## ANSWERS TO SELECTED QUESTIONS RECEIVED FINAL POSTING BEFORE RFP DEADLINE

Please review the following answers carefully as some answers have been revised since they were first posted. Revised and new answers are marked as such.

- What year were the facilities built and put into operation? Answer: The Resource Recovery Facility (Waste Processing Facility and Power Block Facility) was built in 1987-88. The Recycling Facility was built in 1991-1992 and was operational in 1992. The Transfer Stations were constructed and began operation in the late 1980s or early 1990's.
- 2. What is the age of the plant and air handling systems respectively? Answer: The waste-to-energy facility is 27 years old and the MCAPS air handling system is 14 years old.
- 3. For how long are each of the facilities operating per day? Is there an O&M plan? Answer: Regarding the Resource Recovery Facility: The hours of operation for each of the facilities are contained in the respective solid waste operating permits which are available on DEEP's RFP website. The permitted hours of operation for the Resource Recovery Facility (RRF) include hours to receive waste as well as to process waste; the RRF combusts waste 24 hours/365 days per year.

Regarding the Recycling Facility: The Recycling Scale is open to receive Recyclables from 7AM to 4PM Monday through Friday and from 7AM to 2PM on Saturdays following Holidays.

The Recycling Facility processes recyclables during two (2) eight (8) hour shifts per day for 5.5 days per week. That may be extended to two (2) ten (10) hour shifts for six (6) days per week following consultation with MIRA.

Each facility has an O&M Plan which is available on DEEP's RFP website.

4. What is the interim plan for MSW transfers during development/redevelopment? **REVISED ANSWER:** Proposals should assume that the developer will make provision for the transfer and disposal of MSW if/when the construction of a new facility or other development of the site(s) causes the normal operations of the CWS RRF to be diminished or suspended.

- 5. How much is being directly hauled to facility for transfer/transportation elsewhere? Answer: On an infrequent basis (e.g., significant unscheduled boiler disruption /downtime) MSW may be transferred from the RRF for management elsewhere; otherwise, the RRF processes and combusts all MSW that is delivered to the RRF (except for a small amount of ferrous metal and non-processible MSW that is removed and transferred offsite).
- 6. Is the goal to maintain a self-contained or self-sufficient system as the core foundation of the facilities?

**REVISED ANSWER:** Connecticut has had a longstanding policy to ensure sufficient in-state capacity to process waste and recyclables generated within the state. However, this RFP does not require that all processing capacity to be sited within the state – in fact, this RFP does not state a preference. A proposal could rely on the transport of waste to a facility out of state.

7. Will there be opportunities to view/tour the facilities again during the Phase I RFP process?

Answer: Yes. Email your request to DEEP.RFP@CT.gov.

8. Is the railroad switch available for rail car service to the facility? Answer: Regarding the Resource Recovery Facility: There is an old rail line into the RRF that is no longer used; it is not operable at this time. That rail line would need to be refurbished prior to use at the RRF.

*Regarding the Recycling Facility: There is an active rail line that provides service to the Recycling facility.* 

9. Any potential for export of recyclables by barge on the Connecticut River from the CSWS RRF properties?

> Answer: It is believed that the U. S. Coast Guard maintains the Connecticut River as navigable 12 months per year to Hartford. There is infrastructure at the RRF that was historically used to offload barge deliveries of coal. Assuming an operator obtained all necessary permits for such an activity, then export of recyclables by barge might be possible.

10. For the purposes of this project, is gasification considered diversion? Answer: Yes. 11. Are developers to assume that the 30 year term stated in the RFP starts when the Project Agreement is signed or on the first day of operations?

**REVISED ANSWER:** The term of the contract will be that which is required to perform all services, including development and operation, and shall have a 30 year operating period.

- 12. Is the contractor to take market risk on recyclables and byproducts such as compost? Answer: Yes. Absent either a MIRA Customer (town and/or hauler) commitment to accept or pay, or a legislatively mandated offtake requirement (or market creation), the viability of which is unclear, the Developer/Contractor will be expected to move their facility product, byproduct and residues to market or disposal at Developer/Contractor risk and cost. A successful developer may be able to distribute some risk through contracts with MIRA and/or municipalities.
- 13. Does DEEP &/or MIRA anticipate that it will be able to provide a long term (i.e., 20-25 years?) waste delivery commitment to the proposed project on a put-or-pay basis based on the minimum delivery commitment of 1,500 TPD or the alternative delivery commitment of 2,250 TPD?

Answer: Proposals should assume that this requirement can be met for both system sizes. DEEP and MIRA understand the necessity of long term commitments of waste and will work to facilitate the aggregation of waste to match the facility size that is ultimately constructed.

14. Any state or local government fleet users of/or future plans for use of compressed natural gas as transportation fuel within the Hartford/Central Connecticut area? # of vehicles, estimated GGE/year?

