DESIGN, BUILD, OPERATE AND FINANCE (DBOF) REQUEST FOR PROPOSALS (RFP)

MATANUSKA-SUSITNA BOROUGH
Waste Management Project

Issued: February 12, 2020
Due Date: May 14, 2020 4:00 PM

RFP No. 20-087P

TABLE OF CONTENTS

SECTION 1 INTRODUCTION....1
- **1.1** General Introduction....1
- **1.2** Proposers and Technologies....3
- **1.3** MSB Objectives....3
- **1.4** Defined Terms....4
- **1.5** Organization of This RFP....11
- **1.6** MSB Advisors....12
- **1.7** Confidentiality....12
- **1.8** Inquiries and Correspondence....12

SECTION 2 GENERAL BACKGROUND INFORMATION....13
- **2.1** Introduction....13
- **2.2** Solid Waste....13
- **2.3** Septage....14
- **2.4** Waste Stream Characteristics....14
- **2.5** Project Site and Surrounding Areas....21
- **2.6** Other Facilities....22
- **2.7** Environmental and Public Outreach Information....22
- **2.8** Reference Documents Available....23
- **2.9** Geotechnical Information....23
- **2.10** Reference Values....23
- **2.11** Reliance on The MSB Provided Information....24

SECTION 3 OVERVIEW OF EXPECTED FACILITIES AND SERVICES....25
- **3.1** Introduction to Scope of Services....25
- **3.2** Scope of Services....25

SECTION 4 SIGNIFICANT GROUND LEASE AND DRAFT AGREEMENT TERMS AND CONDITIONS....31
- **4.1** Purpose and Scope....31
- **4.2** Agreement Requirements....32
- **4.3** Periods of Work and Commencement of Operations Date....32
- **4.4** Business Terms and Conditions....32
- **4.5** Performance Guarantees....38
- **4.6** Term....38
- **4.7** Additional Contractual Requirements....38
- **4.8** Process for Proposed Changes to the Ground Lease and Draft Agreement....40

SECTION 5 TECHNICAL APPROACH....41
- **5.1** General....41
- **5.2** Site and Utilities....41
- **5.3** Services....41
- **5.4** Overall Project Objectives....41
- **5.5** Aesthetic and Architectural Concepts....42

5.6 Technical Data To Be Submitted....42

SECTION 6 PROCUREMENT PROCESS....43
6.1 Procurement Process Schedule and Project Implementation....43
6.2 MSB Rights and Options....43
6.3 Pre-Proposal Conference/Site Tour....44
6.4 Interpretations, Questions, and Requests for Clarification....45
6.5 Communication Protocol....45
6.6 Contacts With Regulatory Agencies....45
6.7 Use of Proposals....45
6.8 Access and Proposer Investigations During Proposal Preparation....45
6.9 Proposal Evaluation and Selection....46
6.10 Evaluation and Ranking of Proposals....49
6.11 Discussion and Negotiation Process....50
6.12 Expenses of the Proposers....50
6.13 Other Procurement Requirements....51

SECTION 7 PROPOSAL SUBMITTAL REQUIREMENTS....53
7.1 Proposal Overview....53
7.2 Proposal Format....53
7.3 Proposal submittal Requirements....55
7.4 proposer's team Experience....57
7.5 Proposal Contents....62

SECTION 8 PROPOSAL FORMS....80
Proposal Form A Checklist of Forms
Proposal Form 1 Transmittal Letter and Attachment
Proposal Form 2 Non-Collusion Affidavit
Proposal Form 3 Participating Entities – Group List
Proposal Form 4 Participating Entities – Individual Descriptions
Proposal Form 5 [Reserved]
Proposal Form 6 Project Guarantor Commitment
Proposal Form 7 Bank Letter of Intent to Issue Letter of Credit
Proposal Form 8 Insurance Company Letter of Intent
Proposal Form 9 Throughput, Landfill Reduction and Other Performance Guarantees
Proposal Form 10 Specifications of Major Equipment/Systems
Proposal Form 11 Process Residue, Product Materials, and Liquid Discharge Data
Proposal Form 12 Air Pollutant Emissions
Proposal Form 13 Major Equipment Replacement Schedule
Proposal Form 14 Key Personnel Commitments of Time
Proposal Form 15 Guaranteed Maximum Price Breakdown
Proposal Form 16 Operation and Maintenance Price Breakdown
Proposal Form 17 Cost of Capital by Source
Proposal Form 18 Solid Waste Service Fee Breakdown
Proposal Form 19 Escalation Indices
Proposal Form 20 Maximum Electricity Utilization/Demand

