

## AGREEMENT

This Agreement (this "Agreement") is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_ 2011, by and between Delta Thermo Energy A, LLC, a Delaware limited liability company ("DTE"), and the City of Allentown, a municipality of the Commonwealth of Pennsylvania (the "Commonwealth") governed pursuant to the Home Rule Charter effective January 1997 (the "City").

### WITNESSETH:

WHEREAS, DTE is a company focused on the design, manufacture and implementation of innovative technological energy solutions for the conversion of waste, consisting of Sludge and MSW (each as defined in Appendix A hereto), to energy; and

WHEREAS, based on proprietary and patent-pending "Waste to Energy by way of Hydrothermal Decomposition and Resource Recycling," DTE is in the business of providing waste-to-energy technology and services with the ability to recycle the energy contained in biomass and MSW in order to use it as a high value-added fuel to generate large amounts of clean energy; and

WHEREAS, the City is the owner of that certain property known as tax map parcel nos. G10SW4A-007-00 (PIN # 640751452311), G10SW4D-001-002 (PIN # 640750170804) and G10SW4D-001-003 (PIN # 640750739532), located in the City of Allentown, Lehigh County, Pennsylvania (all of the parcels are hereinafter referred to as the "Property"), as more particularly identified on the plan attached hereto as Exhibit "A"; and

WHEREAS, the Property is located adjacent to the City's Kline's Island Waste Water Treatment Plant (the "Treatment Plant"); and

WHEREAS, the City desires to lease to DTE a portion of the Property consisting of approximately three and one-tenth (3.1) acres (the "Premises") (for purposes of clarification, the Premises shall be located within and be only a portion of the Property), as more particularly identified on the plan attached hereto as Exhibit "A", and DTE desires to lease the Premises in order to construct and operate a waste-to-energy facility on the Premises, which facility shall include an electric generator, thermal energy generation, and patent-pending "Waste to Energy by way of Hydrothermal Decomposition and Resource Recycling" system, as more particularly described in Schedule 5.2 hereof (the "DTE Facility"); and

WHEREAS, the DTE Facility shall be located on the Premises as shown on Exhibit "A";

WHEREAS, DTE has agreed to provide waste-to-energy services to the City by constructing the DTE Facility, which will convert the Sludge from the City's Treatment Plant, as well as the MSW generated within the City, to thermal energy and electrical power, which electrical power will be used to power the DTE Facility, and any excess electrical power to be sold to the power producing grid; and

WHEREAS, DTE and the City (individually, a "Party," and collectively, the "Parties") now wish to enter into this Agreement to provide for the terms of (i) the long-term lease of the

Premises from the City to DTE for the construction, ownership, operation and maintenance of the DTE Facility, (ii) the conversion by DTE of the City's Sludge and MSW, to electrical power, and (iii) the use of the electrical power generated by the DTE Facility; and

WHEREAS, a description of the project is as follows: DTE will construct and operate the DTE Facility on the Premises. The City will furnish an agreed upon amount of MSW and Sludge to the DTE Facility. DTE will Process all of the MSW and Sludge and will use same to generate electricity for the operation of the DTE Facility. DTE will sell any excess electricity to the electric power producing grid pursuant to a power purchase agreement between DTE and a third party utility. DTE will also provide a credit to the City equal in value to a fixed quantity of electric generation. DTE may sell all Process Residue produced by the DTE Facility, and retain all revenues from such sales. The City will pay DTE a monthly agreed upon amount for DTE's services as stated herein. The DTE Facility shall be operated in full compliance with all federal, state and local environmental laws and other requirements.

Capitalized terms used in this Agreement are defined in Appendix A hereto.

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein contained, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and intending to be legally bound hereby, the Parties hereby agree as follows:

**Article I**  
**Lease of the Premises**

1.1 Lease. The City hereby leases to DTE, and DTE hereby leases from the City, pursuant to the terms and conditions hereof, the Premises for the purpose of constructing and operating thereon the DTE Facility and for no other purpose. The City shall grant, or cause to be granted to, DTE any and all easements necessary to access the Premises during the Term.

The Parties acknowledge that subdivision and land development approvals ("Land Approvals") for the lease of the Premises and construction of the DTE Facility have not yet been obtained from the City Planning Commission of the City. DTE shall be solely responsible for obtaining the Land Approvals. If required by the Land Approvals, prior to the Construction Start Date, DTE may request that the description of the Premises and/or the location of the DTE Facility on the Premises be amended to conform to the Land Approvals. DTE shall bear all costs of obtaining the Land Approvals and, if necessary, amending the description of the Premises, including reimbursing the City for its out-of-pocket costs, including reasonable legal fees, which costs of the City shall be Development Costs. The City shall cooperate with DTE to expeditiously obtain all necessary Land Approvals in accordance with City land use and zoning ordinances, including approvals for parking required at the DTE Facility. Upon obtaining final Land Approvals, Exhibit A hereto shall, if necessary, be amended to conform to such Land Approvals.

**Article II**  
**Term**

2.1 Term. The lease shall begin on the Contract Date and terminate on the last day of the Initial Term or Renewal Term, as applicable, unless earlier terminated in accordance with the terms of this Agreement. The initial term (the “Initial Term”) shall commence on the second (2<sup>nd</sup>) Business Day after DTE has caused the DTE Facility to be Operational (the “Commercial Operations Date”) and end on the last day of the thirty-fifth (35<sup>th</sup>) Lease Year. The term “Operational” shall mean the date on which (a) construction is complete, (b) all Required Permits and Required Approvals, as set forth on Schedule 2.1 hereto, have been received, (c) Acceptance Testing has been completed and accepted by the City in accordance with Section 5.2.4 hereof, (d) the DTE Facility is accepted for commercial electricity generation to the grid by an electric utility company, and (e) the DTE Facility is able to provide the required waste-to-energy operations as set forth herein.

2.2 Renewal Terms. This Agreement is subject to renewal, at the option of the Parties, for an additional ten (10) year term, for up to a total of two (2) ten (10) year terms (each, a “Renewal Term” and collectively, the “Renewal Terms”) upon the same terms and conditions as set forth in this Agreement. The Party seeking renewal shall provide written notice to the other Party not less than one hundred and eighty (180) days prior to the expiration of the Initial Term or the first Renewal Term, as applicable, of its desire to renew this Agreement. The Renewal Term shall commence at the expiration of the Initial Term or first Renewal Term, as applicable, unless the non-notifying Party provides a written response to the notifying Party at least ninety (90) days prior to the then-expiration date of this Agreement that it does not intend to extend the term of this Agreement. Such written response shall include a statement of the reasons for non-renewal, however, such statement and any response thereto by the other Party shall not in any way affect the non-notifying Party’s right to not renew this Agreement.

2.3 Lease Year. The term “Lease Year” shall mean each period of twelve (12) consecutive calendar months beginning on the Commercial Operations Date if such date occurs on the first day of the month; if not, then on the first day of the month next succeeding the month in which the Commercial Operations Date occurs. Subsequent Lease Years shall run consecutively, each such Lease Year beginning on the first day of the month next succeeding the last month of the previous Lease Year.

### **Article III** **Rent**

3.1 Lease Payments. In exchange for the City’s lease of the Premises and the City’s payment of the Operating Fee (as defined in Article VIII hereof), DTE shall, as set forth in Article VI hereof, Process the Required Tonnage. DTE shall make annual rental payments, in advance, to the City on the first day of each Lease Year, commencing on the first day of the first Lease Year, in the amount of Ten Dollars. DTE shall be responsible for all Real Estate Taxes payable with respect to the Premises (inclusive of that portion of the DTE Facility that is subject to real estate tax assessment); provided, however, if the actual Real Estate Taxes assessed and paid by DTE in any Lease Year (for purposes of this Section 3.1, the “Affected Lease Year”) exceed the Base Amount Real Estate Taxes for such Affected Lease Year, the Operating Fee in the Lease Year immediately following the Affected Lease Year shall be increased by an amount equal to the difference between the Real Estate Taxes paid by DTE in the Affected Lease Year and the Base Amount Real Estate Taxes for the Affected Lease Year.

**Article IV**  
**Title to the Premises**

4.1 Condition of Title. The City represents and warrants that as of the date of this Agreement that the City has fee simple title to the Premises and full right and authority to make and execute this Agreement; to the best of the City's knowledge, the Premises are free and clear of and from all liens, restrictions, leases and encumbrances (whether recorded or unrecorded).

4.2 Title Insurance. In addition, such title shall be insurable under an ALTA Leasehold Owner's Policy by a reputable title insurance company at regular rates, and without any so-called "creditor's rights" exception or exclusion.

4.3 Title Commitment. DTE shall order a commitment to insure title to the Premises under an ALTA Leasehold Owner's Policy (the "Title Commitment") within ten (10) days after the execution of this Agreement and deliver a copy of the Title Commitment to the City immediately upon receipt of the Title Commitment. If any title exceptions are disclosed in the Title Commitment, which are identified as objectionable in writing from DTE to the City within thirty (30) days after DTE's receipt of the Title Commitment, the City shall use its best efforts to correct, at the City's sole cost and expense, any such title objections within ten (10) days after the City's receipt of DTE's objections to the Title Commitment. If the City is unable to correct such objections within said ten (10) day period (or as otherwise extended by DTE), DTE may terminate this Agreement and the Parties shall have no further rights, duties or obligations hereunder.

**Article V**  
**Improvements**

5.1 Financing for Improvements. The City shall cooperate with DTE in applying for financing grants, incentives, credits or other similar programs which DTE, in its reasonable discretion, deems useful or desirable (the "Grant Programs"), to finance the construction of the Improvements and any related improvements for the DTE Facility. As of the date of this Agreement, those Grant Programs and funds listed on Schedule 5.1 hereto have been formally approved, but not received, for the purpose of financing a portion of the DTE Facility. Notwithstanding the foregoing, DTE acknowledges that securing financing for the construction of the Improvements and any related improvements for the DTE Facility is the sole responsibility of DTE and the City has no obligation with respect thereto.

DTE agrees to comply with, and shall be solely responsible for, compliance with the terms of the Grant Programs. DTE shall indemnify the City for any claims or losses arising from a failure by DTE to comply with the terms of any Grant Programs, including any required repayment of any funds received thereunder, unless such claim or loss is a result of the negligence or willful misconduct of the City. Except as set forth in the following paragraph, DTE shall be responsible for any and all repayment of funds received by DTE and required to be made to the Grant Programs if the funds were not spent in conformance with the Grant Programs.

The City agrees to comply with the terms of the Grant Programs to the extent necessary to effectuate the purpose of the Grant Programs' awards to DTE, or to the City on DTE's behalf, including DTE's receipt of any amount to be paid to DTE pursuant to such Grant Programs. The City shall indemnify DTE for any claims or losses arising from a failure by the City to comply with the terms of any Grant Programs where such non-compliance is a result of negligence or willful misconduct. Such amount shall be limited to the amount of any losses of Grant Program proceeds. Provided however, that the City's exercise of any of its rights under this Agreement shall not be deemed to be a failure to comply with any Grant Programs. Furthermore, the City shall have no liability for any claims or losses arising from the manner in which DTE manages or expends any funds received from the Grant Programs. DTE shall use its best efforts to mitigate any losses.

The Parties acknowledge that prior to the Contract Date the City has incurred Development Costs and further acknowledge that the City will continue to incur Development Costs through the Commercial Operations Date. On or before the Construction Start Date the City shall deliver to DTE a list of its Development Costs incurred to such date. On or before the tenth (10<sup>th</sup>) Business Day following the Commercial Operations Date, the City shall deliver to DTE a list of additional Development Costs, including but not limited to costs referred to in Section 5.2.3 hereof. Notwithstanding the foregoing, if any of the Development Costs may be paid from the proceeds of any of the Grant Programs, the City may also submit a list of Development Costs to DTE prior to the release of proceeds of any of such Grant Programs and may deduct the Development Costs from the proceeds of the applicable Grant Program prior to releasing funds to DTE. To the extent that proceeds of Grant Programs are not available for payment of Development Costs, DTE shall reimburse the City for the City's Development Costs from the proceeds of the financing for the DTE Facility upon closing on the financing. To the extent funds from the Grants Programs are not available for the City's Development Costs incurred subsequent to closing on financing for the DTE Facility, DTE will facilitate payment to the City for these costs from available funds within ten (10) days of delivery of documentation of the Development Costs. Each submission of Development Costs shall be accompanied by invoices or other documentation of the Development Costs. The aggregate Development Costs for which the City shall be entitled to receive payment shall not exceed Five Hundred Thousand Dollars (\$500,000).

## 5.2 Construction of Improvements; Construction Schedule.

5.2.1 DTE's Obligations. DTE shall obtain final Land Approvals from the City Planning Commission of the City prior to constructing the Improvements on the Premises. DTE shall also obtain the Required Permits and Approvals prior to the Commercial Operations Date as and when required by the City, DEP or other regulatory agencies. DTE shall perform necessary site surveys, site preparation, road construction, installation of perimeter security fencing and construction of the Improvements. The Improvements shall include Resource Recycling Systems, a Water Treatment System, Complete Combustor Chambers, a boiler system, air pollution control devices, and a turbine generator set to facilitate the back end of the power producing process, as more specifically set forth in Schedule 5.2 attached hereto and made a part hereof (collectively, the "Improvements").

Construction and Acceptance Testing of the DTE Facility shall be completed and the DTE Facility shall be Operational in accordance with the following schedule: (a) the Construction Start Date shall be on or before January 1, 2013, (b) the Acceptance Testing Date shall be on or before the earlier of (i) eighteen (18) months after the Construction Start Date and (ii) July 1, 2014, and (c) the Commercial Operations Date shall be the earlier of (i) six (6) months after the Acceptance Testing Date and (ii) January 1, 2015.

5.2.2. Relocating Utilities. DTE shall relocate, at its sole cost and expense, any and all utility lines currently located on the Property, such as raising or realigning the PPL power line(s), necessary to construct the Improvements. Such relocation shall be in compliance with all applicable codes and safety regulations

5.2.3. City's Observation. The City shall have a reasonable opportunity to review, and may retain the City Consultant to review, all plans, specifications, technical reports, data or other similar or relevant documentation associated with the construction of the Improvements for consistency with Schedule 5.2 hereof. The City shall be reimbursed by DTE for all costs associated with such review as part of the Development Costs in accordance with Section 5.1 hereof. The City shall also be permitted to engage the City Consultant to observe construction of the Improvements and Acceptance Testing, and review the results of Acceptance Testing, the cost thereof to be reimbursed as a Development Cost in accordance with Section 5.1 hereof. DTE shall provide the City with status reports ("City Status Reports") as to the progress of the construction of the Improvements, including a copy of the project budgeted schedule and budgeted costs and tracking against actual schedule and actual costs, as prepared using Microsoft Project or a comparable software program (the "Required Status Report Information"), such City Status Reports to be provided no less frequently than monthly. DTE shall also provide to the City copies of any status reports, notices or other reports it is required to provide (a) to the entities administering the Grant Programs, (b) to bondholders pursuant to a trust indenture, loan agreement or other agreement, (c) in the event that DTE is not subject to SEC Rule 15c2-12 in connection with a bond offering, DTE shall provide information to the City of the type and character that would be required if such rule was applicable to any financing of the DTE Facility, or (d) notice of any material default under any agreement, contract, loan agreement or similar financing document to which DTE is a party ("Finance Status Reports"). Finance Status Reports which contain the Required Status Report Information may be submitted to the City by DTE in lieu of City Status Reports. Within one hundred and eighty (180) days after the execution of this Agreement and upon the City's selection of a City Consultant to represent the City in the observation of the construction of the Improvements, DTE and the City Consultant, shall jointly and mutually develop and sign a reasonable protocol to guide the City's observation activities of the construction and Acceptance Testing of the DTE Facility, provided, however, that the City, by and through the City Consultant, shall be an observer only and shall not control, or be responsible for, the construction activities.

5.2.4 Completion of Acceptance Testing. When the DTE Facility is ready to become Operational, DTE shall notify the City, in writing, that Acceptance Testing has been completed and all Required Permits and Approvals have been obtained by DTE. Such notice shall be accompanied by evidence that the Acceptance Test Protocol has been satisfied. Within ten (10) Business Days of receipt of such notice, the City shall (a) deliver to DTE a letter of a City Consultant stating the reason(s) the Commercial Operations Date should not occur, or (b)

deliver a notice to DTE that it accepts that the DTE Facility is Operational and shall commence delivery of the Required Tonnage on the second Business Day following delivery of the notice.

If the City delivers the letter of the City Consultant referred to above, DTE shall have thirty (30) days from the date of such letter to (a) cure any deficiency, and provide evidence to the City that the deficiency is cured, or (b) submit a plan to the City, acceptable to the City Consultant, that demonstrates that DTE will correct the cited deficiency and the Commercial Operations Date will occur within one hundred twenty (120) days. If the conditions set forth in clause (a) or (b) of the preceding sentence are not satisfied, the City shall not be obligated to deliver MSW or Sludge as provided under Article 6 of this Agreement. In the event that DTE disputes the reasons provided by the City for non-acceptance, upon DTE's written request, which shall be provided no later than five (5) business days after receipt of the letter of the City Consultant referred to above, the Parties shall utilize the dispute resolution procedures in Section 14.2.5 of this Agreement.