**REVISED ANSWER:** MIRA has involvement in Waste and recycling transportation only as a customer of private transportation contractors. These contractors utilize CNG for waste collection route and waste transfer vehicles. CNG use is not required by any MIRA, municipal or statutory requirement.

MIRA participating communities utilize CNG in some public fleets served by MIRA, Development of additional Municipal demand for CNG would depend on Market conditions and or legislation to compel or incentivize CNG use by Municipal and/or hauler fleets.

15. Can you provide/describe the age of each of the systems (including air ducts)?

Answer: Regarding the Resource Recovery Facility: The WPF and PBF began operating in 1988. The air ducts that are located atop on the WPF roofs to remove odorous air were installed in 2001 along with the addition of the MSW receiving area maneuvering hall.

Regarding the Recycling Facility: The Recycling Facility was retrofitted and new processing equipment was installed in 2005 for paper and container processing in dual stream method. Retrofit was engineered and designed to facilitate acceptance of single stream. In 2008 the system was upgraded again to accommodate Single Stream.

16. Are there restrictions on capacity due to steam or odorous air? Answer: There are no capacity restrictions based on odorous air.

The NSR air operating permits specify a design unit load of 231,000 pounds of steam per hour per boiler. The NSR air operating permit limits the maximum steam production to 110% of the design unit load, or 254,100 pounds of steam per hour per boiler.

17. What is the temperature of the burn in the PBF?

Answer: MIRA's operating permit limit is 1,500 degrees F over a four hour block average. The average operating furnace temperature at design steam output is around 1,800 – 1,950 degrees F depending upon the cleanliness of the boiler.

18. How many boilers are operating in the PBF?

Answer: There are three boilers operating in the PBF.

19. What is the age of the steam turbines in the PBF?

Answer: Turbine #5- started service in 1942 and was mothballed by the utility in 1975. Rebuilt/restarted for waste-to-energy service in 1987.

*Turbine #6- started service in 1949 and was mothballed by the utility in 1975. Rebuilt/restarted for waste-to-energy service in 1988.* 

- 20. What is the height of the stack? Answer: The flue gas is emitted through a 218-foot, single-flue stack.
- 21. Who is the manufacturer of the machinery in the MRF?

22. How are odors processed currently?

Answer: The WPF is maintained under a negative air pressure, whereby escape of odorous air is minimized, and the air is instead conveyed from the WPF to the PBF where it is pushed into each of the three boiler's main combustion air fans and used as combustion air in the boilers. Use of WPF odorous air in the combustion process is supplemented by utilization of a freeblow duct that blows the WPF air out to the ambient air once it has been treated with an industrial enzyme intended to destroy the odors.

23. Does/how does MIRA manage the use of thermal-oxidizers?

Answer: MIRA has not needed to use the thermal-oxidizers since 2007. Due to the price of natural gas at that time MIRA invested in additional airflow capacity in the WPF odor control air system by adding an enzyme spray freeblow duct that equaled the oxidizer airflow capacity at the PBF. The thermal-oxidizers can be placed back in service if needed.

24. What is the total square footage of the WPF/PBF?

Answer: WPF- approximately 205,000 square feet. PBF- approximately 120,000 square feet. (Excludes the RDF transfer tower, barge unloader. Equipment in the electrical switchyards is owned by Eversource; Eversource has an easement for these areas.)

- 25. Regarding the two existing turbines operating at the plant, what is the minimum reasonable operating load (%) for either of the turbines? Answer: 12 MW on each unit. The two units are rated at 45 MW each.
- 26. What is your permitted vs. actual waste capacity? Answer: The permitted and actual capacity of the RRF is 888,888 TPY. Actual throughput has averaged 683,046 TPY for last three years.
- 27. What waste streams and tonnages are received daily and annually at each existing facility?

Answer: This information is available among the reports posted by DEEP to the FTP site.

28. What kind of waste segregation is carried out today by households?

**REVISED ANSWER:** Mostly single stream recycling (glass, metal, plastic containers, paper/fiber) with some smaller towns segregating by dual stream at local transfer stations.

- 29. Transfer station delivery tonnages (by location) vs. direct haul tonnage? Answer: Monthly reports of tonnages received, and material transferred for the period April 1, 2014 through March 31, 2015 for the three transfer stations is provided on the DEEP RFP Website (via the FTP site).
- 30. What is the plant's daily/weekly processing schedule currently? Answer: Currently, the Waste Processing Facility processes Municipal Solid Waste into Refuse Derived Fuel in accordance with the schedule below; the facility operator may change this schedule from time-to-time.

		11 PM - 7
SUNDAY		AM
	3 PM - 11	11 PM - 7
MONDAY	PM	AM
	3 PM - 11	11 PM - 7
TUESDAY	PM	AM
	3 PM - 11	11 PM - 7
WEDNESDAY	PM	AM
	3 PM - 11	11 PM - 7
THURSDAY	PM	AM
	3 PM - 11	
FRIDAY	PM	

WPF PROCESSING SCHEDULE

31. What is done with the 1 inch fines/fractions at this time?

Answer: The one inch and under fines/fractions are presently not segregated from the MSW (by use of trommels) as has been done in the past; consequently, the material is burned with the balance of the other constituents in the RDF.