Proposal Form 21 Non-Debarment Certificate of Compliance

ATTACHMENT A FIGURES AND SITE PHOTOGRAPH

ATTACHMENT B COMMUNICATION PROTOCOL

ATTACHMENT C RESERVED

ATTACHMENT D WASTE CHARACTERIZATION DATA

ATTACHMENT E VALLEY CENTER FOR RECYCLING SOLUTIONS

VOLUME II - DRAFT DESIGN, BUILD, OPERATE AND FINANCE AGREEMENT

VOLUME III - APPENDICES TO THE DRAFT AGREEMENT

SECTION 1

INTRODUCTION

1.1 GENERAL INTRODUCTION

1.1.1 Purpose and Organization of This Solicitation

This Request for Proposals for the Matanuska-Susitna Borough (MSB) Waste Management Project (Project) (the "RFP") is being issued by the MSB for the purpose of soliciting comprehensive Proposals from Proposers for the scope of services described in Section 1.1.2 and Section 3. Each Proposal shall include, among other things, guaranteed pricing for design, construction, and operation; performance guarantees; a description of the proposed technical approach to the Project; a comprehensive description of the proposed Financing Plan; supplemental qualification information; and comments on contractual terms and conditions, all as more fully described herein. The MSB will review these Proposals and select the Proposer that submits the most advantageous Proposal based upon the evaluation criteria contained in Section 6.9.

This RFP is organized into three volumes as outlined below.

Volume 1 includes the body of the RFP, Proposal Forms, and Attachments. Volume II is the "Draft Design, Build, Operate and Finance Agreement" (Agreement). Volume III consists of the Appendices to the Draft Agreement, setting forth the technical and certain financial requirements for the Project.

1.1.2 Scope of Services

The MSB anticipates that the scope of services to be provided for the Project by the contractor (the "Company") will include responsibility for designing, permitting, financing, constructing, commissioning, acceptance testing, operating and maintaining the Facility(ies) and required support facilities for an initial Term. Following the initial Term, this agreement shall remain in effect with up to two 5-year extensions unless terminated by the MSB with a one hundred eighty (180) day written notice.

The MSB desires to provide facilities for the proper management of septage and septage residuals (not currently managed by the MSB) generated within the Borough and/or the Company may also propose an approach to employ a waste management technology solution(s) to manage Solid Waste, which could generate energy/revenues and/or produce byproducts of value compared to current landfill disposal methods. The MSB would like to demonstrate leadership and find solutions with proven technologies that have been integrated into commercial facilities with a demonstrated operational record in the size range of the proposed Facility(ies). Refer to Section 3 for further Project description.

A Facility designed to process septage is a priority. The Company will be expected to be responsible for the handling of all septage delivered to the Facility up to the Facility's capacity, the segregation of any septage that is not Acceptable Influent, the processing of all Acceptable

Influent, and the management, processing, and disposal, of any septage or septage residuals or products, as required including but not limited to any required loading, transport, tipping fees and other associated costs, services, and regulatory requirements. If the Company's Project includes a Facility designed to process Solid Waste, the Company will be expected to be responsible for the handling of all Solid Waste delivered to the Facility up to the Facility's capacity, the segregation of any Non-Processible Waste, the processing of all Processible Waste, the marketing and management of any recovered recyclable materials, compost and energy (if applicable), and the management of any Non-Processible Waste, and Residue, as required including but not limited to any required loading, transport, tipping fees and other associated costs, services, and regulatory requirements.

1.1.3 Financing and Ownership

As described in Section 3.2.2 and Section 4.4, the MSB anticipates that the Project will be privately financed. MSB is requiring Proposers to provide Construction Financing for the Project utilizing a loan based upon terms from a commercial bank or other lender reasonably acceptable to the MSB or other capital instrument acceptable to MSB. After completion of the Work, Company shall provide long-term financing for the Project.