5.3 DTE's Access. Upon execution of this Agreement, DTE and persons designated by DTE shall have the right to enter upon the Property to perform all actions necessary to facilitate and complete the design and construction of the Improvements, including conducting Phase II Environmental Site Assessment. Upon completion of a Phase II Environmental Site Assessment of the Premises required as a result of the findings of the Phase I Environmental Site Assessment, DTE will make said report available to the City for review, however, the City has no obligation to undertake any remediation of the Property. In the event that the results of such testing are not suitable to DTE, then DTE shall have the option to terminate this Agreement by providing the City with written notice of its intent to terminate this Agreement within one hundred and eighty (180) days after the Contract Date. If DTE terminates based on the above test results, DTE shall be required to restore the Premises to the condition that existed prior to DTE's Phase II Environmental Site Assessment, but, it shall not have any obligation to remediate any condition discovered or disclosed in the Phase I Environmental Site Assessment or Phase II Environmental Site Assessment.

5.4 Ownership of Improvements.

5.4.1. The Parties agree that DTE is the owner of the Improvements.

5.4.2. Except as set forth in Section 13.2 hereof, upon the expiration of the Term, (a) the Improvements shall continue to be owned by DTE, free and clear of any liens or encumbrances by the City, (b) DTE may remove the Improvements from the Premises at its sole cost and expense, and (c) the City, if requested by DTE, shall execute any and all documents necessary to evidence that title to the Improvements is in DTE to extinguish and remove any cloud or potential cloud on the title to the Improvements created by the City. If neither the City nor DTE exercise their respective options as set forth in Article XIII hereof, DTE shall, at the request of the City, and within a reasonable time, remove the Improvements. Such removal shall be at the sole cost and expense of DTE.

5.5. Maintenance of the DTE Facility.

5.5.1. At all times during the Term, DTE shall keep and maintain the DTE Facility in good order and repair and in a clean and safe condition. The City shall have the right, upon reasonable notice to DTE, to inspect the DTE Facility.

5.5.2. DTE shall make any and all additions to and all alterations and repairs in, on and about the DTE Facility, including maintenance and preventative maintenance in accordance with manufacturers' guidelines, which may be required by, and shall otherwise observe and comply with, all public laws, ordinances and regulations from time to time applicable to the DTE Facility (collectively, the "Laws"). In addition, DTE shall have the right to make such changes, alterations or additions to the DTE Facility as DTE deems necessary to comply with the Laws and the Required Permits.

5.6 Reserves and Additional Sureties. DTE shall establish and maintain those funds and/or accounts and/or sureties listed in Schedule 5.6 hereto, which amounts or coverages shall be held for the durations indicated in Schedule 5.6 and applied for the permitted purposes set forth in Schedule 5.6.

5.7 Environmental Site Assessment. DTE shall be solely responsible for hiring and paying all expenses and costs related to the execution of a Phase I Environmental Site Assessment, and a Phase II Environmental Site Assessment, if required, to be performed on the Premises by independent properly qualified third party engineering consultants. The City shall have a reasonable opportunity to review, and may retain the City Consultant to review, the Phase I Environmental Site Assessment and the Phase II Environmental Site Assessment.

5.8. Traffic Studies. DTE shall be solely responsible for hiring and paying all expenses and costs related to the execution of a traffic study or traffic sufficiency analysis (the "Traffic Study"), if required, on the Property, including the Premises, and the driveways and roadways located thereon and adjacent thereto, to be performed by independent properly qualified third party engineering consultants. Upon completion of such Traffic Study, DTE will make the Traffic Study available to the City or, at the City's option, the City's Consultant, for review, however, the City has no obligation to undertake any roadway or other improvements described in or referenced in the Traffic Study. In the event that the results of the Traffic Study are not suitable to DTE, then DTE shall have the option to terminate this Agreement by providing the City with written notice of its intent to terminate this Agreement within one hundred and eighty (180) days after the Contract Date.

**Article VI**  
**Transportation of Sludge and MSW to the DTE Facility;**  
**Electricity Credit**

6.1 Transportation of Sludge and MSW to the DTE Facility.

6.1.1. Beginning on the Acceptance Testing Date and ending on the Commercial Operations Date, (a) the City, at its own cost and expense, shall deliver the Required Testing Period MSW Tonnage and Required Testing Period Sludge Tonnage to the DTE Facility, such delivery to be at least five (5) days per week, Monday through Friday, according to a schedule

established by the City and DTE; and (b) DTE shall Process the Required Testing Period MSW Tonnage and Required Testing Period Sludge Tonnage.

6.1.2. Beginning on the Commercial Operations Date and throughout the remainder of the Term, (a) the City, at its own cost and expense, shall deliver the Required Commercial Operations MSW Tonnage to the DTE Facility, such delivery to be at least five (5) days per week, Monday through Friday, and may be up to six (6) days per week, Monday through Saturday to accommodate the collection and disposal schedule established by the City as specified in Schedule 6.1.2 hereof, and (b) DTE shall Process the Required Commercial Operations MSW Tonnage. The Required Commercial Operations MSW Tonnage may, at the option of the City, consist of a combination of the City's MSW and MSW which is Third Party Waste (as defined in Section 6.1.7.2).

6.1.3 The City, at its own cost and expense, shall be responsible for entering into any and all agreements necessary for the Required Testing Period MSW Tonnage and the Required Commercial Operations MSW Tonnage to be delivered to the DTE Facility.

6.1.4. Beginning on the Commercial Operations Date and throughout the remainder of the Term, (a) the City, at its sole cost and expense, shall deliver to the DTE Facility the Required Commercial Operations Sludge Tonnage, such delivery to be up to six (6) days per week, Monday through Saturday, and (b) DTE shall Process the Required Commercial Operations Sludge Tonnage. The City, at its own cost and expense, shall be responsible for delivering the Required Commercial Operations Sludge Tonnage to the DTE Facility. The Required Commercial Operations Sludge Tonnage may, at the option of the City, consist of a combination of the City's Sludge and Sludge which is Third Party Waste (as defined in Section 6.1.7.2), provided such third party Sludge is tested and approved by DTE, such testing and approval to be conducted expeditiously.

6.1.5. DTE shall not be obligated to (a) Process Excess Tonnage consisting of MSW at any time during the Term if such Processing would cause the DTE Facility to violate the Capacity Limitations of the DTE Facility; (b) Process Excess Tonnage consisting of Sludge at any time during the Term if such Processing would cause the DTE Facility to violate the Capacity Limitations of the DTE Facility; or (c) Process MSW and Sludge if the proportion of MSW to Sludge delivered does not satisfy the parameters in Schedule 6.1.5. DTE is required to Process the City's MSW and Sludge as provided in Section 6.1.6, Section 6.1.2 and Section 6.1.4 regardless of whether the DTE Facility is Operational.

6.1.6. DTE shall weigh the amount of the MSW and Sludge delivered by the City to the DTE Facility on a truck-by-truck basis. The weigh scale located on the Premises and installed not later than the Acceptance Testing Date by DTE shall be examined, tested, and serviced by DTE regularly to insure its accuracy, including annual testing and calibration of any metering devices, with a report sent to the City. The weigh scale shall be subject to the certification requirements of the Commonwealth. The City shall be permitted, upon reasonable notice to DTE, to inspect the weigh scale. DTE shall provide the hauler and the City with weigh slips for each delivery. DTE will develop, in concert with the City, a real-time, remotely accessible delivery and tracking system (the "Tracking System") to be used during the Term, commencing during the period of Acceptance Testing, which shall provide, among other things,

real-time information of the weight of each delivery for information and review by authorized City personnel, for daily reports to the City of the Tons of MSW and Sludge delivered by or on behalf of the City. The Tracking System will be incorporated in an operations manual. The Tracking System shall be installed and fully operational not less than thirty (30) days prior to the end of the period of Acceptance Testing.

6.1.7. From and after the Commercial Operations Date, DTE shall determine, on a monthly basis (adjusted for the number of weeks and partial weeks in a particular month), whether the City delivered less than the Required Tonnage or delivered Excess Tonnage.

6.1.7.1. In the event that the City delivers Excess Tonnage, then DTE shall have the right to charge to the City a tipping fee in the amount of Sixty-eight Dollars (\$68) per ton (the "Tipping Fee") of Excess Tonnage delivered, or caused to be delivered by the City to the DTE Facility. Beginning on the one year anniversary of the Commercial Operations Date, and annually thereafter, the Tipping Fee shall increase by 2.21%. DTE shall have the right to retain all revenues received from Process Residue relating to the Excess Tonnage.

6.1.7.2. In the event that the City determines that: (a) it is not able to meet its obligation to deliver Required Commercial Operations MSW Tonnage and/or Required Commercial Operations Sludge Tonnage to the DTE Facility; or (b) in the event such minimum amount of Required Commercial Operations MSW Tonnage and/or Required Commercial Operations Sludge Tonnage has been met and the maximum amount of Required Commercial Operations MSW Tonnage and/or Required Commercial Operations Sludge Tonnage has not been fully utilized, the City shall have the right to cause third parties to deliver Sludge, upon not less than two (2) days notice, and MSW (together, "Third Party Waste") (subject to testing of the Sludge as provided in Section 6.1.4 hereof) to the DTE Facility for Processing up to an amount, together with the City's MSW and Sludge, equal to the Required Tonnage. In the event that the maximum amount as set forth in (b) above has not been fully utilized, the City shall also have the right to substitute MSW for Sludge or Sludge for MSW to the extent that the combined maximum amount of Required Commercial Operations MSW Tonnage and/or Required Commercial Operations Sludge Tonnage has been utilized, provided that such addition MSW and/or Sludge supplied by the City will be within the ratio of Sludge to MSW set forth in Schedule 6.1.5.

The City shall notify DTE not later than close of business on the day preceding delivery prior to causing Third Party Waste to be delivered to the DTE Facility. If the City causes Third Party Waste to be delivered to the DTE Facility, the City shall be entitled to all sums paid by a third party to dispose of the Third Party Waste at the DTE Facility. In the event the City obtains Third Party Waste, the City shall advise the parties providing such Third Party Waste of the composition and delivery requirements applicable to such Third Party Waste.

In the event the City does not notify DTE of its intent to provide Third Party Waste, or if the City fails to provide Third Party Waste in amounts sufficient to meet the Required Tonnage, DTE shall use its best efforts to obtain Sludge and MSW from other parties in order to ensure that appropriate amounts of the MSW and/or Sludge are delivered to the DTE Facility. In the event DTE obtains Sludge and/or MSW from other parties in order to ensure that appropriate amounts of the MSW and/or Sludge are delivered to the DTE Facility, forty-five

percent (45%) of all revenues received (after deducting all incremental costs and expenses incurred by DTE in connection with obtaining the additional MSW and/or Sludge) by DTE in connection therewith (being revenues that are separate and distinct from the Operating Fee payable hereunder) shall be credited to the City for the next monthly payment of the Operating Fee then due. DTE shall substantiate to the City any such incremental costs and expenses incurred by DTE in connection with obtaining the additional MSW and/or Sludge. DTE's receipt of additional revenues from third party(ies), and the remittance to and receipt by the City of a portion of such additional revenues, shall be the sole rights and remedies of the Parties in the case hereinabove described. For purposes of clarification, the City shall not be entitled to any other payment or credit.

6.1.8. DTE shall monitor the quality and flows of water delivered from the DTE Facility to the Treatment Plant, as well as monitor the flow of effluent discharging from the stack located on the DTE Facility. The monitoring facilities installed by DTE shall be examined, tested, and serviced by DTE regularly to insure their accuracy, including annual testing and calibration of any metering devices, with a report sent to the City. The City shall be permitted, upon reasonable notice to DTE, to inspect the monitoring facilities.

6.1.9. Upon delivery of any MSW, Sludge or Third Party Waste, the MSW, Sludge or Third Party Waste becomes the responsibility of DTE. DTE will be responsible to separate and pay for the disposal of all Process Residue unacceptable to the DTE Process. The City does not guarantee that incidental quantities of non-MSW, unacceptable to the DTE Process, will be excluded from deliveries to DTE and therefore, DTE will provide means to separate and dispose of any items unacceptable to their Process at DTE's expense.

## 6.2. Waste Disposal Services; Electricity Credit.

6.2.1. DTE, at its sole cost and expense, shall provide all interconnects, including all associated metering and any other equipment required and necessary to facilitate the flow of electricity between the DTE Facility and the power producing grid (collectively, the "Electricity Infrastructure"). At all times during the Term, DTE shall be responsible for the maintenance, repair and replacement, at DTE's sole cost and expense, of the Electricity Infrastructure.

6.2.2. DTE shall be permitted to sell any and all electrical energy produced by the DTE Facility to a third-party utility for the benefit of DTE by way of a separate Power Purchase Agreement or Capital Markets Purchase Agreement between DTE and such third-party utility.

6.2.3. For a period of five (5) years commencing on the Commercial Operations Date (the "Guaranty Period"), each monthly installment of the Operating Fee shall be reduced by an amount ("Electricity Credit"), which shall be twelve (12) cents per kilowatt-hour multiplied by 833,050 kilowatt-hours. After the Guaranty Period, the Electricity Credit shall be an amount equal to the actual price per kilowatt-hour on an all-in kilowatt-hour basis (including payment for capacity and energy) received by DTE for electricity generated at the DTE Facility during the immediately preceding month multiplied by 833,050 kilowatt-hours. Notwithstanding the

foregoing, in the event DTE is paid, pursuant to a power purchase agreement or other similar agreement, other than on a monthly basis, the Electricity Credit shall be credited to the City against its next monthly payment(s) on the same basis on which DTE receives payment under such agreement. The City and DTE will jointly investigate options for selling the power. The City shall have the right to assist, attend and advise DTE in any contract negotiations with a power purchaser with respect to any contract which will be in effect after the Guaranty Period. DTE agrees to provide sufficient notice to the City of any such negotiations. The City's inability to be present at any such negotiation shall not preclude DTE from conducting such a negotiation. During any period when the DTE Facility is unable to generate electricity, the Electricity Credit will be based on the price received by DTE for electricity generated by the DTE Facility during the immediately preceding month during which DTE was entitled to receive (pursuant to a contract or otherwise) revenue from electricity generation.

6.2.4. DTE shall be permitted to sell any and all Process Residue from the Required Tonnage and retain all revenues therefrom. DTE shall report the types and quantities of recyclable materials that it sells and the name of the company the recyclables are sold to in order to assist the City in complying with county and Commonwealth reporting requirements and any grant requirements.

6.2.5. DTE shall, on or before the first anniversary of the Contract Date, enter into a standby agreement with a waste management company and/or sewage sludge processing company (the "Standby Agreement") for the disposal at a licensed facility of the City's MSW and Sludge in an amount equal to the Required Tonnage and for the disposal of Process Residue that is unmarketable. The City shall have an opportunity to review and comment on the Standby Agreement prior to execution. The term of the Standby Agreement may vary, provided however, there shall be no lapse in coverage under the Standby Agreement during the Term.

The Standby Agreement shall require that such disposal services shall be immediately available when DTE Facility is unable to dispose of all or part of the Required Tonnage and DTE is unable to store and maintain the Sludge and MSW at the DTE Facility in accordance with the DTE Facility's Required Permits. The Standby Agreement shall provide, among other things, that the waste management company and/or sludge processing company shall be required to accept all or any MSW, Sludge and Process Residue which DTE is unable to properly hold, Process or maintain in the DTE Facility. The waste management company and/or sludge processing company shall be licensed for hauling and/or disposal by the Commonwealth or by the state of its business location. The use of a waste management company and/or sludge processing company pursuant to the Standby Agreement shall in no way affect, abate, excuse or diminish DTE's obligations to Process the Required Tonnage under this Agreement, and provided that DTE complies with its other duties and obligations under this Agreement, DTE's failure to perform any of its duties, obligations or covenants under Article VI hereof shall not constitute a breach or default by DTE hereunder; DTE's obligation to provide the City with the Electricity Credit as per paragraph 6.2.3 of this Agreement shall remain in effect. The Standby Agreement shall provide that the City is a third party beneficiary of the Standby Agreement and shall further provide that it is assignable to the City provided, however, that the City shall exercise its rights under the Standby Agreement only in the event that such Standby Agreement is not being implemented or enforced by DTE, after not less than three (3) days notice from the

City to DTE of DTE's failure to implement or enforce the Standby Agreement. DTE shall provide a copy of the Standby Agreement to the City upon execution.

**Article VII**  
**Representations, Warranties and Covenants of the City and DTE**

7.1 Representations and Warranties of the City. The City hereby represents and warrants to DTE that, as of the Contract Date:

7.1.1. to the best of its knowledge, the City has good and marketable title to the Premises and the City possesses full power and authority to deal therewith in all respects and no other party has any right or option thereto or in connection therewith;

7.1.2. there are no easements, covenants, conditions, or rights-of-way, which would prohibit or interfere with the construction of the Improvements or the operation of the DTE Facility;

7.1.3. there are no pending or threatened actions or legal proceedings affecting the Premises;

7.1.4. this Agreement and the consummation of the transactions contemplated herein are the valid and binding obligations of the City and do not constitute a default (or an event which, with the giving of notice or the passage of time, or both, would constitute a default) under, nor are they inconsistent with, any contract to which the City is a party or by which it is bound; and

7.1.5. the City is not obligated upon any contract, lease or agreement, written or oral, with respect to the ownership, use, operation or maintenance of the Premises.