- 32. What percentage of the total waste was categorized as one inch fines/fractions? *Answer: Approximately 12%*
- 33. What is the composition of the 6-8 inch RDF fractions?

Answer: Analytical results for the Refuse Derived Fuel (RDF) are provided on the DEEP RFP Website (via the FTP site).

- 34. Do you have seasonal waste volumes for prior years? *Answer: Monthly reports of tonnages received, and residue generated for the period April 1, 2014 through March 31, 2015 are provided on the DEEP RFP Website (via the FTP site).*
- 35. What is the average moisture composition? Answer: 30.0- 33.0 %.
- 36. Does the water content vary by season? Answer: Yes.
- 36. Do you recover both ferrous and non-ferrous metals in your processing? Answer: Only ferrous materials. At both the WPF and the PBF.
- 37. How much material spillage does the RDF processing/grinding area experience per day? Answer: Less than 20 cubic yards per day.
- 38. How does the RDF get transported from the RDF to the PBF? Answer: Via two redundant belt conveyor trains.
- 39. How is coolant water used and treated in facility processes?

Answer: Turbine generators 5 and 6 are each served by once-through, noncontact cooling water (NCCW) systems. The Connecticut River is the source water for the NCCW. The NCCW is not associated with any processes, and therefore does not require any treatment before being returned to the Connecticut River in accordance with the terms and conditions of NPDES Permit No. CT0003875.

Service water for cooling auxiliary equipment (i.e., turbine lube oil coolers, instrument and service air compressor coolers, etc.) is also once-through NCCW that utilizes Connecticut River water as the source. The service water passes through a strainer for solids removal before distribution to the auxiliary equipment. The majority of the service water NCCW is returned to the Connecticut River in accordance with the terms and conditions of NPDES Permit No. CT0003875. The service water that is not returned to the Connecticut River (i.e., pump seal water, etc.) is collected by floor drains which direct the water to an 80,000-gallon equalization tank. Water from the equalization tank is pumped through an oil/water separator for treatment before being discharged to the sanitary sewer under Pretreatment Permit No. SP0000850.

#### 40. Do you deal with tires at the facility?

Answer: Any car size tire without a rim will be processed. If the car size tire has a rim it does not get processed. Tires with rims and anything larger than a car tire will be isolated and moved to the metal containers for a tire recycler to process.

#### 41. What is the parasitic load?

Answer: Total: average 9.0 MW/hour for both the PBF & WPF- split below. PBF: average: 7.0 MW/hour (24 hours per day) WPF: average: 2.5 MW/hour when processing lines operate (16 hours per day) and 0.5 MW/hour when processing lines are not operating (8 hours per day).

42. Truck traffic delivery information to the CSWS RRF properties? #, sizes, tonnages, hourly and daily deliveries?

Answer: The Resource Recovery Facility receives approximately 55,600 waste deliveries per year, most of which is delivered Monday through Friday. This equates to approximately 213 loads per day, averaged over the year. MSW is delivered in all types of waste hauling vehicles, including typical curbside residential packer trucks, commercial front loaders, and 100 CY transfer trailers. Monthly reports of tonnages received at the Resource Recovery Facility for the period April 1, 2014 through March 31, 2015 is provided on the DEEP RFP Website (via FTP site).

- 43. How much ferrous metal contamination is there? Answer: Approximately one percent (1%)
- 44. What products, by-products and rejects and tonnages are generated when processing every stream at each facility, whether at the beginning or on intermediate/final stages of the value chain? (e.g. residual waste entering the pretreatment plant at the Resource Recovery Facility –RRF-; RDF produced, metals recovered and rejects originated at such pre-treatment plant; RDF feeding the Waste-to-Energy plant at the RRF; Bottom Ash and Fly-Ash produced)

Answer: For the Resource Recovery Facility, the Recycling Facility, and the Transfer Stations: Monthly reports of tonnages received, quantities and destinations of recovered materials, transferred materials, and residual wastestreams generated (e.g., ash, ferrous metals) for the period April 1, 2014 through March 31, 2015 is provided on the DEEP RFP Website (via the FTP).

45. Include as a separate line item, the cost of operating the existing transfer stations for transport

**REVISED ANSWER**: Following are the current O&M fees for the transfer stations, and transportation costs to convey MSW and recyclables from the three transfer stations to the Resource Recovery Facility and the Recycling Facility. Consistent with the RFP, these costs are not a part of the \$70 per ton target used for proposal evaluation.

	Annual O&M Cost	Per Ton Cost to Transport MSW to RRF	Per Ton Cost to Transport Recyclable Materials to Recycling Facility
Transfer Station			
Essex	\$532,800	\$14.35	\$21.52
Torrington	\$511,000	\$12.93	\$23.52
Watertown	\$532,800	\$14.35	\$21.52

- 46. What is the residue rate at the recycling facility? Answer: Approximately 8%.
- 47. How much ash is generated per day/per year?