1.1.4 Project Schedule

A summary of the anticipated schedule of the major activities associated with this RFP through execution of the Agreement is presented below. The dates are subject to change.

Date	**Activity**
February, 12 2020	Issuance of RFP
March 18, 2020, 1:30 pm	Pre-Proposal Conference- CLF Conference Room
April 22, 2020	Proposer Questions Due Date
May 14, 2020 4:00 PM	Proposal Submittal Date
June 1, 2020	Clarification Questions Issued
June 22, 2020-June 26, 2020	Clarification Meetings with Proposers, if necessary
July 13, 2020	Request for Best and Final Offers Issued, if applicable
July 20, 2020	Best and Final Offers Due Date, if applicable
July 27, 2020	Evaluation and Final Ranking
July 29, 2020	Notice of Apparent Successful Proposer(s)
August 18, 2020	Assembly Approval
September 18, 2020	Agreement Finalized/Contract Date

*Subject to change and legislative action by the MSB and MSB Assembly, respectively.

The MSB retains the right to modify any or all of the above dates.

1.2 PROPOSERS AND TECHNOLOGIES

Proposers are required to submit summary information describing their technical, management, and financial qualifications and approach to design, construct, finance, permit, operate, and maintain the Project. Proposers are required to submit information about the specific waste management technology and process that they propose to use and believe would best suit the MSB's need and the Proposer's experience and expertise.

Proposers are required to submit Proposals based on the technologies for which the Proposer has demonstrated the necessary minimum experience in its Proposal. Minimum experience is further discussed in Section 7.

The criteria by which the MSB will evaluate the Proposals are set forth in Section 6.9 of this RFP.

Proposals must be submitted and received by the MSB at its offices no later than SEE SECTION 1.1.4 SCHEDULE.. All Proposals are to be submitted in accordance with the requirements of Section 1 of this RFP.

1.3 MSB OBJECTIVES

The MSB has identified an overall goal for the Project. The goal of the MSB is to put in place a full scale integrated solution that provides a long term environmentally and economically sustainable system to manage all of the waste streams identified above and further discussed in this RFP and generate energy/revenues or byproducts of value, if applicable. Minimization of technology, operational and commercial risk is a core concern for the MSB, and therefore the field of potential solutions for consideration under this RFP should be focused on technologies that are (at least individually in the case of combination schemes addressing both waste and septage) proven at a commercial scale on similar feedstock(s) as further defined in this RFP. Proposed solutions should in particular demonstrate proven ability to meet the scope of MSB's waste management needs and goals including:

1. **Technical and commercial maturity**, integrate at scale robust and proven systems for feedstock pre-treatment, emission control and safe handling and disposal of processing residues, if applicable;

2. **Process and feedstock flexibility**, provide a high degree of integration with other resource opportunities within the Borough;

3. **Maximum energy output flexibility (if applicable)**, including but not limited to:
    a. direct use of raw conversion products (e.g. synthesis gas, biogas, methane or other off-gasses and char residues if produced) for the generation of power and heat on site, or
    b. their upgrading into high-order energy carriers or products (such as substitute natural gas or hydrogen, renewable natural gas, compressed natural gas, diesel, bunker fuels, or equivalent products, etc.) that can be used for transport fleets and/or delivered off-site;
4. **Cost-effectiveness**, providing lowest overall net cost to the MSB, with the goal to establish a long-term least cost solution to integrate resource management needs across the Borough (to clarify, MSB will not participate in the cost of capital improvements for any offerings or pilot project costs);
5. **Sustainability**, ensuring the least impact to the public and the environment;
6. **Maximize beneficial reuse opportunities** to recover resources from waste, if applicable;
7. **GHG (greenhouse gas) emission reduction** potential and minimization or avoidance of future costs of landfill gas collection, if applicable;
8. **Effective Project delivery team**, engaging a reputable, experienced, and knowledgeable Proposer with the ability to work effectively together and with the MSB to deliver and operate a Project that meets the MSB's needs for at least 20 years;
9. **Single point of responsibility** between the MSB and the Company, which will provide certain risk insulation for the MSB as well as ease of contract administration and operations. Consistent with this approach, the MSB expects the Company to assume certain risks as further described in this RFP; and
10. **Company responsibility for capital** meeting the MSB's desire that the Project be financed by the Company provided that the MSB reserves the opportunity to own the Project at the end of the Term of the Agreement.