7.1.6. the City is not obligated upon any contract or agreement, written or oral, with respect to the City's MSW which would prevent the City from meeting its obligation to deliver the Required Testing Period MSW Tonnage and the Required Commercial Operations MSW Tonnage;

7.1.7. the City is not obligated upon any contract or agreement, written or oral, with respect to the City's Sludge which would prevent the City from meeting its obligation to deliver the Required Commercial Operations Sludge Tonnage;

7.2. Covenants of the City. The City hereby covenants to DTE that, during the Term:

7.2.1. DTE shall peaceably and quietly hold and enjoy the full possession and use of the Premises;

7.2.2. the City shall not grant any mortgage, deed of trust, or mortgage encumbrance against the Premises without the prior written approval of DTE;

7.2.3. the City shall not grant any non-monetary liens or encumbrances against the Premises without the prior written approval of DTE;

7.2.4. the City shall cooperate with DTE in any and all applications for the Required Permits and Required Approvals, including Land Approvals, required to construct and operate the DTE Facility;

7.2.5. the City shall adopt, deliver, execute and make any and all further assurances, instruments and resolutions as may be reasonably necessary or proper to carry out the intention or to facilitate the performance hereof and for the better assuring and confirming unto DTE of the rights and benefits provided to it herein;

7.2.6. the City shall supply DTE with the Required Tonnage in accordance with the terms of this Agreement;

7.2.7. the City shall expedite the processing and transfer of funds received by the City, on behalf of DTE, from the Grant Programs minus an amount equal to the amount of Development Costs of the City reimbursable from the proceeds of the Grant Programs, but not in excess of the amount set forth in Section 5.1 hereof. The remaining moneys shall, subject to the terms of the applicable Grant Program, be delivered to DTE within ten (10) days of receipt by the City; and

7.2.8. the City shall include in each of its annual budgets the annual Operating Fee for the respective fiscal year. The City acknowledges that it has a contractual obligation hereunder to pay the Operating Fee to DTE during the Term of, and subject to the terms of, this Agreement. The City agrees that when the Operating Fee is provided for in its annual budgets, the City shall, in accordance with the terms of this Agreement, pay to DTE or its assigns, the Operating Fee due hereunder, out of the current revenues of the City from funds appropriated in the then current fiscal year. Notwithstanding the foregoing, DTE and the City each acknowledge and agree that the obligation of the City to pay the Operating Fee (and any other sums due hereunder) is a current expense under a service contract, payable solely from funds lawfully available to the City for such purpose during the then current fiscal year of the City. DTE and the City each also acknowledge that this Agreement and the obligations of the City hereunder to pay the Operating Fee (and any other sums due hereunder) do not constitute a lien or charge upon the funds of the City beyond the fiscal year for which the City has appropriated money to pay the Operating Fee (and any other sums due hereunder) and that this Agreement and the obligations of the City hereunder do not constitute a debt or general obligation of the City. It is further acknowledged by DTE and the City that neither the full faith and credit nor the taxing power of the City or of any other political subdivision of the Commonwealth has been or will be pledged to the payment of the Operating Fee (and any other sums due hereunder).

7.3 Covenants of DTE. DTE hereby covenants to the City that, during the Term:

7.3.1. DTE shall apply for and obtain, in a timely manner, with the City's assistance when needed, all Required Permits and Required Approvals;

7.3.2. DTE shall construct, maintain and operate the DTE Facility in compliance with Required Permits, Required Approvals and all applicable laws and ordinances, provided, however, that the payment of surcharges under applicable federal, state and local laws and ordinances shall not be deemed to be noncompliance for purposes of this Section 7.3.2;

7.3.3. Upon receipt of notice of a violation any Required Permit, DTE shall promptly notify the City, in writing, of the nature of such violation and, upon request, provide a copy of the notice of violation;

7.3.4. DTE shall weigh, or cause to be measured, all Sludge and MSW delivered to the DTE Facility and shall keep and maintain accurate and complete records thereof and the City shall be permitted, upon reasonable notice to DTE, to inspect such records and to inspect and test the scale system at the DTE Facility. In addition, DTE shall provide real-time, remotely accessible tracking data and/or daily data reports to the City of the amount of MSW and Sludge delivered, or caused to be delivered, by the City in accordance with Section 6.1.6 hereof;

7.3.5. DTE shall monitor, or cause to be monitored, the quality and flow of water delivered from the DTE Facility to the Treatment Plant, as well as monitor the flow of effluent discharging from the stack located on the DTE Facility, and shall keep and maintain accurate records thereof. The City shall be permitted, upon reasonable notice to DTE, to inspect such records;

7.3.6. DTE shall ensure that all treated water being transferred to the Treatment Plant at the end of the waste-to-energy process shall meet the City's agreed water standards approved in the waste water discharge permit (as listed on Schedule 2.1 hereto) issued by the City to DTE;

7.3.7. DTE shall maintain the DTE Facility in good repair and operating condition; operate them continuously in an efficient manner and in compliance with regulatory and statutory requirements where applicable and appropriate; and make all repairs, renewals, replacements and improvements thereto as required to maintain reliable thermal power and electrical energy generation;

7.3.8. DTE shall adopt, deliver, execute and make any and all further assurances, instruments and resolutions as may be reasonably necessary or proper to carry out the intention or to facilitate the performance hereof and for the better assuring and confirming unto the City of the rights and benefits provided to them herein;

7.3.9. DTE shall maintain all applicable technology licenses required for the DTE Facility. In the event of non-performance by DTE, the use of the technology only within the DTE Facility shall be transferred to the bondholders or whomever the bondholders designate at such time;

7.3.10. DTE shall Process Required Tonnage in accordance with the terms of this Agreement. The disposal of by-products (waste water, ash, air emissions, etc.) shall be in accordance with applicable state and federal environmental laws;

7.3.11. DTE will use the DTE Facility to convert MSW and Sludge into electrical energy and shall provide the Electricity Credit to the City as per the terms of this Agreement;

7.3.12. DTE shall use commercially reasonable efforts to maintain the DTE Facility in an Operational status at all times, and shall use all reasonable means to restore the

DTE Facility to an Operational status in the event the DTE Facility is not, for any period of time, Operational;

7.3.13. DTE shall not make any material substitution of the fundamental technology of the DTE Facility as described in Schedule 5.2 of this Agreement after the Commercial Operations Date without the prior written consent of the City; and

7.3.14. DTE shall not seek any amendments or modifications of the Required Permits without providing thirty (30) days prior written notice to the City.

7.4 Representations and Warranties of DTE. DTE hereby represents and warrants to the City that, as of the date of this Agreement and the Commercial Operations Date:

7.4.1. This Agreement and the consummation of the transactions contemplated herein are the valid and binding obligations of DTE and do not constitute a default (or an event which, with the giving of notice or the passage of time, or both, would constitute a default) under, nor are they inconsistent with, any contract to which DTE is a party or by which it is bound;

7.4.2. DTE is not obligated upon any contract or agreement, written or oral, which would prevent DTE from meeting its obligations herein;

7.4.3. DTE is a limited liability company duly organized, validly existing and in good standing under the laws of its jurisdiction of organization, with full corporate power and authority to conduct its business as it is now being conducted, to own or use the properties and assets that it purports to own or use, and to perform all its obligations under the contracts to which it is a party;

7.4.4. DTE is not required to give any notice to or obtain any consent from any party in connection with the execution and delivery of this Agreement or the consummation or performance of any of the transactions contemplated hereunder;

7.4.5. DTE shall at all times employ experienced personnel at the DTE Facility and shall engineer the DTE Facility to accept and dispose of the Required Tonnage at the DTE Facility and to perform its obligations thereunder;

7.4.6. DTE has the right to use and operate the technologies referenced in Section 5.2 and Schedule 5.2 hereof, and to the extent necessary in order to perform under this Agreement, DTE shall acquire the right to use and operate other non-proprietary technologies at the DTE Facility; and

7.4.7 The Required Permits and Required Approvals, including Land Approvals, are all the permits or approvals required to be obtained from any governmental agency in connection with the construction and operation of the DTE Facility.

**Article VIII**  
**Operating Fee**

8.1 Beginning on the Commercial Operations Date and for so long as DTE performs its duties and obligations under Section 6.1 hereof (including the disposal of the Sludge and MSW under the Standby Agreement), the City shall be responsible for the payment to DTE of an annual operating fee in the amount of Five Million Eight Hundred and Eighty Five Thousand U.S. Dollars (\$5,885,000.00) (the “Operating Fee”) in exchange for the waste-to-energy services provided by DTE pursuant to this Agreement and the other obligations and covenants to be performed by DTE hereunder. The Operating Fee shall be paid in twelve (12) monthly installments over the course of each Lease Year in the amount of Four Hundred and Ninety Thousand Four Hundred and Seventeen Dollars (\$490,417.00) per month, provided however that the first and last monthly payments under this Agreement shall be pro-rated. The Operating Fee shall be reduced by the Electricity Credit, as provided in Section 6.2.3 hereof. Each monthly installment of the Operating Fee shall be invoiced in arrears. The City’s obligation to pay Operating Fees is contingent on DTE’s continuing to Process the Required Tonnage in accordance with the terms of this Agreement.

The invoice shall set forth the portion of the Operating Fee due, a list of any Excess Tonnage charges including a description of the amount of MSW and/or Sludge delivered to DTE as Excess Tonnage, any credit for Third Party Waste and a calculation thereof, and a calculation of the Electricity Credit including the rate paid by the power purchaser during such period. In the event the City disputes any charges or credits in the invoice, it shall promptly notify DTE of the basis of such dispute. DTE shall promptly provide a response to the City. If the City and DTE cannot resolve the dispute by the due date for the invoice, the City agrees to pay the invoice in full and may invoke the dispute resolution procedures in Article XIV.

8.2 Beginning on the first anniversary of the Commercial Operations Date, and for each succeeding Lease Year thereafter, the Operating Fee shall increase annually by 2.21%.

8.3 The Operating Fee is also subject to adjustment as required by Section 3.1 of this Agreement.

8.4 The Operating Fee shall be utilized by DTE to cover all costs associated with the ownership, operation, maintenance, repair and/or replacement of the DTE Facility, including, but not limited to, any and all taxes, employee salaries, capital expenditures, insurance, general and administration costs, accounting, legal, supplies, etc., and charges and expenses for all utilities used or consumed by the DTE Facility.

## **Article IX** **Insurance and Surety**

9.1. City Insurance. The City has and shall maintain (including through self-insurance), continuously throughout the Term, general liability insurance, including contractual liability, and comprehensive automobile liability insurance for bodily injury and property damage in such amounts, subject to such exceptions and deductibles, as are customary for similarly sized cities in Pennsylvania, and shall maintain (including through self-insurance) worker’s compensation and employer’s liability insurance limits as required by law. The City further covenants and agrees that all insurance policies shall be carried with a responsible insurance company or companies authorized to do business in the Commonwealth or shall be provided under

a self-insurance program; any self-insurance program shall be actuarially sound in the written opinion of an accredited actuary. DTE acknowledges that the City has no obligation to maintain any insurance with respect to the DTE Facility.

9.2. DTE Insurance and Bonds. Continuously throughout the Term, and during any period of time in which construction of the Improvements is occurring, DTE shall, and shall also require its contractors and subcontractors to, maintain and keep in effect the following insurance coverages with an insurance company or companies lawfully authorized to do business in Pennsylvania and having a B+ Operating and Class VIII Financial Rating as listed in Best's Key Rating Guide, latest edition:

9.2.1. Commercial general liability insurance, including contractual liability, with a combined single limit with respect to each occurrence of not less than \$5,000,000.00, insuring DTE (and naming the City, all of its, agents, officers and employees as an additional party or insured) against loss, damage, cost, expense or liability for any damage to any property or bodily injury or personal injury, illness or death of any person occurring or arising as a result of the negligence of DTE or its contractors, agents or employees, or this Agreement; and

9.2.2. Worker's compensation and employer's liability insurance limits as required by law; and

9.2.3. Comprehensive automobile liability insurance with a combined single limit not less than \$1,000,000 for bodily injury and property damage.

DTE further covenants and agrees that it will add as a party insured by such policies the interest of the City and will provide an annual certificate of insurance coverage to the City as evidence of all such insurance coverages to the City prior to the start of construction of the Improvements and thirty (30) days prior to the start of each Lease Year. It is expressly understood and agreed that all policies of insurance shall contain a clause that the same shall not be canceled except on thirty (30) days' written notice to any and all parties in interest.

9.2.4. Environmental insurance as set forth in Schedule 5.6 hereto.

9.3. Payment and Performance Bond. DTE shall require its general contractor or construction manager and any other prime contractor(s) to provide a performance bond and payment bond, each in the amount of 100% of their respective contract value, of the faithful performance of the installation of the Improvements and the payment of all obligations arising thereunder.

## **Article X** **Indemnification**

10.1 Indemnification During Construction of the Improvements. DTE shall indemnify, hold harmless and defend the City, its agencies, officers, employees and agents (collectively, "City Indemnitees") from and against any liability, loss, damage and expense (including reasonable attorneys' fees and court costs) incurred by or imposed upon City Indemnitees in connection with any third-party claim, suit, action, demand or judgment related to construction of the Improvements.

## 10.2 Indemnification for Third-Party Liability.

10.2.1. DTE's Duty. DTE shall indemnify, hold harmless and defend the City Indemnitees from and against any liability, loss, damage and expense (including reasonable attorneys' fees and court costs) incurred by or imposed upon City Indemnitees in connection with any claim, suit, action or demand by a third-party arising from the negligence or willful misconduct of DTE in its operation of the DTE Facility and performance of its duties and obligations hereunder including, but not limited to, violations of Environmental Laws.

10.2.2. The City's Duty. The City shall indemnify, hold harmless and defend DTE, its agencies, officers, employees and agents (collectively, "DTE Indemnitees") from and against any liability, loss, damage and expense (including reasonable attorneys' fees and court costs) incurred by or imposed upon DTE Indemnitees in connection with any claim, suit, action or demand by a third-party arising from the negligence or willful misconduct of the City relating to the existence of any hazardous or toxic substances or materials identified by a Phase I Environmental Site Assessment and Phase II Environmental Site Assessment within the soil on the Premises prior to DTE's control of the Premises.

10.3. Time Limitations. No party will have any liability for indemnification under this Article X unless notice claiming the right to be indemnified has been given to the other party that it in good faith is thought to constitute a reasonable basis for indemnification.

## **Article XI**

### **Default by DTE; Remedies; Notices**

#### 11.1. Events of Default.

(a) Unless otherwise provided herein, an event of default shall occur upon DTE's failure to perform any provision of this Agreement to be performed by DTE if the failure to perform is not cured within fifteen (15) days after DTE receives written notice thereof from the City, provided, however, that if such default cannot reasonably be cured within such fifteen (15) day period, DTE shall not be in default of this Agreement if DTE takes reasonable actions intended to cure the default, including, without limitation, conducting an internal audit or investigation of such alleged breach or hiring a third-party to conduct such an audit or investigation, and diligently and in good faith continues to cure the default until completion.

(b) If the Commercial Operations Date does not occur on or before January 1, 2016, there shall be a default under this Agreement not subject to the cure provision of Section 11.1(a).

11.2. City's Remedies. If DTE fails to cure a default after expiration of the applicable time for cure of a particular default, the City may exercise any remedy given hereunder or now or hereafter existing at law or in equity or by statute. The City shall only be permitted to terminate this Agreement in the event that DTE fails to comply with its obligations under Sections 6.1.1, 6.1.2 and 6.1.4 of this Agreement (after notice and the opportunity to cure as set forth herein), in the event that DTE becomes bankrupt or insolvent, or in the event of a default under Section 11.1(b). The City may seek reimbursement moneys for any excess disposal costs it incurs in the event that DTE does not Process an amount up to the Required Tonnage.

If at any time the City exercises its right to terminate this Agreement, DTE, at its sole cost and expense, shall remove the DTE Facility and restore the Premises to its condition immediately prior to the commencement of construction of the Improvements, such removal and restoration to be completed within six (6) months of the date of delivery by the City to DTE or a written notice requiring removal of the DTE Facility and restoration of the Premises.

11.3. Mitigation of Damages. Notwithstanding anything to the contrary set forth herein, the City agrees to use its best efforts to mitigate its damages resulting from a DTE default.

11.4 Notices. Notices given under this Article XI shall specify the alleged default and the applicable Agreement provisions, and shall demand that DTE perform the provisions of this Agreement within the applicable period of time for cure. No such notice shall be deemed a forfeiture or termination of this Agreement unless expressly set forth in such notice.

## **Article XII**

### **Default by City; Remedies; Notice**

#### 12.1. Events of Default.

12.1.1. Monetary Default. The City shall be in monetary default of this Agreement if it fails to pay any monthly installment of the annual Operating Fee, as adjusted by the Electricity Credit, or an applicable surcharge under Section 12.2.1 more than thirty (30) days after the due date thereof.

12.1.2. Non-Monetary Default. The City shall be in non-monetary default of this Agreement if it fails to perform any provision of this Agreement that it is obligated to perform and if the failure to perform is not cured within thirty (30) days after written notice of the default has been given by DTE to the City. If a non-monetary default cannot reasonably be cured within thirty (30) days, the City shall not be in default of this Agreement if the City commences to cure the default within such thirty (30) day period and diligently and in good faith continues to cure the default until completion, provided the same is capable of being cured by the City.

#### 12.2. Right to Cure; DTE's Remedies.

12.2.1. Monetary Default. If the City shall be in monetary default of this Agreement, the City shall be charged interest at a rate of one and one-half percent (1.5%) per annum on any overdue amounts owing to DTE.

12.2.2 Non-Monetary Default. If the City shall have failed to cure a non-monetary default after expiration of the applicable time, if any, for cure of a particular default, the City shall be charged actual costs and damages incurred by DTE, if any, for each day that the City is in non-monetary default.

12.2.3. Other Remedies. Notwithstanding the above, DTE may exercise any remedy given hereunder or now or hereafter existing at law or in equity or by statute.