Answer: CY 2013: 164,159 tons CY 2014: 180,006 tons CY2015: 158,530 tons

48. Where is ash currently disposed?

Answer: The ash is transported to the Wheelabrator Technologies, Inc. ash residue landfill located in Putman, CT for disposal.

49. Cost per ton for ash disposal fees?

Answer: Transportation: \$17.92 per ton Disposal: \$42.79 per ton

- 50. What is done with the fly ash at this time? Does it require additional treatment? Answer: The fly ash and bottom ash are combined. The fly ash does not receive treatment. The bottom ash is amended with dolomitic lime prior to being combined with the fly ash. The combined ash is conveyed to the ash loadout building where it is temporarily stored prior to being loaded into trucks for shipment off site.
- 51. Any back-end recovery of metals or other materials? Answer: Ferrous metal is recovered from the bottom ash.
- 52. Where are the recovered ferrous materials from the Resource Recovery Facility sent? Answer: Recovered ferrous metal is shipped to wTe Corporation located in Greenfield, Massachusetts.
- 53. During our tour, one of the plant managers mentioned that the plant often had to decrease tip fees significantly to attract spot market waste during times of diminished supply in the market. Can you provide a schedule that details how much spot market waste was delivered at various tip fee levels during which times of the year?

Answer: In recent years, per ton prices offered for such waste have generally ranged from \$30-\$55 in winter months to as high as \$80 in summer months. Spot receipts, prices and quantity data is market sensitive information and is not generally provided. Specific contracts and results of solicitations for waste from MIRA customer haulers are available on the MIRA website.

54. What is the annual energy output (MWh) of the facility currently? Has this changed recently? How many MWh monthly/quarterly/annually? Answer: See the Table below for net energy generation.

Net MWh Energy Generation, South Meadows Assets 580 & 581 (MIRA Fiscal Year is July – June)													
	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
FY10	33,229	32,788	31,250	34,109	33,724	33,908	24,221	26,910	32,737	36,362	38,018	33,171	390,427
FY11	29,473	34,379	32,714	31,219	33,751	33,581	22,797	22,237	31,066	36,006	36,720	34,651	388,457
FY12	33,694	34,820	28,590	35,899	34,477	37,143	25,521	27,419	38,816	35,635	34,577	34,200	400,791
FY13	33,579	32,303	28,636	33,783	31,682	30,989	25,866	26,359	30,255	33,210	34,031	30,687	371,380
FY14	27,329	30,840	26,550	25,750	32,005	24,365	32,088	28,760	35,059	26,171	34,429	37,223	360,566
FY15	30,133	33,056	32,021	28,884	31,641	26,869	30,295	28,994	26,338	19,714	20,209	23,756	331,909
FY16	27,787	25,717	23,903	19,470	32,794								

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55. What is the current power purchase agreement? How is it structured (at least a summary of basic conditions on price and guarantees)? What is the electricity sale price?

Answer: MIRA currently has a Power Purchase Agreement ("PPA") whereby the Purchaser buys from MIRA the first 20 MWh of Net Energy produced (total energy produced net of the waste-to-energy station service requirements) during each hour of each day. MIRA is paid a contractually specified rate for the first 20 MWh of energy produced during each on-peak hour and a specified rate for the first 20 MWh of energy produced during each off-peak hour. MIRA receives \$63.04/MWh for on-peak power, and \$45.86/MWh for off-peak power. The agreement terminates on June 30, 2016.

MIRA's obligation to sell and deliver and Purchaser's obligations to take and pay for PPA Energy are contingent upon the production of PPA Energy by the Facility. MIRA is not responsible to Purchaser for providing replacement Energy for any lost production(s) of PPA energy due to any scheduled or unscheduled outage(s) of the Facility caused by any reason (including Force Majeure). The agreement terminates on June 30, 2016.

The balance of the energy produced by the facility is settled at ISO-NE cleared Day-Ahead and Real-Time Locational Marginal Prices.

56. Is generated power used in-house? How much is used?

Answer: Energy sold is net of station service requirements. The average total station service is 9.0 MWh for both the WPF and PBF. The split between the two facilities is approximately:

WPF 2.5 MWh average when processing lines are operating (16 hours per day) and 0.5 MWh when processing lines are not operating.

PBF averages 7.0 MWh, 24 hours each day.

57. What is the HHV capacity by which MIRA operates? How much fuel can be processed at PBF when in full operation? What is the energy output at the facility daily in KWh/MWh? Does MIRA currently have a power plan in place?

Answer: The Solid Waste Operating Permit for the facility specifies an average HHV value of the MSW that is processed and combusted. However, the ultimate governing parameter is steam production which is specified in the NSR air operating permits for the three boilers: 231,000 pounds per hour per boiler. The PBF combusts approximately 2,100 tons per day of RDF. The facility produces approximately 1,100-1,200 MWh per day of net power output. 58. Is MIRA power output ever rejected/non-competitive?