1.4 DEFINED TERMS

For the purposes of this RFP, the following words and terms shall have the meanings set forth below. Unless otherwise specified in this RFP, all capitalized terms in this document refer to defined terms in the Draft Agreement. In cases where terms are defined differently in both the Draft Agreement and this RFP, definitions in the Draft Agreement will prevail:

"Acceptable Influent" means influent received by the Facility meeting the applicable parameters set forth in the Agreement Appendix No. 1, Performance Specifications

"Acceptable Operator" means the Company, subject to Company's right to change as set forth in the Agreement.

“Acceptance Test”, “Acceptance Testing”, or “Start-up Testing” means the test, plans, and procedures set forth in the Appendices of the Agreement to be conducted following Substantial Completion to demonstrate Acceptance and further detailed in the Company's Acceptance Test Plan to be developed by the Selected Proposer if awarded the Agreement.

“Acceptance Test Standards” means those requirements as set forth in Agreement Appendix 1.

“ADEC” means the State of Alaska Department of Environmental Conservation.

“Agreement” means the "Design, Build, Operate and Finance Agreement," including its amendments, attachments, exhibits, appendices and any other document or documents that are incorporated by reference.

“Appendix” means any of the Appendices to the Draft Agreement included in the Appendices of the Agreement.

“Applicable Law” means any applicable law, regulation, ordinance, rule, order or determination of any federal, state, borough or municipal authority.

“By-Pass Waste” means Waste delivered or available for delivery to the Facility which the Company wrongfully refuses to accept or fully process at the Facility as provided in the Draft Agreement.

“Capital Reserve” means the Company's only vehicle to recover the Company's equity contribution and the cost of internal or external financing if not covered by warranty or insurance as further addressed in the Agreement.

“Change in Law” means any of the occurrences set forth in Section 12.6 of the Agreement, which may occur after the Agreement is signed.

“Code” means Alaska Statutes or MSB Code Sections, unless the context indicates otherwise.

“Commencement of Operations Date” means the date on which the Company is ready, willing and able to commence to operate the Facility(ies) and provide service to the Borough Central Landfill, has provided all prerequisites for Operation, obtained all required approvals, has successfully completed all required Acceptance Testing, and all other requirements necessary prior to commencement of Operations.

“Company” means the Selected Proposer with whom the MSB has executed the Agreement.

“Company’s Contractors” means TBD, subject to the Company's right to change as set forth in Agreement Section 20.4.

“Company’s Designers” means TBD, subject to the Company's right to change as set forth in Agreement Section 20.4.

"Compensation" means the money due Company for the Work and the O&M Services as specified in Agreement Article IX.

"Construction and Demolition Waste," "Construction and Demolition Debris", or "C&D Waste" means waste generated during the construction, renovation, and demolition of buildings or structures. These wastes include materials such as concrete, bricks, wood and lumber, roofing, drywall, landscape and other wastes.

"Contract Date" means the date that the Agreement has been executed and delivered by the MSB and the Company and the MSB has issued a Notice to Proceed to commence Work.

"Contract Facility Capacity" means the annual Waste processing commitment the Company proposes for processing the Solid Waste received. The MSB anticipates the Contract Facility Capacity will be at least 40,000 tons per year (tpy) and can be sized for up to 70,000 tpy or more, if approved by MSB.

"Contract Time" means the duration of the performance of the Work either as a part of the total work thereof or the total time from Notice-to-Proceed to the Final Completion Date. Contract Time will be as identified in the MSB-approved Project Schedule.

"Contract Year" means the one year period commencing TBD and ending the following TBD in each year during the term of the Agreement, except the first year which shall commence on the Effective Date and end the next December 31, and the last year, which shall commence on January 1 and end on the anniversary of the Commencement of Operations Date immediately following said January 1.

"Crevasse Moraine Neighbors United" or "CMNU" means a group of concerned citizens and neighbors of the Central Landfill.

"Effective Date" means the date this agreement is signed by all parties.

"EIS" means an Environmental Impact Statement.

"Evaluation Criteria" means the approach used by the MSB to compare all Proposals in developing its ranking of Proposals.