12.3. Notices. Notices given under this Article XII shall specify the alleged default and the applicable Agreement provisions, and shall demand that the City perform the provisions of this Agreement within the applicable period of time for cure. No such notice shall be deemed a forfeiture or termination of this Agreement unless expressly set forth in such notice.

### **Article XIII** **Option**

13.1. Option to DTE. The City hereby grants to DTE the exclusive right and option (“DTE Option”) to purchase the Premises upon the expiration of the Term. DTE may exercise the DTE Option upon not less than one hundred and eighty (180) days’ notice to the City prior to the expiration of the Term. The purchase price shall be the fair market value of the Premises as determined by an independent real estate appraiser, as of the date when the DTE Option is exercised by DTE, as if no buildings and other improvements have been constructed on the Premises and as if no lease agreements exist with respect to the Premises. For the avoidance of doubt, the purchase price shall be the fair market value of the land only as of the date when the DTE Option is exercised and shall not include the value of the buildings, site improvements and/or leases.

13.2. Option to City. DTE hereby grants to the City the exclusive right and option (“City Option”) to purchase the Improvements upon DTE’s failure to timely exercise the DTE Option. The City may exercise the City Option upon not less than one hundred and fifty (150) days’ notice to DTE prior to the expiration of the Term. The purchase price shall be the fair market value of the Improvements only as determined by an independent equipment appraiser, as of the date when the City Option is exercised by the City. For the avoidance of doubt, the purchase price shall be the fair market value of the Improvements only as of the date when the City Option is exercised and shall not include the value of the land and/or leases.

#### 13.3. Exercise of Option.

13.3.1. Agreement. The City Option and the DTE Option may be exercised, as applicable, by either the City or DTE by delivering written notice of its election to exercise the DTE Option or the City Option, as applicable. Promptly after the execution and delivery of such written notice, the relevant buyer and the relevant seller shall diligently and in good faith negotiate the terms and conditions of an Agreement of Sale (the “Agreement of Sale”) for the acquisition of the Premises or the Improvements, as applicable, in accordance with the terms and conditions contained herein. The Agreement of Sale shall include representations and warranties reasonably satisfactory to DTE and the City, and their respective counsel, customary provisions relating to due diligence, title, prorations and adjustments, indemnities, governmental assessments, environmental conditions and outstanding violations, as well as such other terms, conditions and provisions deemed necessary by DTE and the City which are customarily contained in Pennsylvania contracts for the purchase and sale of commercial type real and personal property.

13.3.2. Settlement and Closing. The obligation to consummate the Agreement of Sale and complete settlement (the “Settlement”) shall, with regard to the sale and purchase of the Premises, be subject to the condition that title to the Premises shall be conveyed to DTE at

Settlement by quitclaim deed and shall be good and marketable and insurable as such by a title insurance company or company of DTE's selection, free and clear of all liens (with the exception of any title exceptions approved by DTE). Settlement under the Agreement of Sale for either the Premises or the Improvements shall be held on or before thirty (30) days after satisfying all conditions contained in the Agreement of Sale (the "Settlement Date"). Transfer taxes, if any, shall be equally split between the City and DTE.

13.3.3. The Parties acknowledge that the Options set forth in this Article XIII are essential terms of this Agreement of which it is a part, and is supported by adequate consideration therefor, receipt of which is acknowledged by both Parties.

13.4 Removal of the DTE Facility. In the event that neither DTE nor the City exercise their respective Options at the end of the Term as stated in the provisions of this Paragraph of the Agreement, the City has the right to require DTE, at DTE's sole cost and expense, to remove the DTE Facility and restore the Premises to its condition immediately prior to the commencement of construction of the Improvements, such removal and restoration to be completed within six (6) months of the date of delivery by the City to DTE or a written notice requiring removal of the DTE Facility and restoration of the Premises.

#### **Article XIV** **Dispute Resolution**

14.1. Generally. This Article XIV governs any disputes between DTE and the City, other than matters involving an event of default as described in Section 11.1 and Section 12.1 hereof ("Event of Default"), that arise under the terms of this Agreement (a "Dispute"). For clarification purposes, it is acknowledged that, upon an Event of Default, the Parties are not limited to the dispute resolution procedures set forth in this Article XIV.

14.2. Dispute Resolution Procedures. Any Dispute shall be subject to the alternative dispute resolution process described in this section.

14.2.1 Negotiation. The resolution procedures shall be invoked when either party sends a written notice to the other. The notice shall describe the nature of the dispute and the party's position with respect to such dispute. The Parties shall expeditiously schedule negotiations between designated management representatives appointed by each party. The period of informal negotiations shall not extend beyond thirty (30) days from the date of the first meeting between the management representatives, unless the Parties agree to extend this period.

14.2.2. Mediation. The management representatives may request the assistance of an independent mediator if they believe that such a mediator would be of assistance to the efficient resolution of the dispute.

14.2.3. Arbitration. In the event that the management representatives are unable to resolve the matter, either party may initiate the arbitration process set forth in this subsection upon giving written notice to the other party (the "Arbitration Notice"), although the arbitration option may be passed over and the matter taken directly to litigation if either party provides written notice to the other party within ten (10) days of receiving an Arbitration Notice that it objects to the particular dispute being subject to arbitration under these provisions.

14.2.4. Arbitration Terms. Any arbitration will comply with the following terms:

i. Within thirty (30) days of the Arbitration Notice, the Parties shall either agree upon the use of an arbitration service or the appointment of a single independent professional to serve as arbitrator, or if the Parties are unable to agree upon a single arbitrator, each party shall appoint an independent professional to serve as arbitrator, and the two individuals so named shall, within an additional thirty (30) days, agree upon a third independent professional to serve as the third arbitrator. At least one of the arbitrators shall be an attorney familiar with litigation proceedings and rules of evidence. The Parties shall mutually cooperate to retain the arbitrator(s) upon terms and conditions mutually satisfactory to the Parties as soon as practicable after selection of the arbitrator(s). Any arbitration conducted under this Article XIV shall be nonbinding on the Parties unless the Parties agree in writing to waive all appeal rights, in which case the arbitrator(s) determination shall be final and binding upon the Parties and a judgment may be enforced in a court of competent jurisdiction.

ii. The arbitration shall take place in Allentown, Pennsylvania or such other location as mutually agreed to by the Parties.

iii. The fees of the arbitrator(s) shall be paid one-half by DTE and one-half by the City.

iv. The arbitrator(s) shall decide such disputes pursuant to the Pennsylvania Rules of Evidence. The arbitrator(s) shall be required to make a final determination within thirty (30) days from the receipt of such dispute by the arbitrator(s), which determination, in the case of binding arbitration, shall be subject to review and vacation by the Court of Common Pleas of Lehigh County to the extent provided pursuant to 42 Pa.C.S. §7314. Where three arbitrators are appointed, the decision may be rendered by a majority of the arbitrators. The determination by the arbitrator(s) shall be made in writing and shall contain written findings of fact, and may be specifically enforced by a court of competent jurisdiction. The arbitrator(s) shall determine a fair and equitable allocation of the reasonable expenses of the Parties (excluding the arbitrator's costs) incurred in connection with the resolution of any dispute hereunder. Each party shall bear its own attorney's fees, unless the arbitrator(s) shall determine that the nature of the action or defense of the non-prevailing party was frivolous, in which event the arbitrator(s) shall determine a fair and equitable attorney's fee to be paid to the prevailing party. The arbitrators may require the services of one or more independent engineers to assist them in the arbitration process.

v. The arbitrator(s) shall retain independence of the Parties to this Agreement, and neither party shall engage or attempt to engage the services of the arbitrator(s) for any other purposes without prior written notice to, and the consent of, the other party.

vi. Except as otherwise set forth in this subsection, any arbitration pursuant to this subsection shall be governed by and subject to the provisions of the Pennsylvania Uniform Arbitration Act, 42 Pa.C.S. §7301 et seq.

vii. In the case of a dispute not resolved to the satisfaction of a Party after nonbinding arbitration, either Party may pursue its remedies by filing in the Court of Common Pleas in Lehigh County.

14.2.5 Notwithstanding the dispute resolution procedures set forth in this Article XIV, in the event a dispute arises between DTE and the City regarding any alleged deficiency in the DTE Facility as set forth in a letter from the City Consultant as described in Section 5.2.4 hereof, DTE and the City shall select and engage a mutually-acceptable third party engineer to resolve any such dispute. Each Party's engineer, or the City Consultant for the City, shall select the mutually acceptable third party engineer. The determination of such engineer shall be binding upon the Parties. The fees of the engineer shall be paid one-half by DTE and one-half by the City.

14.2.6 Modification of Dispute Resolution Procedures. The Parties may agree in writing to modify the dispute resolution procedures set forth in this Article XIV at the time of a Dispute.

## **Article XV** **Notices**

15.1 Any notice required or permitted to be given or served by either party to this Agreement shall be in writing and deemed to have been given or delivered, as the case may be, on the date of mailing when deposited in the United States Post Office, Certified or Registered Mail, Return Receipt Requested, postage prepaid, or the date of deposit with a national overnight express carrier, such as Federal Express, charges prepaid, addressed as follows:

to the City:

City of Allentown  
Attn: Mayor  
435 Hamilton Street  
Allentown, PA 18101

with a copy to:

Solicitor – City of Allentown  
435 Hamilton Street, Room 519  
Allentown, PA 18101

to DTE:

Delta Thermo Energy A, LLC  
c/o Chief Executive Officer  
66 Witherspoon Street, No. 111  
Princeton, NJ 08542

with a copy to:

Fox Rothschild LLP  
c/o Marcel L. Groen, Esquire  
10 Sentry Parkway, Suite 200  
P.O. Box 3001  
Blue Bell, PA 19422-3001

Notices by the Parties may be given on their behalf by their respective counsel. The addresses or names may be changed from time to time and at any time by either party by serving notices as above provided.

**Article XVI**  
**Confidential Information**

16.1. Any materials made available to the City by DTE in furtherance of this Agreement or as to the processes to be utilized within the DTE Facility, whatever the means of transmission or delivery, shall be treated by the City as “Confidential Information” of DTE. The City shall be permitted to disclose the Confidential Information only to its attorneys, accountants, agents, consultants and/or advisors who have agreed to keep such information confidential.

16.2. Except as may be required in order to comply with a court order, or a governmental requirement (including state and local law), or required for purposes of obtaining government approvals and for financing the DTE Facility, neither the City nor DTE shall publicly disclose by written press release, public announcement or otherwise, the terms of this transaction without the prior written approval of the other party.

16.3. The terms of this Article XVI shall survive the expiration or earlier termination of this Agreement.

**Article XVII**  
**Miscellaneous**

17.1. Headings. The headings of the sections hereof are inserted for convenience only and shall not be deemed a part of this Agreement.

17.2. Further Assurances. The Parties shall (i) furnish upon request to each other further information, (ii) execute and deliver to each other documents, and (iii) do other acts and things, all as the other party may reasonably request for the purpose of carrying out the intent of this Agreement and the documents referred to in this Agreement.

17.3. Jurisdiction; Service of Process. All actions or proceedings relating to this Agreement (whether to enforce a right or obligation or obtain a remedy or otherwise) that are not subject to Article XIV (Dispute Resolution) shall be brought solely in the federal or state courts located in or for Lehigh County, Pennsylvania. Each party hereby unconditionally and irrevocably consents to the jurisdiction of that court and waives its rights to bring any action or proceeding against the other party except in that court. Process in any action or proceeding referred to in the preceding sentence may be served on any party anywhere in the world. Each party irrevocably waives any right to a jury trial with respect to any matter arising out of or in

connection with this Agreement. If any party seeks to enforce its rights under this Agreement by joining another person to a proceeding before a jury in which the third party is a party, the Parties will request the court to try the claims between the Parties without submitting the matter to the jury.

17.4. Entire Agreement and Modification. This Agreement (a) supersedes all prior agreements between the Parties with respect to the subject matter of this Agreement and (b) constitutes a complete and exclusive statement of the terms of the agreement between the Parties with respect to the subject matter. This Agreement may not be amended except by a written agreement executed by the Parties.

17.5. Assignments, Successors.

17.5.1. Neither party may assign any of its rights or obligations under this Agreement without the prior consent of the other party. Subject to the preceding sentence, this Agreement will apply to, be binding in all respects upon and inure to the benefit of the successors and permitted assigns of the Parties. For purposes of this Section 17.5, a Change of Control (as hereinafter defined) shall be deemed to be an assignment prohibited by this Section 17.5.1.

17.5.2. A “Change of Control” shall mean:

17.5.2.1. A merger, consolidation or other reorganization of DTE with any other entity where DTE is not the surviving entity or survives only as a subsidiary of another entity (other than Delta Thermo Energy, Inc.);

17.5.2.2. Any third person or entity, or group of persons and/or entities acting in concert, not owning more than fifty percent (50%) of the issued and outstanding voting interests of DTE on the date hereof, becomes the owner of more than fifty percent (50%) of the issued and outstanding voting interests of DTE; or

17.5.2.3. A sale, exchange, transfer or other disposition, in a single transaction or series of related transactions, of all or substantially all of DTE’s assets.

17.6. No Third Party Rights. Nothing expressed or referred to in this Agreement will be construed to give any person other than the Parties any legal or equitable right, remedy or claim under or with respect to this Agreement or any provision of this Agreement. This Agreement and all of its provisions and conditions are for the sole and exclusive benefit of the Parties and their successors and assigns.

17.7. Severability. If any provision of this Agreement not essential to accomplishing its purposes is held invalid or unenforceable by any court of competent jurisdiction, the other provisions of this Agreement will remain in full force and effect. Any provision of this Agreement held invalid or unenforceable only in part or degree will remain in full force and effect to the extent not held invalid or unenforceable.

17.8. Time is of the Essence; Computation of Time. Time is of the essence of each and every provision of this Agreement. If the last day for the exercise of any privilege or the

discharge of any duty under this Agreement falls on a day that is not a Business Day, then the Party having such privilege or duty will have until 5:00 p.m. (its local time) on the next succeeding Business Day to exercise its privilege or to discharge its duty.

17.9. Governing Law. This Agreement, including issues arising out of or related to this Agreement, will be governed by the laws of the Commonwealth and the United States.

17.10. Counterparts. This Agreement may be executed in one or more counterparts, each of which will be deemed to be an original copy of this Agreement and all of which, when taken together, will be deemed to constitute one and the same agreement.

17.11. Covenants Running with the Land. This Agreement and each and every covenant, agreement, condition and undertaking shall be deemed to be running with the land during the Term of this Agreement and shall be binding upon and inure to the benefit of the respective Parties hereto, their legal representatives, heirs, executors, administrators, successors and assigns.

17.12. Memorandum of Ground Lease. The Parties shall execute and acknowledge the Memorandum of Ground Lease for recording purposes in substantially the same form attached hereto as Exhibit "B", which shall be recorded at the expense of the requesting party. Such memorandum shall include such other information as may be reasonably requested by the City or DTE. Upon the expiration of the Term, at the request of the City, DTE shall execute a quitclaim termination of its leasehold interest to the City.

17.13. Not a Partnership. Nothing herein contained shall be construed as creating a partnership, joint venture or any other relationship between the City and DTE, other than that of landlord and tenant and customer and service provider.

17.14. Force Majeure. The time for performance by the City or DTE of any term or provision of this Agreement shall be deemed extended by time lost due to delays resulting from acts of God, strikes, civil riots, floods, unavailability of material or labor, restrictions by governmental authorities and any other causes not within the control of the City or DTE, as the case may be.

17.15. Waiver. No waiver of any of the terms or conditions of this Agreement shall be binding or effective unless expressed in writing and signed by the party giving such waiver.

**[Signature Page Follows]**

IN WITNESS WHEREOF, DTE has executed this Agreement as of the day above first written.

**DELTA THERMO ENERGY A, LLC**

By its sole member,  
Delta Thermo Energy, Inc.

Attest: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**CITY OF ALLENTOWN**

Attest: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

By: \_\_\_\_\_

Name: Ed Pawlowski

Title: Mayor

## APPENDIX A

### DEFINITIONS

“Acceptance Testing” shall mean operation of the DTE Facility to evidence compliance with the design specifications set forth in Schedule 5.2 hereto.

“Acceptance Testing Date” shall mean the date Acceptance Testing commences.

“Acceptance Test Protocol” shall mean the test procedures and final test results signed by the company conducting the Acceptance Testing, including target and actual test data and an explanation of deviations or adjustments to testing conditions.

“Base Amount Real Estate Taxes” shall mean the amount of Real Estate Taxes due based on the assessment of the Premises (inclusive of that portion of the DTE Facility that is subject to real estate tax assessment) established by the Lehigh County Assessment Office upon completion of the Improvements, provided, however, that DTE shall be permitted to appeal any such assessment, and in the event of such an appeal, the amount of Real Estate Taxes due based on the final unappealable assessment shall be the “Base Amount of Real Estate Taxes,” and further provided that the Base Amount Real Estate Taxes shall be increased (i) annually by 2.21% beginning on the first day of the Lease Year immediately following the Lease Year in which the original Base Amount Real Estate Taxes are determined, and (ii) to the extent an increase in the Real Estate Taxes relates to an increase in the underlying assessment arising from an expansion of the DTE Facility.

“Business Day” shall mean shall mean any day other than a Saturday, Sunday, or a day on which banks in the Commonwealth are authorized or obligated by law or required by executive order to be closed.

“Capacity Limitations of the DTE Facility” shall mean the capacity limitations as set forth in the Required Permits, provided such amount does not exceed the DTE Facility’s design capacity limitation, in which case the later shall govern.