Answer: Based upon the fuel type used by the facility (i.e. municipal solid waste) pursuant to ISO-New England (ISO-NE) Market Rule 1, the South Meadows generation assets 580 and 581 are classified as <u>intermittent, must run</u>. Therefore, the Facility's energy production is never curtailed or "rejected" via instructions issued by ISO-NE. The projected net energy output of the assets is bid into the ISO-NE Day-Ahead Market each day and then actual output (+/- MWh deviation from the Day-Ahead bid) is settled in the next day's Real-Time Market.

59. Is there any potential for electric connection to the City of Hartford distribution grid (vs. the existing transmission grid connection)? If you have any single line drawings for the existing connection, please provide?

Answer: There is not significant electric load owned by the City of Hartford adjacent to the South Meadows site. Present statutory and regulatory authority and details for net metering is available from The DEEP (formally DPUC) and by review of statutes. There exists potential for Private sector and Public Utility electric, gas and steam load in the immediate vicinity of the South Meadows facility.

60. Will you have building/inspection/maintenance reports available for equipment in the facilities?

Answer: All available maintenance reports have been posted to the FTP site.

- 61. Will MIRA provide updated maintenance records for equipment and cost to repair? Answer: Regarding the Resource Recovery Facility: MIRA will provide such maintenance and cost records as reasonably requested. They may be reviewed in person by appointment. Please email any specific request to DEEP.RFP@ct.gov. Regarding the Recycling Facility: The following reports will be posted on the DEEP RFP (FTP) Website: 1) The Facilligence report that covers all equipment and facility maintenance items, 2) The report that covers inventory, downtime minutes and any major issues for the previous month.
- 62. What is the useful life on the equipment and when is replacement expected? Answer: Regarding the Resource Recovery Facility: Estimates and expectations for useful remaining life of the major equipment items vary widely from component to component. Respondents are advised to consider each facility

component separately for establishing engineering estimates of remaining useful life.

Regarding the Recycling Facility: Major processing equipment such as optical sorters, sorting screens and balers have useful lives ranging from 5-15 years and the end of the current operating agreement and its extensions going through June 2022. All major items may require replacement at that time.

63. Would it be possible to provide a log of daily, monthly, or annual maintenance at all facilities?

Answer: Regarding the Resource Recovery Facility: Daily, weekly and monthly operations and maintenance reports are generated for both the Waste Processing and Power Block Facilities. Plant staff utilizes the MP2 predictive maintenance and MAS90 accounting systems. MIRA will provide such maintenance and cost records as reasonably requested.

Regarding the Recycling Facility: The following reports will be posted on the DEEP RFP Website: 1) The Facilligence report that covers all equipment and facility maintenance items, 2) The report that covers inventory, downtime minutes and any major issues for the previous month.

64. What is the average up-time for the facility (operation vs. shut down for maintenance)? Answer: Regarding the Resource Recovery Facility: Boiler availability over the past several years has averaged 85%. Turbine availability is near 100%. Availability of the WPF is near 100%.

> Regarding the Recycling Facility: Operational hours are based on inbound volumes and will range from 1 to 2 shifts per day ranging from 8-10 hours per shift. Uptime ranges in the 90%+ range for the scheduled run time and maintenance activities are performed during the times prior and post the operating shifts as well as weekend as needed. Additional routine maintenance occurs during break times within the operating day.

65. Does MIRA have a maintenance plan in place? If so, how often is it updated? Answer: Regarding the Resource Recovery Facility: Each fiscal year as part of the budget process MIRA develops a major maintenance and capital plan with accompanying budgets as well as a five year capital plan. Plans and budgets are adjusted as needed to address emergent issues discovered during major outages or other issues that may present themselves.

Regarding the Recycling Facility: The Operating Agreement with the contractor includes O&M Plan which is followed by the Contractor.

### 66. How many people are working (per shift/overall)?

Answer: Regarding the Resource Recovery Facility: The plant (WPF and PBF) currently has a workforce of 115 people; 53 at the Waste Processing Facility, 58 at the Power Block Facility and 4 shared positions. The shared positions are Environmental Manager, Safety Manager, Plant Engineer, Administrative Manager.

PBF: There are four shifts designated A, B, C and D for each day of the week including weekend days. There are seven people per shift including the shift supervisor. Day shift hours are 0630 to 1830. Night shift hours are 1830 – 0630.

WPF: See WPF staffing table below. Note that the "Temps" referenced in the table are contract personnel retained to perform plant cleaning duties (blow down equipment, etc.).

