available in this budget for this expenditure

TAB 7

**RESOLUTION REGARDING AN AGREEMENT WITH
TG ADVISORS, INC. TO UNDERTAKE A ROOT CAUSE
ANALYSIS OF THE TURBINE 5 ROTOR FAILURES**

RESOLVED: That the President is hereby authorized to enter into an agreement with TG Advisors, Inc. to undertake a root cause analysis associated with the Turbine 5 rotor failures, substantially as discussed and presented at this meeting.

Materials Innovation and Recycling Authority

Contract Summary for Contract entitled

Contract with T.G. Advisors, Inc. to Undertake a Root Cause Analysis of the Turbine Steam Generator 5 Rotor Failures

Presented to the MIRA Board on: October 9, 2019

Vendor/ Contractor(s): T.G. Advisors, Inc.

Effective date: Upon execution

Contract Type/Subject matter: Contract to provide consulting services associated with the steam turbine generator #5 at the South Meadows Resource Recovery Facility.

Facility (ies) Affected: CSWS Resource Recovery Facility

Term: Through completion of the root cause analysis.

Contract Dollar Value: \$35,250.00

Scope of Services: This is to undertake a root cause analysis to determine the cause of the bowed rotor associated steam turbine generator #5 located at the MIRA RRF in Hartford.

Other Pertinent Provisions: TG Advisors, Inc. is engaged as a contractor with Special Capability pursuant to section 3.1.2.5 of MIRA's Procurement Policies & Procedures; accordingly, this contract is awarded as an exception to the competitive process.

Materials Innovation and Recycling Authority

Contract to Perform a Root Cause Analysis of the Steam Turbine Generator #5 Failures

October 9, 2019

Executive Summary

This is to engage the services of TG Advisors, Inc. (“TGA”) to perform a root cause analysis in order to determine the cause of the “bowed” rotor associated with steam turbine generator 5 located at MIRA’s Resource Recovery Facility in Hartford. TGA will be engaged as a contractor with special capability pursuant to section 3.1.2.5 of MIRA’s Procurement Policies & Procedures; accordingly, this contract is awarded as an exception to the competitive process.

Discussion

TGA has provided consulting support to NAES Corporation for support during repair and maintenance work on both of the steam turbine generators at MIRA’s resource recovery facility in Hartford. NAES first engaged TGA in June 2015 to provide support during the major maintenance outage on steam turbine generator #5. TGA has subsequently provided turbine generator consulting support to NAES, as necessary, since that time. Consequently, TGA is intimately familiar with the two steam turbine generators at MIRA’s RRF, and is considered to have special capability in this regard as a vendor for MIRA.

In November 2018 following a maintenance outage, and then again in June 2019, the rotor associated with turbine generator #5 failed – specifically, it experienced a “bowing” which in-turn caused unacceptable vibration during operation such that the turbine generator could not be operated. This contract is to engage TGA to undertake a root cause analysis to identify the cause of each failure event.

Financial Summary

These consulting services will be funded from the FY2020 CSWS operating budget.

TAB 8

DRAFT

2020 MIRA BOARD AND COMMITTEE MEETING SCHEDULE

Finance Committee

Ph.: 860-757-7700

Start time: 9:30 a.m.

**Wednesday, January 8, 2020
Wednesday, February 5, 2020
Wednesday, March 4, 2020
Wednesday, April 1, 2020
Wednesday, May 6, 2020
Wednesday, June 3, 2020
Wednesday, July 8, 2020
August 2020 - NO MEETING
Wednesday, September 9, 2020
Wednesday, October 7, 2020
Wednesday, November 4, 2020
Wednesday, December 9, 2020**

Policies & Procurement

Ph.: 860-757-7700

Start time: 11:00 a.m.

**Wednesday, January 8, 2020
Wednesday, February 5, 2020
Wednesday, March 4, 2020
Wednesday, April 8, 2020
Wednesday, May 6, 2020
Wednesday, June 3, 2020
Wednesday, July 8, 2020
August 2020 - NO MEETING
Wednesday, September 9, 2020
Wednesday, October 7, 2020
Wednesday, November 4, 2020
Wednesday, December 9, 2020**

OS & HR Committee

Ph.: 860-757-7700

Start time: 8:30 a.m.

**Wednesday January 15, 2020
Wednesday, April 8, 2020
Wednesday, July 15, 2020
Wednesday, October 14, 2020**

Board of Directors

Ph.: 860-757-7700

Start time: 9:30 a.m.

**Wednesday, January 15, 2020
Wednesday, February 19, 2020
Wednesday, March 11, 2020
Wednesday, April 8, 2020
Wednesday, May 13, 2020
Wednesday, June 10, 2020
Wednesday, July 15, 2020
Wednesday, August 12, 2020
Wednesday, September 16, 2020
Wednesday, October 14, 2020
Wednesday, November 18, 2020
Wednesday, December 16, 2020**