“City Consultant” shall mean an individual or engineering firm employed by or retained by the City knowledgeable in the area of waste disposal and waste to energy facilities.

“Contract Date” shall mean the date of execution and delivery hereof.

“Construction Start Date” shall mean the date on which all Required Approvals have been obtained by DTE and construction of the Improvements has commenced.

“DEP” shall mean the Pennsylvania Department of Environmental Protection.

“Development Costs” shall mean all costs incurred by the City relating to discussions with DTE, the development of the DTE Facility and the negotiation of this Agreement, including costs incurred prior to the Contact Date and costs referred to in Section 5.2.3 hereof.

“Environmental Laws” shall mean all federal, state or commonwealth and local laws, regulations, statutes, codes, rules, resolutions, directives, orders, executive orders, consent orders, guidance from regulatory agencies, policy statements, judicial decrees, standards, permits, licenses and ordinances, or any judicial or administrative interpretation of any of the foregoing, pertaining to the protection of land, water, air, health, safety or the environment, whether now or in the future enacted, promulgated or issued, including the laws of the Commonwealth.

“Excess Tonnage” shall mean MSW and/or Sludge delivered, or caused to be delivered, by the City to the DTE Facility in excess of the Required Testing Period MSW Tonnage, the Required Testing Period Sludge Tonnage, the Required Commercial Operations MSW Tonnage or the Required Commercial Operations Sludge Tonnage, as applicable. Any tonnage in excess of the Required Tonnage shall be considered Excess Tonnage only if it is not Processed at the DTE Facility.

"MSW" shall mean any garbage, refuse and other material, including bulk items, as allowed under the City's Waste Ordinance (defined below) resulting from operation of residential, municipal, commercial or institutional establishments and from community activities, provided however that such term shall not, unless included as acceptable municipal waste in Article 1131 of the City's Municipal Waste Storage, Collection and Disposal Ordinance #12703, as amended (City's Waste Ordinance"), include the following:

1. Residual waste (resulting from construction, industrial, mining and agricultural operations), or
2. Hazardous waste (any waste material or a combination of solid, liquid, semisolid or contained gaseous material that because of its quantity, concentration, physical, chemical or infectious characteristics may:
  - a. Cause, or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating illness; and
  - b. Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of or otherwise managed).
3. Household hazardous waste (HHW) (waste which would be chemically or physically classified as a hazardous waste but is excluded from regulation as a hazardous waste because it is produced in quantities smaller than those regulated by the DEP, and because it is generated by persons not otherwise covered as hazardous waste generators by those regulations. Such HHW materials meet one of the following four classifications: Toxic; Flammable; Reactive; or Corrosive. HHW consists of numerous products that are common to the average household such as: pesticides and herbicides, cleaners, automotive supplies, paints, and acids).

4. Medical waste that requires special handling according to the laws and is commonly referred to as “red bag waste.”.
5. Source Separated Recyclable Materials as defined and required to be recycled by Commonwealth Law and/or City Ordinance that are separated from the waste stream at the point of generation.

“Operational” shall have the meaning set forth in Section 2.1 hereof.

"Phase I Environmental Site Assessment" means an environmental assessment performed in accordance with ASTM Standard E 1527-05 and the requirements for All Appropriate Inquiry as set forth in 40 CFR Part 312, but specifically excluding any environmental sampling or testing, including sampling or testing of soil, soil vapor, groundwater or surface water, ambient or indoor air, or building materials.

"Phase II Environmental Site Assessment" means an environmental investigation or assessment performed to further evaluate the potential presence of hazardous substances identified in a Phase I Environmental Site Assessment. A Phase II Environmental Site Assessment may include environmental sampling or testing, including sampling or testing of soil, soil vapor, groundwater or surface water, ambient or indoor air, or building materials.

“Process” or “Processing” shall mean to accept and dispose of, utilizing the technology of the DTE Facility as set forth in Schedule 5.2, MSW and Sludge delivered, or caused to be delivered, by the City to the DTE Facility and shall also include disposal by DTE at a site other than the DTE Facility of the amount of MSW and Sludge which is not capable of being disposed of at the DTE Facility under the following circumstances: (i) the DTE Facility is not fully Operational; (ii) the DTE Facility is subject to a forced or scheduled maintenance outage or shutdown; and (iii) the MSW and Sludge delivered, or caused to be delivered, by the City to the DTE Facility is Excess Tonnage that exceeds the Capacity Limitations of the DTE Facility.

“Process Residue” shall mean (i) recyclables and any and all sorted materials from the MSW, including, but not limited to glass, metals, plastics, etc., and (ii) any and all fertilizer based water byproduct and bottom ash resulting from the waste-to-energy process produced by the DTE Facility.

“Real Estate Taxes” means all real property taxes, including assessments whether ordinary, special, or extraordinary levied or assessed against the Premises (inclusive of that portion of the DTE Facility that is subject to real estate tax assessment).

“Required Approvals” shall mean the approvals listed on Schedule 2.1 hereto.

“Required Permits” shall mean the permits listed on Schedule 2.1 hereto.

“Required Testing Period MSW Tonnage” shall mean the amount of MSW to be delivered to the DTE Facility as set forth in a schedule submitted by DTE to the City at least seven (7) Business Days prior to the Acceptance Testing Date setting forth the quantities of MSW to be delivered to the DTE Facility during Acceptance Testing and the times at which such MSW should be delivered, such quantities and timing to be subject to change by DTE upon notice in writing to the City at least two (2) Business Days prior to the effective date of the change.

“Required Testing Period Sludge Tonnage” shall mean the amount of Sludge to be delivered to the DTE Facility as set forth in a schedule submitted by DTE to the City at least seven (7) Business Days prior to the Acceptance Testing Date setting forth the quantities of Sludge to be delivered to the DTE Facility during Acceptance Testing and the times at which such Sludge should be delivered, such quantities and timing to be subject to change by DTE upon notice in writing to the City at least two (2) Business Days prior to the effective date of the change.

“Required Commercial Operations MSW Tonnage” shall mean seven hundred fourteen (714) Tons per week, plus or minus twelve percent (12%).

“Required Commercial Operations Sludge Tonnage” shall mean two hundred seventy-five (275) Tons per week, plus or minus twelve percent (12%), except that during periods of forced or maintenance outages of the Treatment Plant, “Required Commercial Operations Sludge Tonnage” shall mean zero (0) Tons per week to two hundred and seventy five (275) Tons per week, plus twelve percent (12%) (or 308 Tons).

“Required Tonnage” shall mean the Required Commercial Operations MSW Tonnage and the Required Commercial Operations Sludge Tonnage.

"Sludge" shall mean the untreated or treated residual material left from the wastewater treatment process, including material commonly referred to as activated sludge or biosolids.

“Term” shall mean the period commencing on the Contract Date and terminating on the last day of the later of (i) the Initial Term and (ii) the last Renewal Term.

“Third Party Waste” shall have that meaning set forth in Section 6.1.7.2 of this Agreement.

“Ton” shall mean US short ton equal to two thousand (2000) pounds.

**EXHIBIT "A"**

**PLAN OF THE PROPERTY AND THE PREMISES**

**[Attachment to be amended following final Land Approvals,  
as set forth in Section 1.1 of the Agreement.]**

**EXHIBIT "B"**

**MEMORANDUM OF GROUND LEASE**

**SCHEDULE 2.1**

**REQUIRED APPROVALS AND REQUIRED PERMITS**

***REQUIRED PERMITS***

Air Quality Permit from DEP

Waste Permit from DEP

Zoning Permit from the City of Allentown

Building Permit from the City of Allentown

Labor & Industry (L&I) Permit from the Commonwealth

***REQUIRED APPROVALS***

Land Development Approval from the City of Allentown

Water Quality Approval from the City of Allentown

NPDES Storm Water Management Approval from DEP

Inclusion in the Lehigh County Solid Waste Management 10 Year Plan and Approval from DEP

## **SCHEDULE 5.1**

### **GRANT PROGRAMS AND SOURCES OF FUNDS**

As of the date of this Agreement, the following Grant Programs and Sources of Funds have been formally approved, but not received:

1. RACP Commonwealth Grant: \$2.5M
2. CFA Commonwealth Grant: \$2M
3. DOE Federal Grant: \$1M
4. PEDA Commonwealth Grant: \$0.5M

As stated in Section 5.1 and Section 7.2.7 of this Agreement, the City shall have the right to retain an amount of moneys from the grants as the Parties' shall mutually agree to, to be reimbursement for the City's Development Costs, provided the City fully complies with all applicable federal and state laws, stipulations and regulations pertaining to those awarded grants as they pertain to reimbursement moneys.

## SCHEDULE 5.2

### TECHNICAL DESCRIPTION OF DTE FACILITY

#### **Overview of the Project**

The Project is comprised of a waste-to-energy facility which includes waste receiving and processing of municipal solid waste (“MSW”) and sewage sludge (“Sludge”), waste handling equipment and storage, waste pre-treatment, waste water treatment and combustion, steam and electric power generation (the “Facility”). It is also comprised of site improvements for the construction of a building, vehicle access and utilities to the Facility; electric connection to the power distribution grid; as well drains and waste water disposal to the City of Allentown’s water and sewage system. Vehicles to haul MSW and Sludge to the Facility will be provided or arranged for by the City. Vehicles to haul MSW, Sludge, process residues and recyclables from the Facility will be provided and operated by other third party providers and suppliers. The information provided in this Schedule will be revised and finalized during the basic and detailed engineering phases of the Project before construction will begin. The final detailed design documentation will include the complete set of technical engineering plans and descriptions on the Facility as well as the equipment and the complete Hydrothermal Decomposition process to be installed.

#### **Technical Description**

##### Site Plan

The Facility site consists of approximately 3.1 acres situated in the City of Allentown, PA, which are owned by the City of Allentown. Contiguous to the site is the City of Allentown’s Wastewater Treatment Plant. At the end of this Schedule, there is a site plan which shows the approximate location of the Facility within the specified site.

##### A Site Parking and Roadways

Within the Facility’s site, all parking and roadway areas will be constructed of asphalt overlaying a gravel base course. Their design will be in accordance with the recommendations and standards of the geotechnical construction engineer(s) based on their review of soil investigation. It should be adequate to accommodate the expected parking and traffic loading over the life of the project with the proper repair and maintenance. All necessary drainage required for the final grading plan will also be provided.

Adequate parking will be provided for the automobiles of employees and visitors, which, if feasible, might include at least one electric car charging parking station. Proper queuing and turnaround areas will be provided for signs to direct vehicles and trucks inside the gate to the appropriate locations for either parking or waste weighing and discharge.

##### B Weighing Area

The weighing area will be located after the entrance gate and within the fence of the Facility. Trucks delivering MSW and Sludge will be weighed when entering the Facility site before unloading their waste. Access to the Facility will be monitored and truck data and weighing information recorded before and after unloading.

A scale operator will be present during the times when the trucks of the City or of its contracted waste haulers are being weighed before and after unloading MSW or Sludge. The scale operator will be a certified as a Weigh Master by the Commonwealth.

### The Facility

The Facility's structure will primarily consist of a Butler type of building made of steel. A Butler type of building is a metal building system designed for commercial construction and installation. The Butler type building will be constructed over cast-in-place reinforced concrete foundations, footings with below grade walls of waterproofed reinforced concrete. Some of the foundations may be pile supported. Above grade construction will incorporate a structural steel frame, wall and roof panels. Electrically operated overhead doors will provide access for waste handling and service vehicles. Interior and exterior paint coatings will be selected to paint the building.

The process equipment, except for the air pollution control system, electric transformers, and cooling tower will be contained within the building. Air will be drawn from the waste handling area reducing the potential for odors to escape from that area and there will be an odor reduction system also installed. The processing area of the building will purposely be negative-pressured to reduce the potential risk of odors escaping from the building.

The offices, bathrooms and control rooms will have their own heating and air conditioning system to control temperature and humidity. Fire protection will be provided through the use of fire suppression facilities including locally mounted, portable extinguishers and automatic sprinklers as required by the local ordinances, fire authorities and insurance underwriter.

The process equipment will include: the overhead cranes; sorting system; industrial shredder and baling equipment; the three fundamental DTE technologies - Resource Recycling System ("RRS"), the Water Treatment System ("WTS") and the Complete Combustion Chambers ("CCC"); the heat boiler(s); steam condensers; the water dehydration equipment; loading equipment serving the CCCs; the steam turbine generator set(s); as well as waste heat recovery system, motors, pipes, valves, pumps, control and monitoring system, etc. All of the process equipment will occupy areas on and above grade. All below grade installations, such as the waste receiving and processed fuel pits (or bunkers), will be on reinforced concrete footings with pile supports, where required, and appropriate slabs and walls.

The MSW and sludge waste tipping and receiving area of the building will be constructed at grade (except for the waste receiving pit, which is below grade) and located adjacent to the presorting and RRS equipment. Concrete floors and walls will be utilized in this area, as required. A control room will be near the receiving pits and storage area and it may be above the tipping floor. The crane operator and personnel in the control room will have visibility of the receiving pit area. Access will be provided to the receiving area and the process

equipment area from the control room. A small laboratory area might also be located adjacent to the control room. Lockers will be provided near the process as well as washing and toilet facilities. The general administrative offices will be constructed of drywall with acoustic tile ceilings. Glass window walls and tile or carpeted floors will be provided, where appropriate.

#### Process Flow Diagram

At the end of this Schedule there are three waste-to-energy process flow diagrams, which present an overview of the most important flows of the plant process. All of them depict the various components and systems of DTE's proprietary Hydrothermal Decomposition Process.

#### Energy and Mass Balance

An Energy and Mass Balance analysis is included in this Schedule; it is located after the process diagram. Please refer to the end of this Schedule for additional details. As indicated above, the Energy and Mass Balance will be revised and updated according to the MSW and Sludge material analyses done during Basic and Detailed Engineering.

#### Building Plan, Elevation and Sections

A proposed architectural look of the building is enclosed for illustration. This view as well as an overall Plant Layout with a side elevation, which show the different sections of the plant, are included at the end of this Schedule. It is anticipated that the tallest part of the roof of the building will be approximately 45 feet from the ground (on-grade) of the site.

#### Descriptions of Major Pieces of Equipment

The Facility is expected to operate 24 hours per day and seven days per week, except for preventive and planned maintenance periods which are anticipated to last approximately two weeks during normal operations. The waste storage capacity, using sealed bales, will allow full Facility operation for at least four and a half days without receiving additional waste; i.e., when the entire storage and tipping pit areas are filled to capacity.

Given waste production variations and the seasonality of the MSW and Sludge collections during the year, at times, the Facility may be constrained by waste shortfalls. Other times, waste exceeding the plant capacity would be available which will be baled and stored to the capacity permitted in the Facility. When the waste production might exceed the storage capacity of the Facility because of seasonality or unpredicted variations in the collections or the production might exceed the required waste volumes contracted under this Agreement, the plant will dispose of any additional tons to a landfill.

The major pieces or components of equipment, including the fundamental three technology components of DTE's Hydrothermal Decomposition are briefly described below.

### Receiving Pits

The waste receiving area will be enclosed within the building of the Facility. Three to four overhead doors will provide access for refuse vehicles. The doors will be aligned so that vehicles may unload directly into the two receiving pits. Overhead clearance will be maintained so that vehicles can deposit contents within the enclosed waste receiving area. Concrete floors will be finished to have a high density surface. The pits are expected to be constructed of cast-in-place reinforced concrete including curbs to reduce the possibility of trucks entering the pits by accident. Since waste can be stacked above the elevation of the surrounding floor, a wall will likely be constructed on two sides of the pits for that purpose, subject to final engineering designs. This wall will also be constructed of solid concrete. The pits will be located below grade. The larger pit will receive the MSW waste before sorting. The second pit will contain both the shredder MSW and the Sludge. This mixed pit will be used to temporarily contain the mixed waste before loading it to the RRS.

### Cranes and Front Loader

Two cranes will be installed with an approximate capacity of 5 to 10 tons each. Crane control will be available for both cranes from the control room. Appropriate dual controls may be installed near the receiving areas, if required. The cranes will be equipped with either a cable operated or electro-hydraulic operated buckets. Primarily, the two waste cranes will be provided for loading the MSW from the pit area to the sorting and picking line as well as loading the shredded and mixed waste from the second pit to the RRS hoppers.

At least one front loader will be operational. The front loader operator will stack the bales, when needed, as well as remove any reject and bulk materials and metals and depositing them in roll-off containers located in the opposite end of the receiving areas. The front loader will also be used to move the bales from the bale press to the storage area and stack them as well as remove them from storage back to the shredder, when required to be processed.

### Sorting Line Equipment

The sorting line equipment will occupy areas on and above grade. Above grade, the sorting line conveyor will be installed with at least three sorting stations. The collection Material Recovery Buckets (“MRBs”) for recyclables, ceramics, and other discarded materials, etc, will be on grade and located just below the sorting line. Sorting operators will be able to promptly discard picked materials before the rest of the MSW is automatically fed into the waste shredder.

### Materials Recovery

From the sorting line, materials sorted out and picketed by the sorting operators will accumulate in the MRBs located below the conveyor sorting line, which will be used by the operators to discard them. Once filled, each MRB (bucket) will be moved and placed outside the building for removal by the recycling or disposal hauler once a day or more frequently, if necessary. The MRBs which are moved away from the sorting line will be replaced by empty MRBs, so sorting can continue during the MSW receiving cycle.

### Shredder

An industrial size shredder equipment, which has been developed to meet the demands of shredding MSW and Sludge, will be installed after the sorting line. It will have a slow-motion turner to avoid any spontaneous combustion. The shredder will be coupled with a baler which was designed with control technology adapted to the packing of the waste in sealed bales, when required for inside storage.