# WPF Staffing - by/shift

					Mgmt-	NAES		
			Hourly	Supv	staff	total	Temps	TOTAL
		11PM to						
Monday	X3	7:30AM	12	1				
	Day	7AM to 3:30PM	21	1	6		6	
		3PM to						
	X2	11:30PM	12	1				
			45	3	6	54	6	60
		11PM to						
Tuesday	X3	7:30AM	12	1				
	Day	7AM to 3:30PM	21	1	6		8	
		3PM to						
	X2	11:30PM	12	1				

11PM to Wednesday Х3 7:30AM Day 7AM to 3:30PM 3PM to X2 11:30PM 11PM to Thursday ХЗ 7:30AM 7AM to 3:30PM Day 3PM to X2 11:30PM 11PM to Friday Х3 7:30AM Day 7AM to 3:30PM 3PM to X2 11:30PM 11PM to Saturday Х3 7:30AM Day 7AM to 3:30PM 3PM to X2 11:30PM 11PM to Sunday Х3 7:30AM Day 7AM to 3:30PM 3PM to X2 11:30PM 

\* each shift is eight hours plus 30 min for lunch

Regarding the Recycling Facility: Weekday is a full complement of employees as listed above. Weekend staffing is on an as needed basis depending on required processing or receiving and/or if additional maintenance activities are required. First shift – 44 employees this include office personnel Second shift – 38 employees including supervisor

67. What is the staffing weekday schedule vs. the weekend schedule?

Answer: PBF: The weekend shifts are identical to the weekday (M-F) shifts. See answer above.

WPF: See WPF staffing table above.

68. What are the transfer rights/obligations when taking over existing plants with regards to employees and any existing pension rights?

Answer: MIRA employees do not participate in any Defined Benefit pension plan. MIRA contractors have their own individual company responsibilities to their employees independent of MIRA. All MIRA contractors presently engaged can be disengaged without costs to MIRA or any RFP participant with 12 months' notice. RFP participants can assume there will be no costs or responsibilities to existing MIRA or MIRA contractor employees regarding pensions or severance.

69. Must we assume that licenses and permits should be held by the developer, and not by MIRA?

Answer: Yes.

70. In case existing facilities (that belong to MIRA) are to be used by the new system, but require changes in permitting, because of different capacity or process, who would be the permit holder?

**REVISED ANSWER**: The permit would be transferred to the developer.

71. How is diversion specifically defined for the purposes of the RFP?

**REVISED ANSWER**: Diversion is measured by: Tons MSW Materials Diverted or Recovered/FY2013 Tons MSW Generated.

Diversion processes are defined in the RFP.

Statewide diversion (FY2013) is estimated to be approximately 35 percent.

The RFP does not provide a minimum threshold but in the proposal evaluation criteria gives preference to projects that divert 60 percent or more of materials generated within the system area (towns served).

72. If the proposed integrated waste management facility includes a combustion component that produces an ash residue that is directed to a landfill, is the amount of landfilled residue deducted from the amount of waste diverted at the front end of the facility, or is the landfilled residue considered a subset of the waste directed to combustion?

Answer: It is a subset.

- 73. Is scrap metal recovered from the ash residue by a metal recovery system at a landfill considered diversion? If not, why not? Answer: For the purposes of the RFP, yes.
- 74. **NEW 2.3.16.** Could MIRA continue to have a role in administering contracts with the project on behalf of its member towns? *Answer: Yes, it could.*
- 75. **NEW 2.3.16.** When will DEEP issue a Draft Contract, or Terms and Conditions of same, to describe to Proposers the contract terms and risk sharing that is expected? This is necessary for pricing proposals.

Answer: Draft terms and conditions developed by DEEP will be included in the Phase 2 RFP as contract principles to assist Proposers in developing firm pricing.

- 76. **NEW 2.3.16.** There is a need to extend the waste supply contracts through the term of the contract to allow for private project financing. Will this be done? *Answer: Proposers should assume that MIRA will work to renew existing contracts and secure new contracts. For purposes of the RFP, proposers should assume that sufficient tonnage will be guaranteed under contract.*
- 77. **NEW 2.3.16.** Is more detailed information available on the financials of the MIRA facilities?

Answer: The most detailed information available can be found in public records posted to the MIRA website at <u>http://www.ctmira.org/</u>. Another source is the 2013 Comprehensive Operational Review of CRRA, online at <u>http://www.ct.gov/deep/lib/deep/waste\_management\_and\_disposal/solid\_was</u> <u>te/transforming matls mgmt/resources recovery task force/crra operational</u> <u>review report 110813.pdf</u>.

- 78. NEW 2.3.16. Is there recent information available on waste composition of the post recycled MSW and the single stream recyclable stream? Answer: A draft of the 2015 Waste Composition Study is posted on the FTP site.
- 79. **NEW 2.3.16.** What are the site boundaries? Answer: A site map has been posted on the FTP site.
- 80. **NEW 2.3.16.** Where will residue be disposed, is there a specific disposal point to be used?

Answer: To be determined by Proposer.

- 81. **NEW 2.3.16.** Will DEEP reimburse the Contractor for work completed if the project is cancelled or cannot be permitted? *Answer: The RFP does not anticipate such an arrangement.*
- 82. **NEW 2.3.16.** Will a minimum tonnage guarantee be provided? Answer: For purposes of the RFP, proposers should assume that sufficient tonnage will be guaranteed under contract.
- 83. **NEW 2.3.16.** What is the rationale for the 1500tpd and the 2250 tpd system sizes? Answer: The smaller size is the minimum needed to process currently contracted waste. The larger size is what is needed to match the historic capacity of the CSWSP.
- 84. **NEW 2.3.16.** Is there a hard and fast date for closing the existing MIRA facilities? *Answer: No.*
- 85. **NEW 2.3.16.** What incentives, e.g, grants, low interest loans, etc, for facility development are provided for by the Solid Waste Plan? *Answer: Anaerobic digesters can qualify for a Class I Renewable Energy Credit. New programs of incentives and investment may be created to support this and other facility development projects.*
- 86. **NEW 2.3.16.** Will DEEP use technical, financial, legal advisors to assist it for this procurement process?

Answer: Yes. DEEP currently has a procurement advisor as part of the team and anticipates soliciting additional consulting services in or around May 2016 to assist the second phase of the RFP process.

87. **NEW 2.3.16.** Is decommissioning cost for existing facilities to be included in the cost proposal?

Answer: No, proposers should not include the cost of decommissioning or environmental remediation.

88. **NEW 2.3.16.** Does DEEP see organics diversion as the key means of achieving the additional 25% diversion?

Answer: It is expected to be a major means of increased diversion, however the RFP accommodates a range of approaches to diversion.

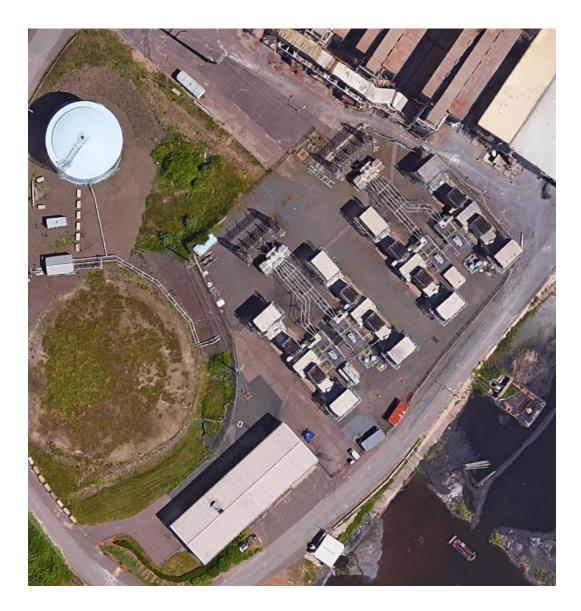
- 89. **NEW 2.3.16.** Must a Proposer use the existing MIRA sites? *Answer: No.*
- 90. **NEW 2.3.16.** When will performance guarantees and financial guarantees be defined? *Answer: In the Phase II RFP document.*
- 91. **NEW 2.3.16.** Are there any other waste projects in the State that are proposed and could take away tonnage from this project?

Answer: There are currently proposals for the development of 200,000 – 300,000 TPY in anaerobic digester capacity, primarily for source-separated food scraps. It is not anticipated that these proposed facilities will process mixed MSW. For more information on proposed facilities, see <u>http://www.ct.gov/deep/cwp/view.asp?a=2718&g=325376&deepNav\_GID=1645</u>

92. **NEW 2.3.16.** Are we correct to assume that MIRA (or another state agency) will own the proposed facility even if private financing is undertaken? Are we correct to assume that the owner of the proposed facility will also be the same owner of the 3 other transfer stations and the single-stream MRF?

Answer: No, the assumption should be that MIRA will own the land and the developer will own the facility. It is not required that the developer own all the CSWSP facilities – proposers may include any of the facilities in their proposal as necessary to meet the goals of the RFP.

- 93. **NEW 2.3.16.** Under Section 11.5, are we correct to assume that financial statements are required for each key project team member (excluding 3rd party contractors)? Are we correct to assume that audited financial statements are required? *Answer: Yes to both questions.*
- 94. **NEW 2.3.16.** On page 7 of the RFP, first paragraph, it is stated that "Materials that are combusted, including through processes with advanced thermal recovery, and materials that are disposed in a landfill, are not considered to be diverted. Residues left over from conversion processes that are subsequently combusted or sent to a landfill are not considered diverted."
  - a) Please confirm that such "other conversion processes" does not include stoker grate incineration (combustion technology).
    Answer: that is correct.
  - b) Please confirm that such "other conversion processes" does not include RDF production for subsequently combustion. Answer: that is correct.
  - c) Please confirm that Anaerobic Digestion technology is included within the technologies to be considered to increase diversion. Answer: that is correct.
  - d) Please confirm that Gasification technology to produce heat and electricity is included within the technologies to be considered to increase diversion. *Answer: that is correct.*
- 95. **NEW 2.3.16.** Will there be volume cap available for tax exempt financing? Answer: It is not certain whether there will be cap available. For planning level cost estimates, proposers should assume it is not available.
- 96. **NEW 2.3.16.** Are we correct to assume that industry standard language/form shall apply to the bid bond and consent letter as no specific forms were provided? *Answer: Yes.*
- 97. **NEW 3.1.16.** Can you confirm that the attached picture shows the jet peaking turbine facility?