### Baler/Bale Cutter

The packing equipment will be used to operate in conjunction with the shredder equipment. This equipment will compact the MSW shredded material as well as Sludge, if needed. The compacted bales will be capable of being stacked in rows for storage in the bale storage area directly next to the shredder and baler equipment. The baler equipment will be located on grade, next to the shredder equipment in the proximity of the bale storage area. The bales will be wrapped with air and watertight polyethylene film which will prevent any liquids or odor from leaking. The approximate locations of the shredder and the baler can be seen in the plant layout in the opposite side of the receiving pits and next to the sorting line at the end of this Schedule. The baling safety film will be of polyethylene which has been successfully used for years in the waste industry.

The volume of the bales will be expected to be between 1 and 1.3 cubic meters/bale. The bale weight and density will be, however, heavily dependent on the material packed and will be influenced by the:

- Specific weight of the waste material
- Element size of the material which will be a function of the shredding.
- Compactability of the waste.
- Moisture content (e.g., MSW versus Sludge).
- Composition of the material mixture.

### Bale Storage Area

The bale storage area, constructed of concrete floors, will be designed to provide storage for approximately 300 tons of baled waste which will be stacked in rows above grade, when needed. The waste storage bales can be stacked on top of each other using a mechanized or front loader to perform this task. The bales in the storage area will be

sealed to avoid odors and spills. It is anticipated that the pits plus the bale storage will provide approximately four and one half days of storage, if required, at design conditions.

### RRS Reactor

After receiving the waste, the Hydrothermal Decomposition Process which will be installed in the Facility's plant will start with the RRS. The RRSs will be installed in reinforced concrete foundations, which might be pile supported, if required by the engineering analysis. The RRS is one of the three fundamental technologies used in the overall process of the Facility, as depicted in the Hydrothermal Decomposition Process flow outline at the end of this Schedule.

The Facility will have no less than four (4) RRSs. The RRSs will function in parallel at the front-end of the process. The expected volume of each of these RRSs will be approximately ten cubic meters each. They will be located after the receiving and mixed material pits following the flow of the plant process, according to the Plant Layout included in this Schedule. The RRSs will be installed on grade but the feeding hoppers for each RRS will be above grade. Each of the RRSs will be fed separately and independently using the overhead cranes. The cranes will carry the waste materials from the mixed pit, containing both MSW and Sludge, to the RRS' hoppers.

The RRS equipment elements are depicted in pictures and flow diagrams contained at the end of this Schedule.

### Dehydrators/Dryers

As shown in the plant layout there is a below grade pit to collect the material resulting from the Hydrothermal Decomposition after completing its processing in the RRSs. The wet materials will have the consistency of a "hot slurry", which will be composed of a thick mixture of a liquid, with a high water content, and finely divided and decomposed substances; i.e., made up of the materials present in MSW and Sludge. This "hot slurry" will be then dewatered using a centrifuge or similar equipment to extract water and other liquids contained in the "hot slurry". This dewatering or dehydration process will be the last step used for liquid and solid separation before combustion is realized.

Then, the dewatered material will be then subjected to a drying step. The plant process will produce excess heat which will be used, to the extent economically feasible, to assist in further drying the waste materials resulting from the dehydration step before entering the CCCs. This drying step will take place during the automatic and continuous feeding of the fuel material to each of the CCCs installed in the plant.

### Complete Combustion Chamber(s)

No less than two (2) CCCs will be installed in the Facility. The CCCs are the second fundamental technology component of DTE's Hydrothermal Decomposition process. It is expected the two CCCs will be installed on reinforced concrete foundations, which might be pile supported, if required by the results of the engineering analysis.

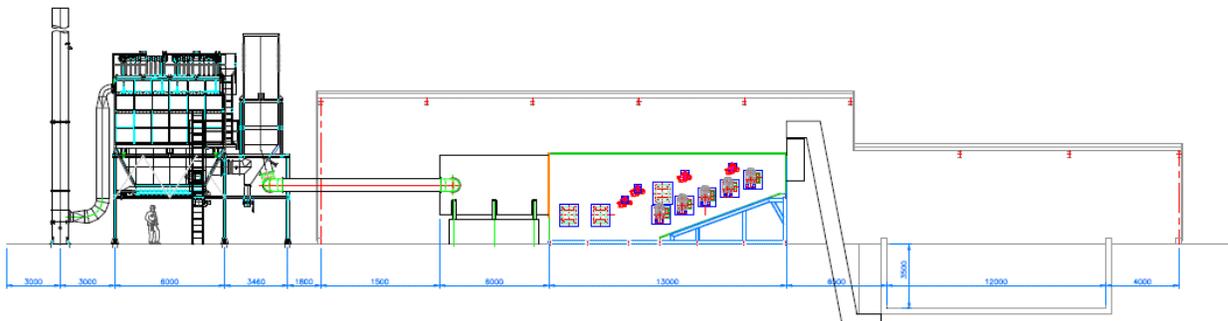
Additionally, each CCC will be designed to burn the fuel resulting from the RRS process, according to the tons per day of processed waste fuel indicated in the enclosed Energy and Mass Balance in this Schedule.

The CCCs will be expected to operate 24 hours per day and will be designed with the ability to process the resulting dehydrated fuel from the "Required Commercial Operations MSW Tonnage" and "Required Commercial Operations Sludge Tonnage" after processing via the RRSs, except for at times the CCC might be constrained by waste shortfalls or maintenance.

The CCC system, which will be used, was designed by Jasper GmbH which is the inventor and designer of this fundamental technology. The CCC system will be used as the Facility's thermal treatment component for pulverized fuel and/or small cut MSW shredded material, when required.

As partially shown in the picture below, for illustration, the CCCs basically will consist of:

- Storage pit and feeding system of the material
- Material dryer as external or internal component of CCC
- CCCs with charging and discharging system
- Post-combustion chamber
- Steam generation with heat recovery
- Flue gas cleaning, off-gas fan and stack.



The CCCs will be controlled charged by the "fuel charging system". Each CCC will be designed using square steel construction, inside refractory lining and heated directly by a fuel gas burner system. Depending on the heating value of the input waste material, the

burner system will be used only for start ups. Inside each CCC, the pulverized fuel material will be burned at a temperature of approximately 900 °C. With installed internals inside the CCC, the thermal process will be assisted / de-assisted and the movement of the ash to the discharging will be controlled. Due to its design, the process will get low dust emission and lower pollutant emissions in the off gas. The ash will be discharged using a chain conveyor system.

The off gas is transported to the post-combustion chamber. The post-combustion chamber is designed in horizontal and welded metal sheet construction, inside refractory lined. The post-combustion chamber will safely keep the burning temperature above 850 °C and the residence time of the off gas will be greater or equal to two seconds to reduce CO emissions. To increase safety conditions, oxygen measuring equipment and fuel gas burners will be installed. At the outlet of each post-combustion chamber, there will be a connecting piece for interconnection to the boiler.

The CCC and the Post-combustion chamber will be equipped with local process measuring, control equipment and the combustion air fans. Fuel gas burners will be designed and installed in accordance with applicable regulations, complete with all prescribed and necessary fittings, ignition and monitoring devices, automatic firing devices, UV flame monitoring devices, etc.

#### Boiler and Steam Generation

This system includes steam generation with heat recovery. The flue gas from the CCC's combustion chambers will be supplied to the fire tube boiler for the purpose of generating high temperature steam. The superheated steam will be used for driving the steam turbine and for providing steam to the thermal process in the RRS system as well as supplying heat to assist in drying the processed fuel from the RRS.

The boiler(s) will be designed, manufactured, equipped and installed in accordance to applicable regulations and standards. The boiler will include inspection openings, all necessary connection pieces for steam extraction, delivery, discharge, desalination and the necessary measurements. The boiler body will be insulated with mineral wool matting and a cover made of galvanized sheet steel. Essentially, the water-steam circuit consists basically of the steam system, steam turbo set, the condensation and feed water system and the cooling system.

#### Steam Turbine/Generator

The water-steam circuit and associated systems will be used to generate power for the plant's own internal power use as well as for feeding the excess electricity into the public electric power grid. The steam power is built up in the steam turbine through the

conversion of the thermal energy into mechanical and electrical energy. The turbine generator set will be a condensing steam turbine with output and operating characteristics to best utilize the output energy captured in the boiler steam. The condensing might entail dual steam turbine/generator sets of with matching or complementing generating capacities instead of one single steam turbine/generator.

The Energy and Mass Balance analysis, hereby included, provides an indication of the electricity generation gross and net which will be expected from the process, once operational. The anticipated internal use of electricity will be approximately 1 Mwh.

The design of the overall steam cycle will comply with the A.S.M.E. Code in effect. All pressure components will also conform to the A.S.M.E Boiler Code as to design, material, and workmanship and are subject to the inspection and approval of the authorized inspection agency.

#### Wastewater Treatment System

Wastewater Treatment System (WTS) is also a fundamental technology of DTE's process. Water utilized in the boiler(s) will be provided from the water main located on the site prior some appropriate pretreatment. All waste water generated by the Facility's process will be treated by the WTS before being discharge to the water sewage system.

Boiler blowdown and other process waste water, including water from the scrubber, will be treated in the WTS as well. All waste water will be expected to be treated in this manner. However, toilets and conventional sanitary facilities will be discharged directly into the sanitary sewer system as any conventional building will do.

This Schedule includes five (5) Piping and Instrument Diagrams pertaining to the Wastewater Treatment System. Additionally, a complete overview diagram of the WTS is provided for reference.

#### Air Pollution Control Device(s)

After the boiler, the flue gas will pass a wet flue gas cleaning unit. As such, the flue gases will be conditioned in a scrubber or baghouse. Depending on the material combusted in the CCC, an adsorbent mixture might be added to the flue gas. The spray injector will be designed as welded sheet metal construction with direct water cooling, with reinforcements, gas-tight welding, with all necessary built-in fittings and connecting flanges. The temperature-controlled nozzle injection system will inject the water via a nozzle connection.

It is currently anticipated that the following emission values might be continuously monitored: CO, NO<sub>x</sub>, SO<sub>2</sub>, dust content, flue gas flow and flue gas temperature. However, before being vented to the atmosphere, the gas will be passed through wet scrubbing or a baghouse or a combination of both which will be part of the overall air pollution control equipment designed to reduce acid gases and particulate matter, etc. in compliance with PA-DEP's the air pollution permit. If a wet scrubber or a combination baghouse/scrubber were to be ultimately installed, the waste water of the scrubber will also be piped to the Water Treatment System (WTS), DTE's other fundamental technology in the overall plant process, as indicated above.

#### Residue Handling Equipment

As indicated above for the fundamental CCC process, the waste will be fed into each CCC in its "as dehydrated delivered" state with some additional applied drying using the process' available excess heat. The waste fuel will travel through each CCC down a series of moveable "paddles" or "steps". During the combustion process, the ash residue will fall into a water quench trough for cooling and will be then conveyed by drag link chain conveyor to a dumpster on the side of each CCC for transport to a landfill or selling it to an industry which can make good use of it. The approximate residual ash volume to be expected as a result of CCC's combustion of waste fuel is shown in the Energy & Mass Balance included at the end of this Schedule.

#### Chimney/Stack

The clean flue gas will be delivered to the chimney/stack via the off gas fan and then extracted to the atmosphere. The inside pressure for this system will be controlled by a frequency converter for the off gas fan. The steel chimney/stack will only be a few feet higher than the highest point of the roof, in free-standing and double-walled, self-supporting design.

An analysis and monitoring system will be installed in the chimney/stack. Plant stack emissions will be monitored in accordance with the air permit in hand. Plant operations parameters will be set to conform with emission control requirements using the results of a testing program designed and implemented during plant acceptance testing.

#### Process Controls

Process monitoring and control operations will be performed by a computer based Control System. The Control System will coordinate CCC, boiler, pollution control, WTS, RRS and turbine generator and some auxiliary systems, all which be identified, defined and designed during the engineering phase.

The Control System will be installed in either an administrative office or in the control room. Its major components will include necessary Input/Output Devices and an Operator Workstation. The Input/Output devices interface with required field input and output signals to provide data acquisition and stand along integrated control of the plant process. The Operator Workstation will provide an interface to the Control System for monitoring and controlling process operations. The operator Workstation will include a printer/logger and one operator console high resolution monitor, active graphic display, mouse and keyboard.

The Control System will employ redundant processors and standby power supply to provide reliability and to minimize the effect of any single failure of the process control on process monitoring operations. These redundant devices shall be an integral part of the Control System. Upon detection of a failure in the primary device, the redundant device automatically will take over the required operation.

If required, a separate centralized control panel will be provided for special instrumentation requirements and for specialized instrumentation whose function cannot be implemented in the computer based Control System.

#### Fire/Explosion Suppression System

Hose stations and automatic sprinklers will be installed for fire control and suppression. Additional hose stations will be located in the process equipment area, as required. Additionally, portable fire extinguishers will be located adjacent to each hose rack and in other areas as directed by local fire codes and safety practices and insurance requirements.

#### Safety

Safety procedures will be established by the plant manager and the chief engineer in accordance with industry standards. Together with design engineers, safety discussions and directives will provide the necessary guidelines for operating and maintenance personnel for specific equipment.

Guidelines for plant safety standards and procedures will be based on labor and industry standards and the Federal Occupational Safety and Health Act (OSHA). Period safety meetings will be established and conducted by the plant manager and on-site engineering staff to keep employees abreast of any changing conditions or new plant policies. All plant safety equipment will be identified and maintained in accordance with the appropriate rules and regulations.

#### Electrical

The electric system will be connected to the utility grid through an overhead line. As appropriate, distribution to the plant will be through transformers, low voltage switchgear, motor control centers, and distribution panels to provide feeds to all required plant loads. Protective relaying, surge protection, and metering will be provided.

Detailed electrical diagrams and as-builts will be engineered during the Detailed Engineering phase and available for the construction and testing phases of the project.

### Ventilation and Odor Control

In addition to the odor controls indicated above in this Schedule, ventilation of the process area might be accomplished by using roof mounted exhaust fans. High capacity roof exhaust fans might utilize an automatic temperature control system to maintain sufficient ventilation in summer and to provide for temperature control during the colder winter months.

Heating and air conditioning at the control room and administrative office areas will be provided. A positive pressure HVAC system will prevent any infiltration of process or waste handling area air from entering the administrative office and control room areas. The best manner to handle ventilation and odor control will be analyzed and designed during the engineering phase.

### Telephone and Intercom Systems

A telephone system will be installed within the administration and control areas. All telephones will be capable of inter-plant communication. Office and control room telephones will be utilized for outside communication. In addition, a dedicated wireless connection will be installed to connect the alarm systems directly with the appropriate alarm monitoring and dispatch center.

### Housekeeping

Storage of any unprocessed waste will be kept within the building, baled and sealed as per above description. To minimize scavenger infiltration, perimeter fencing and landscaped buffer areas will be constructed.

All areas of the facility will be accessible for cleaning, therefore reducing the possibility of nesting areas for rodents and insects. Spraying for insects and, if necessary, traps for rodents will be maintained for additional control.

### Operating Plan and Manual

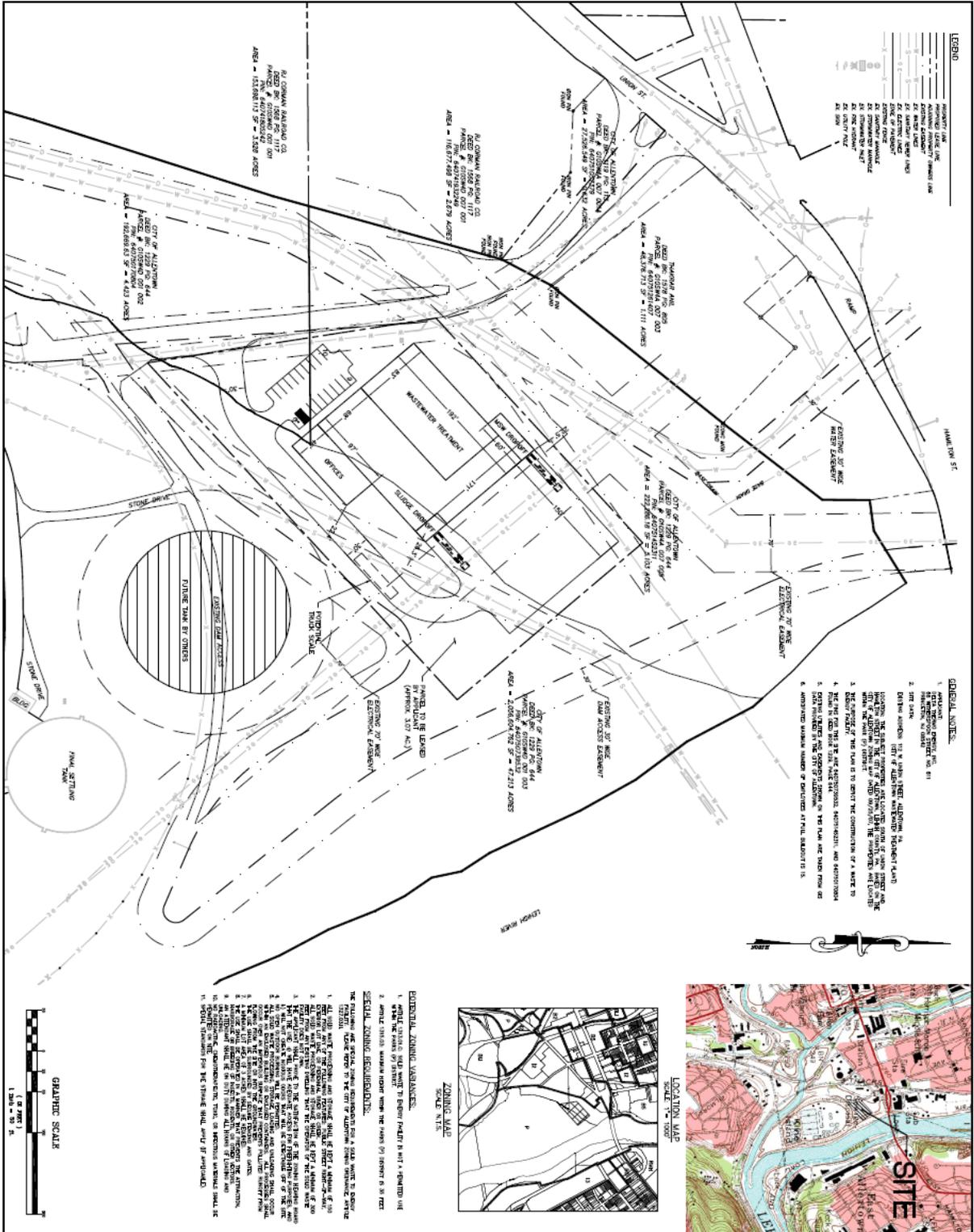
An Operating Plan will be defined and incorporated in the Operations Manual, which will be drafted and put into effect at the start of plant operations. The Facility will operate 24/7 all year, including holidays with three operational shifts. The Operating Manual will indicate

operational guidelines, tracking system, reporting, staffing, waste acceptance procedures, maintenance systems, training, quality control, housekeeping, material recovery procedures, etc.

As such, the training of plant operating personnel will include the necessary directives and personnel assignments to control odors and spillage problems. Odors and spillages will have to be contained within the building. Personnel will address the cleanliness of the facility on a daily basis. These procedures, among others, will be included in the Operating Manual for the plant.

**WORK FLOW DIAGRAMS, DRAWINGS, ENERGY AND MASS BALANCE, TECHNICAL DESCRIPTIONS, PICTURES AND OTHER ATTACHMENTS MENTIONED ABOVE AS PART OF THIS SCHEDULE**

(see attached)



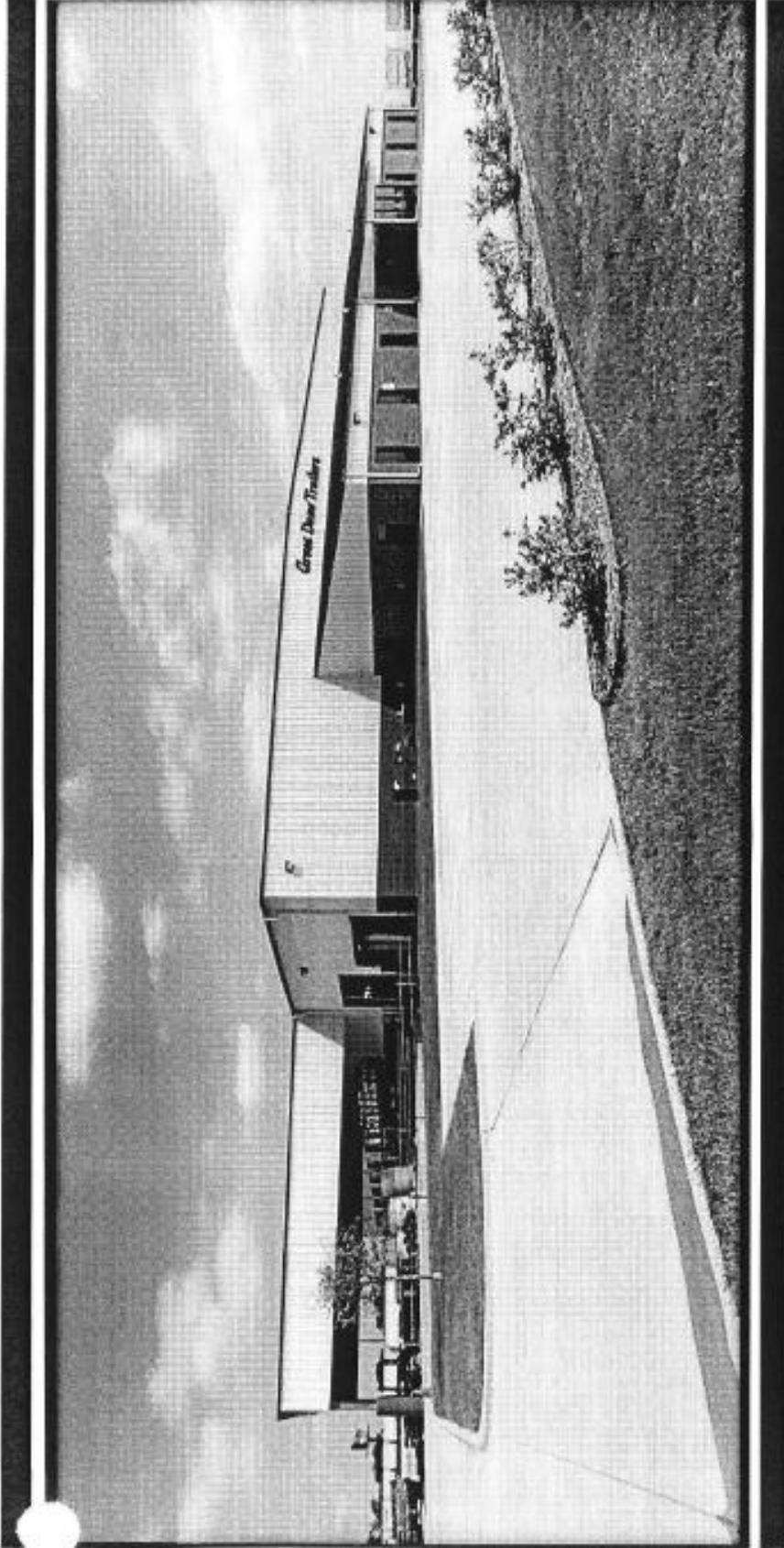
**Pennoni Associates Inc.** 2041 AVENUE C, SUITE 100, BETHLEHEM, PA 18017 Engineers • Surveyors • Planners • Landscape Architects  
 (610) 232-0600 FAX (610) 232-2033

<b>D.T.E. ALLENTOWN</b> CITY OF ALLENTOWN, LEHIGH COUNTY, PENNSYLVANIA  <b>SITE PLAN</b> <b>PENNTX CONSTRUCTION CO.</b> 350 EDTRY PARKWAY, BUILDING 640, SUITE 101 BLUE BELL, PA 19422	<b>SP-1</b>			
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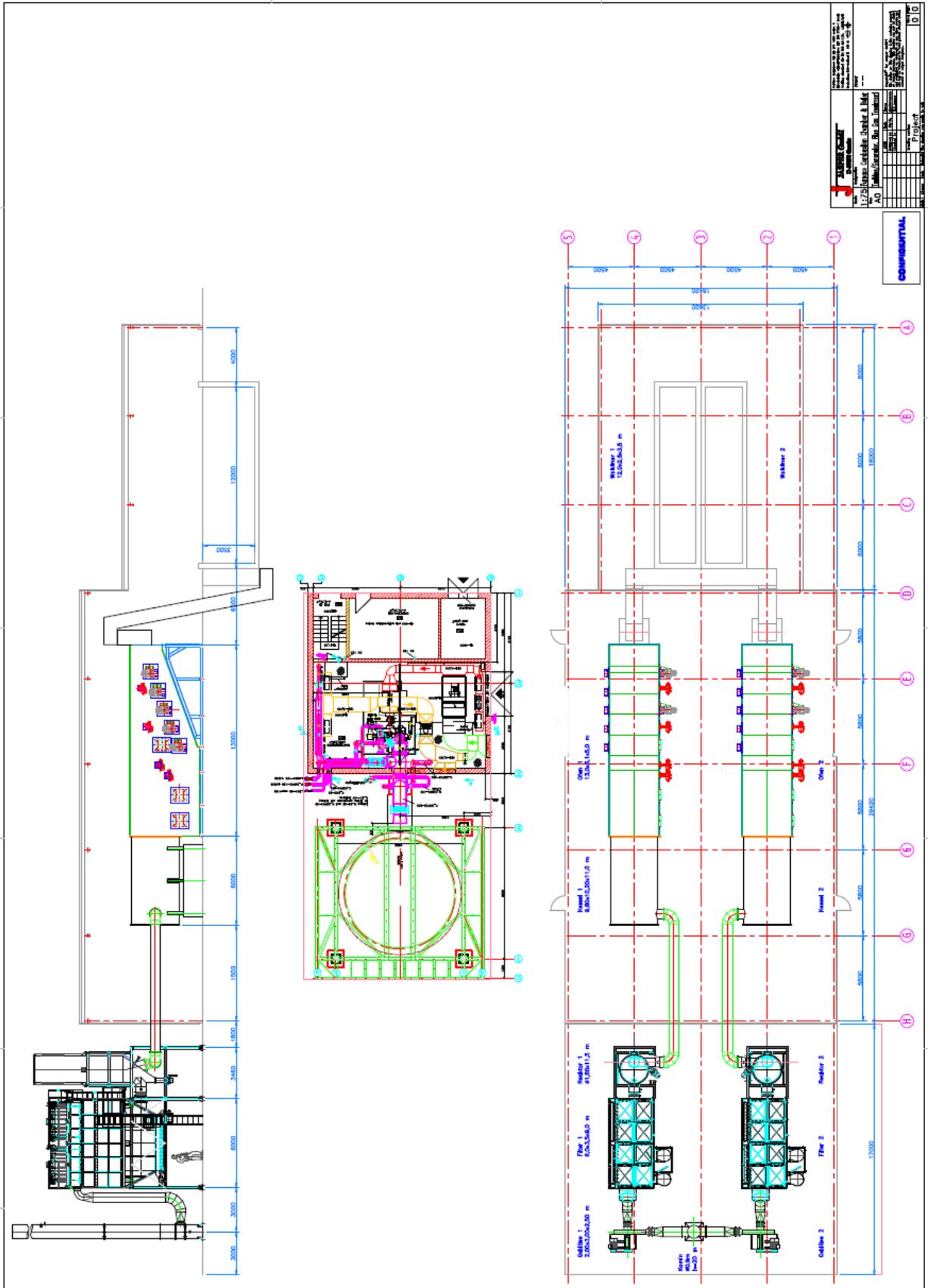




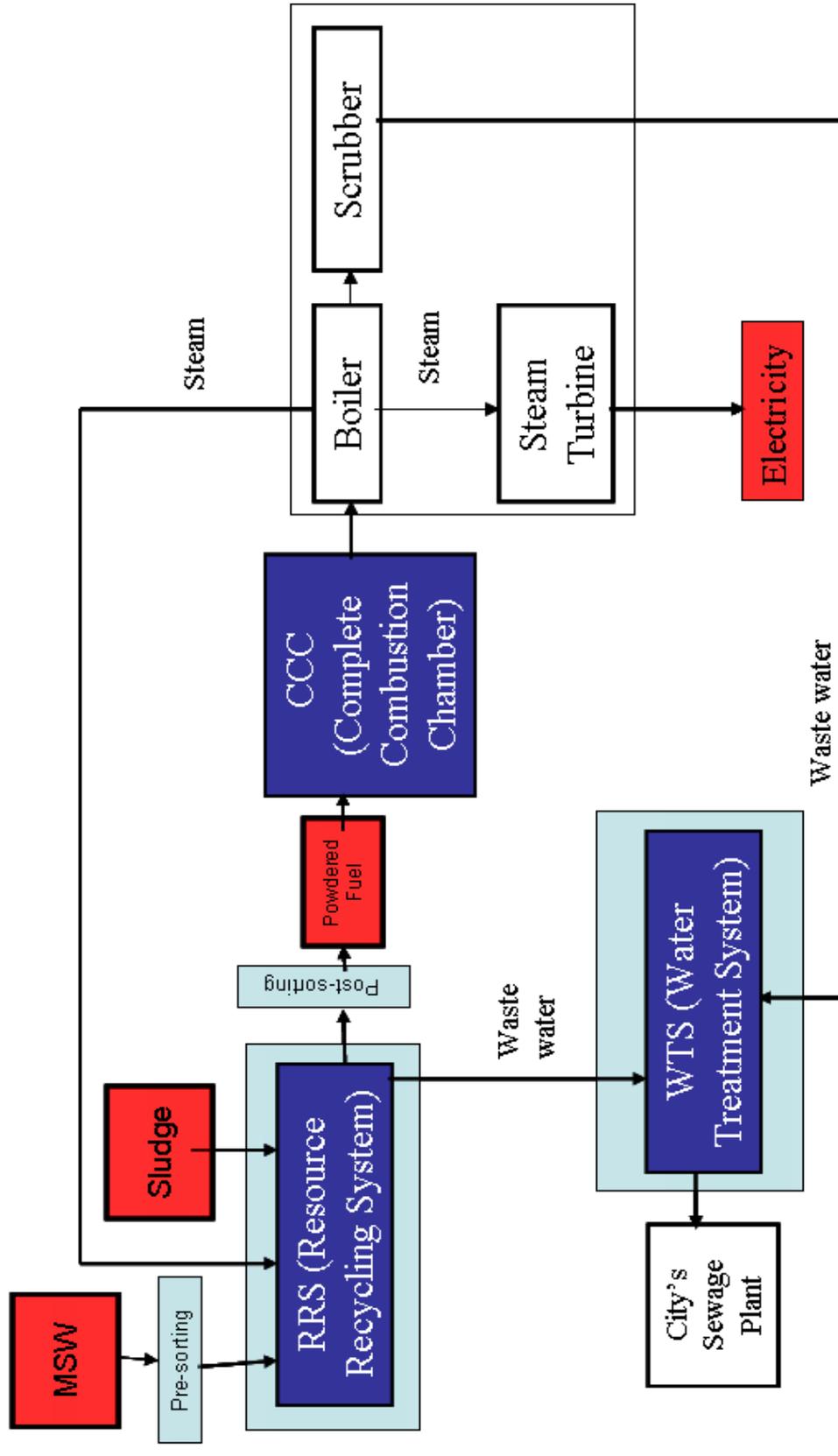
Proposed Look of DTE building at 112 Union Street Allentown, PA.

DTE will utilize no more than the ~3.1 acres available next to the Kline Island Waste Water treatment Plant (WWTP) for the above facility, access roads, parking for employees and visitors, weigh station for incoming and outgoing trucks, etc.