Answer: Yes.

- 98. **NEW 3.1.16.** How will the process treat confidential information? We would like to be as transparent as possible with CDEEP and MIRA, but are concerned that some of our proprietary technology systems and business approaches might be made public. *Answer: Please refer to Section 15 on Page 13 of the RFP document. All proposals are exempt from public disclosure until a final agreement is made for a project.*
- 99. **NEW 3.1.16.** Generally, we form a project-based LLC to undertake individual developments. We would rather defer the time and expense of setting up such an entity until we are more certain of our chances with the RFP. Does this entity need to be formed in Phase 1, or can we defer until phase 2?

Answer: The RFP does not require that such an entity be formed in Phase 1. However, if a team, please identify all principal project participants in the Phase 1 proposal as identified in Item 11 of Appendix II, Required Information.

100. **NEW 3.1.16.** Are there any current or anticipated historical preservation status for the RRF structure?

Answer: Unknown. Assume the answer is no.

101. NEW 3.1.16. Section 5 of Appendix II of the RFP (Required Information) asks for planning level cost and pricing estimates, including proposed tipping fees for MSW and source separated recyclables, for a minimum of the first 5 years of system operation. But Section 5 also asks for an economic pro forma for the project, including tipping fees, for a 30 year system operating period. We request that the CT-DEEP accept an economic pro forma for the project, given that only planning level costs and pricing are being developed, the accuracy of a 30 year financial pro forma will be unreliable.

Answer: A 30 year proforma is preferred. However, a pro forma for a shorter operating period will be accepted as meeting the requirements of Section 5 of Appendix II. The minimum period shall be 5 years after start of operations. For financing purposes, assume that the project debt will be amoritized over a 30 year operating period.

Keep in mind that proposal evaluation criteria for cost for the "most preferable" case is for tipping fees "projected at below \$70/ton for the first five years or longer of project operations.". Also, as noted in the RFP, the net present value of the annual cash flow will be considered. The later calculation requires a 30 year projection of annual cash flow. It is important for proposers to consider any significant costs that might occur over the project life, such as for major equipment replacement or significant structural repair or maintenance. For Proposal purposes, if a 30 year proforma is not provided, the State will assume that such costs are part of the proposed tipping fee, even if said costs occur after 5 years of operation. In other words, the State will assume that the proposed tipping fees will increase annually subject only to escalation by a fixed adjustment factor, such as the CPI, or some proposed percentage of the CPI.

102. **NEW 3.1.16.** Please clearly highlight on a CSWSP Site Plan the specific areas on the Maxim Road and Reserve Road site that will be leased to the preferred bidder, as stated in Section II.4 (page 8) of the RFP. We would like to be certain that the areas we plan to develop as part of our proposal lie completely within the areas that will be leased.

Answer: Assume that the entirety of the site, with the exception of the jet turbine facility, may be leased.

103. **NEW 3.1.16.** Besides the jet turbine plant and its supporting fuel infrastructure, are there any other portions of the South Meadows site that are "off limits"? These might include protected wetlands dedicated rights of way or fixed infrastructure (e.g. transmission towers), etc.

Answer: There are two documents on the FTP site that show/describe encumbrances at the site. One is pdf with file name "South Meadows Site -Highlighted Substation and Electricity T&D Easement Area" and one is a pdf with file name "South Meadows Site - Encumbrances Listed in Title Report."

104. **NEW 3.1.16.** Is there a possibility that transmission lines might be able to be moved within the existing easements to accommodate additional development of the South Meadows site?

Answer: Eversource Energy controls the transmission lines on site pursuant to several easements. Permission to relocate transmission lines would have to be obtained from Eversource Energy.

105. **NEW 3.1.16.** Who owns the inactive rail line adjacent to the RRF property's western boundary? Is it Connecticut Southern Railway? What about the active line that serves the MIRA MRF on Murphy Rd.?

Answer: MIRA is uncertain who owns the inactive rail line adjacent to the western boundary of the property. However, this rail line is controlled by Connecticut Southern Railway. MIRA owns the rail siding at the rear of the Recycling Facility; MIRA also owns the rail line segment that crosses Maxim Road (to the north of the Recycling Facility). This rail line is controlled by Connecticut Southern Railway.

106. **NEW 3.1.16.** What is the minimum steam production which allows operation of the turbines?

Answer: Concerning the PBF and the current restrictions on capacity due to boilers, the maximum steam production is limited to 254,100 pounds of steam per hour per boiler.