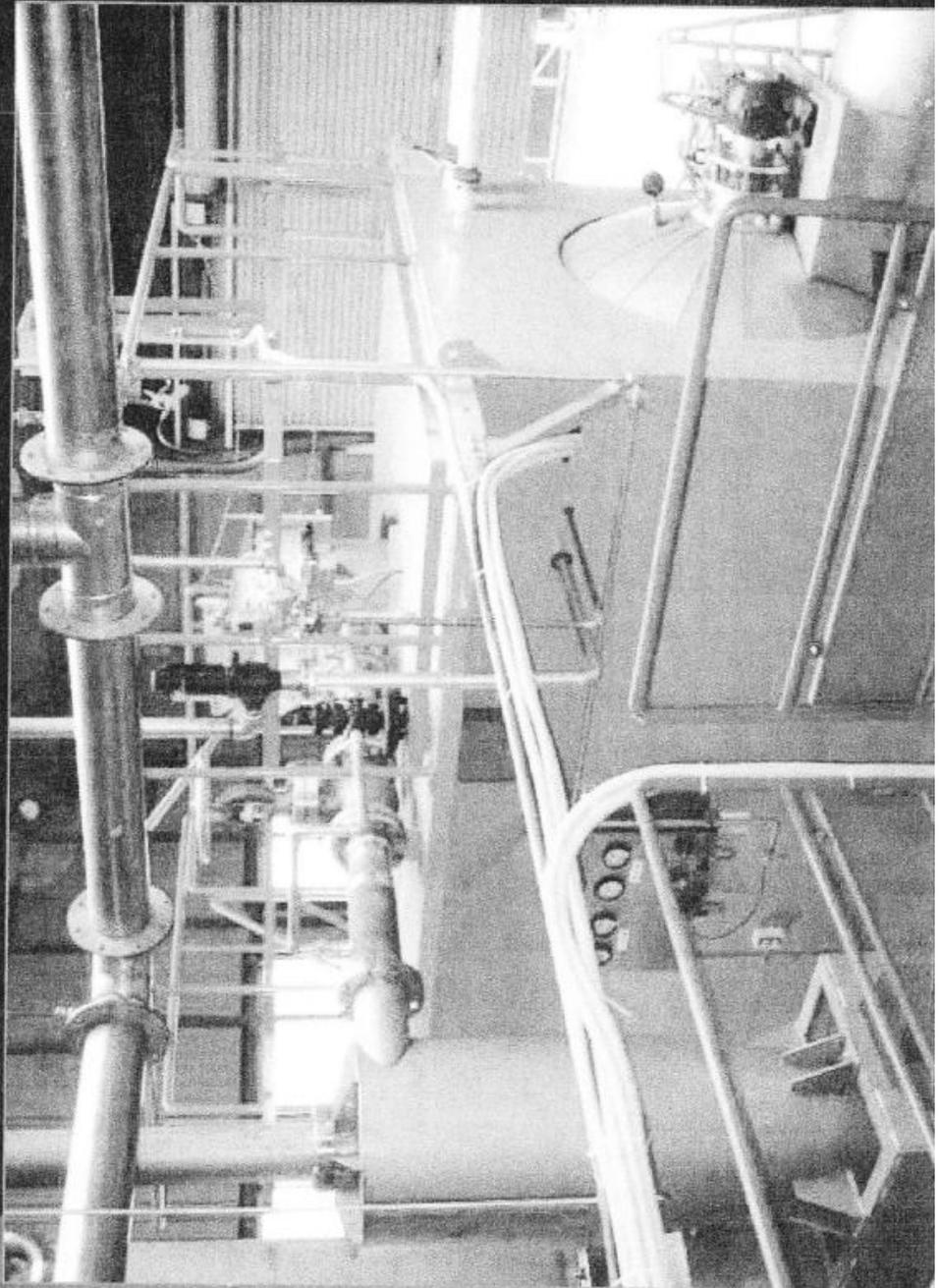


# Hydrothermal Decomposition Components



**Fundamental Technology Components**

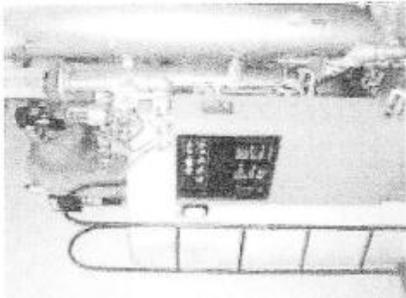
# RRS Hydrothermal Treatment Facility



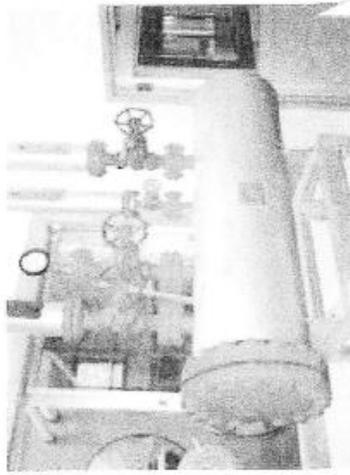
2009/3/17

# RRS Treatment • Photos •

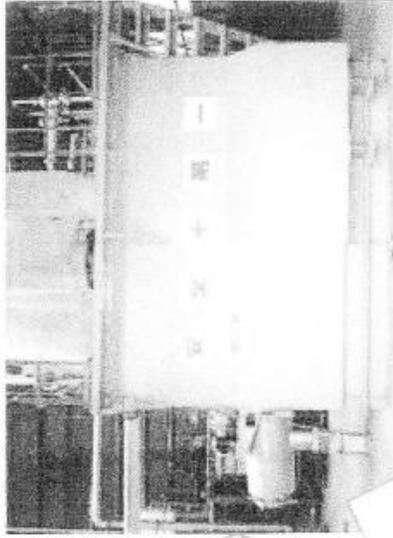
Boiler



Steam header

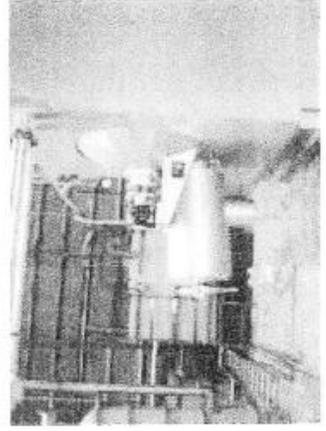
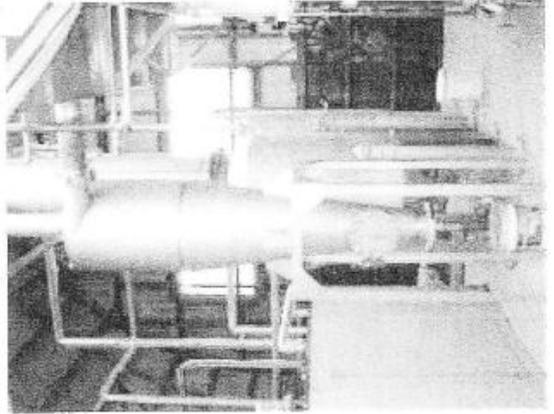


Pressure vessel



Water treatment, Gas treatment

Cyclone

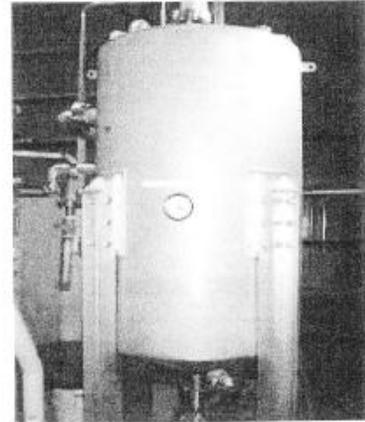


# Water treatment line 1 (Photo••

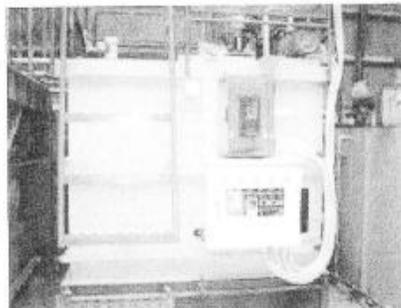
Condenser



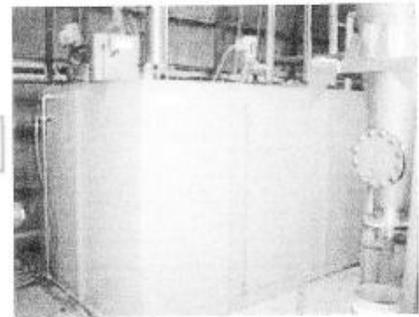
Cooling water circulation tank



Solid/liquid separator



Reaction tank



← AT-BC  
Facility



# Water treatment line 2

• Photo •

Filter



Activated carbon filter



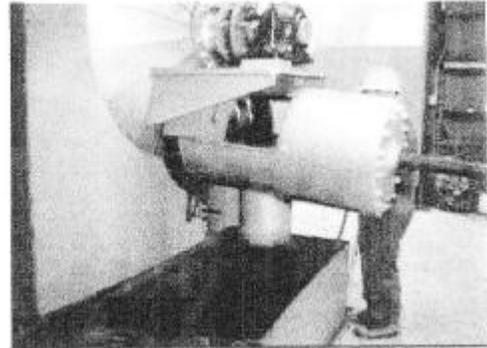
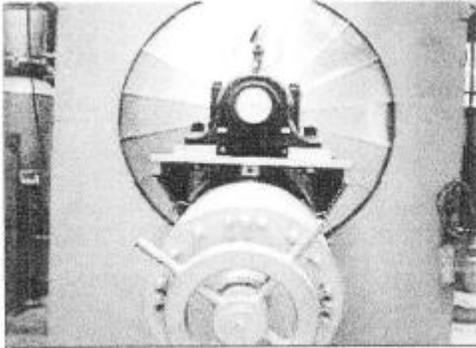
RO



Pre-filter



Boiler





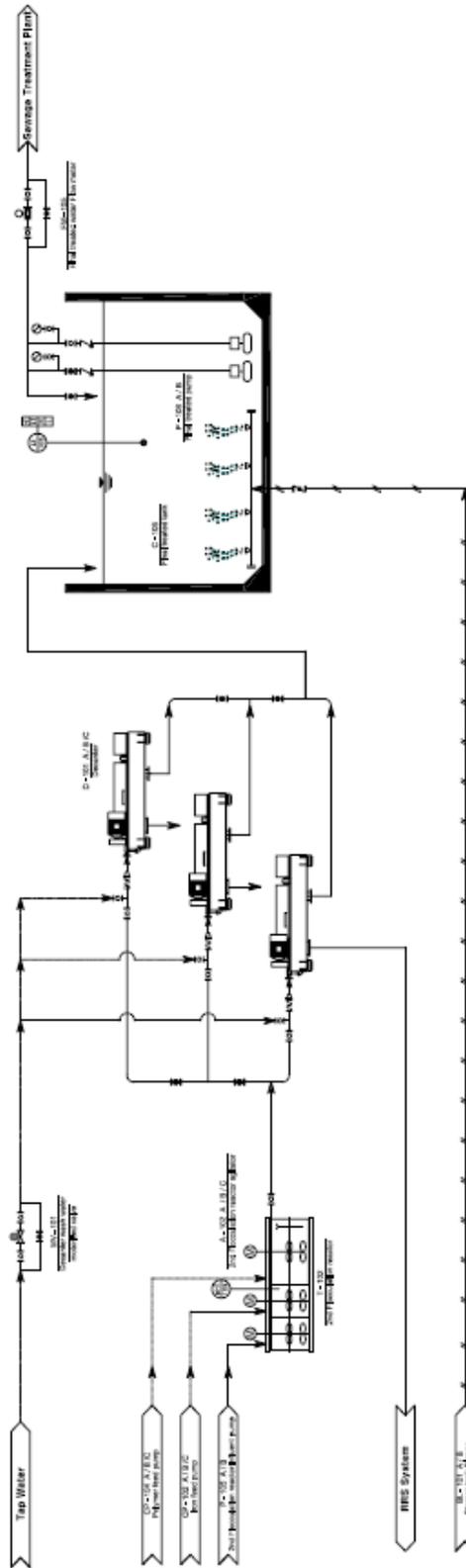




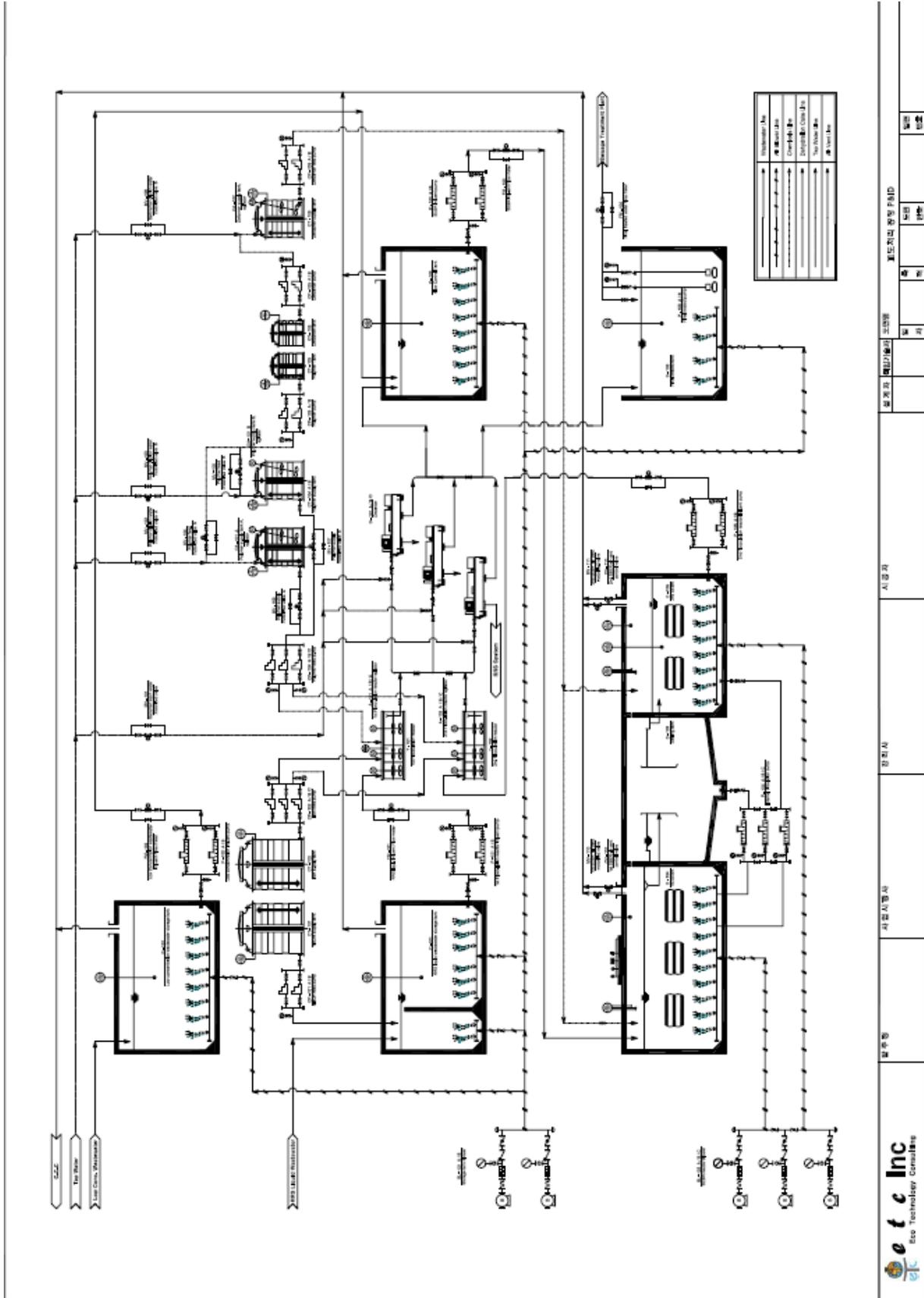




Waste to Energy plant wastewater treatment  
Piping & Instrument Diagram (5/5)



	김주영	시공시행사	장회사	시공처	설계자: 김주영 검토자: 김주영 승인: 김주영	프로젝트명: 폐기물 에너지화 시설 위치: 서울특별시
	2024. 10. 10 10:00 AM					



 <b>ek Inc</b> Eco Technology Consultants	업무용	시공처 시공사	설계처 설계사	제작처 제작사	설치처 설치사
	프로젝트명 프로젝트명	시공처 시공사	설계처 설계사	제작처 제작사	설치처 설치사

5.2 (34)



## SCHEDULE 5.6

### **RESERVES AND ADDITIONAL SURETIES**

In addition to the Insurances and Sureties provided in Article IX of this Agreement, which DTE shall pay and reserve for the durations stated and applicable under this Agreement, DTE shall also maintain the following reserves and sureties:

- Improvement and Restoration Reserve (“Improvement Reserve”): The Improvement Reserve shall be funded in the amount of Six Million Dollars (\$6,000,000) (the “Improvement Reserve Requirement”) on or before the Construction Start Date. Funds on deposit in the Improvement Reserve shall be used for effecting capital improvements, actual repairs of the DTE Facility or for extraordinary or unforeseen items of maintenance. Such funds shall not be applied to ordinary and routine maintenance expenses with respect to the DTE Facility. In the event the City terminates this Agreement pursuant to Section 11.2 or Section 13.4 of the Agreement, funds on deposit in the Improvement Reserve may be used to remove the DTE Facility and restore the Premises. In the event the balance on deposit in the Improvement Reserve is less than the Improvement Reserve Requirement, DTE shall be obligated to replenish the Improvement Reserve by depositing therein, on a monthly basis, commencing on the fifth (5<sup>th</sup>) day of the calendar month following a shortfall in the Improvement Reserve an amount equal to Three Dollars (\$3.00), to be increased annually by 2.21%, per Ton for every Ton Processed at the DTE Facility during the preceding month until such time as funds on deposit in the Improvement Reserve equal the Improvement Reserve Requirement. As the City may reasonably request, DTE shall deliver to the City evidence of the existence and use of the Improvement Reserve, including the nature and cost of any actual repairs made to the DTE Facility.
- Standby Turbine and Generator Set Contingency Services: For the first ten (10) years of the Term after expiration of the manufacturers’ warranties, or, at DTE’s sole discretion, until on-site standby equipment shall be secured or two (2) generators of equal dual generating capacity are installed, whichever is implemented earlier, DTE shall pay annually for an independent third party provider for on-site replacement of a complete equivalent power turbine and generator set within forty eight (48) hours of failure of such equipment in the event it cannot be repaired within a reasonable time.
- Environmental Insurance: DTE shall secure for the Term a Pollution Legal Liability Policy or similar environmental impairment insurance to include remediation and related expenses for Five Million Dollars (\$5,000,000), with a maximum deductible of One Hundred Thousand Dollars (\$100,000), or such greater coverage as may be required by law or the DEP.
- Flood Surety Coverage: DTE shall have adequate flood insurance coverage for the DTE Facility for the duration of the Term.
- Other Sureties: DTE shall also annually procure adequate Fire and Extended Coverage and Vandalism and Malicious Mischief Insurance on the DTE Facility for the Term.

### **SCHEDULE 6.1.2**

MSW is collected on behalf of the City commencing at 10:00 p.m. and all routes are completed by 12 noon the following day. Collections take place six nights a week, Sunday nights through Friday nights, except as permitted pursuant to the City's contract for MSW collection (i.e. holidays, etc.).

City staff typically collects MSW from City facilities and public receptacles Monday through Friday from 6:00 a.m. to 2:00 p.m. and Saturdays 6:00 a.m. to 10 a.m.

The Parties shall agree to a mutually acceptable schedule for delivery of MSW such that haulers may conveniently deliver MSW to the DTE Facility based upon the collection times above. The City and DTE agree to arrange the schedule for delivery of MSW for disposal at the DTE Facility during days, nights and times so as to avoid additional collection and delivery costs attributable to City employees or imposed by the City's contracted haulers due to unavailability of the DTE Facility during certain hours of the day or night. In furtherance of this objective, DTE shall make reasonable accommodations to accept deliveries of MSW upon prior written notice from the City.

## **SCHEDULE 6.1.5**

### **RATIO OF SLUDGE TO MSW**

The ratio of Sludge to MSW necessary for the DTE Facility to operate efficiently is defined to be between 20% and 40%, provided, however, so long as the City delivers MSW and Sludge in amounts which satisfy the definitions of Required Commercial Operations MSW Tonnage and Required Commercial Operations Sludge Tonnage, such amounts of MSW and Sludge shall be deemed to satisfy the ratio.