"Evaluation Committee" means the committee formed by the MSB that is responsible for evaluating Proposals.

"Excess Processible Waste" or "Excess Waste" means (1) any Processible Waste which cannot be combusted or processed at the Facility on account of a partial or complete shutdown caused by uncontrollable circumstances or the MSB fault, and (2) any Processible Waste delivered by or on behalf of the MSB in any billing period or in any contract year in excess of the applicable billing period throughput guarantee or the annual facility throughput guarantee, as more fully described in the Draft Agreement and this RFP.

"Facility" for the Solid Waste portion of the Project, if provided, means all the buildings, structures, equipment, piping, wells, and related or required appurtenances that are to be designed and constructed by as set forth in the Agreement and this RFP, including all improvements in the Waste Facility and for the septage portion of the Project, if provided, means all the leaching fields, buildings, structures, equipment, piping, wells, and related or required appurtenances that are to be designed and constructed by as set forth in the Agreement and this RFP, including all improvements in the septage Facility.

"Final Completion Date" means the date on which all requirements for the design and construction of the Facility(ies) identified under this RFP and the Agreement are fully satisfied, including all start-up and commissioning activities, Acceptance Testing, and all of the items in Agreement Section 5.16 have been completed.

"Financial Close" means the time when all financing and other agreements related to the Project have been executed and delivered and all conditions to the effectiveness of the Agreement and Project financing agreements have been satisfied.

"Financing Plan" means the Proposer's plans for financing the Project in accordance with this RFP and the Draft Agreement.

"Good Industry Practices" means those methods, techniques, standards and practices which at the time they are employed and in light of the circumstances known or reasonably believed to exist at such time, are generally recognized and accepted as good and prudent practices in the construction, operation or maintenance, as the case may be, for the Waste and/or wastewater and septage industry, as applicable, in Alaska and are consistent with the same degree of skill and care ordinarily exercised by members of the respective trade or profession.

"Ground Lease" means the lease by and between the MSB, as landlord, and Company, as tenant, of the Project Site a true and correct copy of which is attached hereto as Agreement Appendix 2.

"Guarantor" means the entity that will guarantee all of the obligations of the Company under the Draft Agreement.

"Guaranty Agreement" or "Guaranty" is the agreement, entered into concurrently with the Draft Agreement, pursuant to which the Guarantor guarantees all of the obligations of the Company.

"Hazardous Material" means any waste, substance, object or material deemed hazardous under Applicable Law including, without limitation, "hazardous substance" as defined under CERCLA and "hazardous waste" as defined under RCRA.

"Landfill" or "Central Landfill" means the Borough Central Landfill, which is owned and operated by the MSB and located at 1201 N. 49th State Street, approximately three miles west of Palmer.

"Landfill Development Plan" or "LDP" means the Landfill Development Plan for the MSB.

"Mandatory Submission Requirements" means required information that Proposers must provide for complete and consistent information for one Reference Project.

"MSB" or "Borough" means the Matanuska-Susitna Borough, a municipal corporation organized and existing under the laws of the State of Alaska.

"Non-Processible Waste" [to be defined later based upon the Project] means (a) Hazardous Material; (b) dirt, concrete and other construction material and demolition debris; (c) refrigerators, washing machines, large appliances and similar "white goods"; (d) large items of machinery, equipment and mechanical parts, such as motor vehicles and major components thereof (e.g., transmissions, rear ends, springs and fenders), agricultural equipment, trailers and marine vessels, or any other large item of waste; (e) sludge, sewage, wastewater and septic, cesspool, human, animal, offal and liquid waste; (f) incinerator residue, ashes, foundry sands, and large concentrations of plastics disposed of as wastes; (g) oil, paints, acids, caustics, poisons, asbestos, chemicals, highly ignitable substances, explosives and ordinance materials; (h) bulk loads of whole tires; and (i) any other materials the receipt and combustion of which is likely to cause damage to or otherwise materially and adversely affect the operation of the Facility(ies), constitute a material threat to health or safety, or violate or cause the violation of any applicable law.

"Notice to Proceed (NTP)" means the authorization by the MSB for the Company to proceed with the Work or some portion of the Work.

"O&M Scope of Work" means the scope of work for operating and maintaining the Facility(ies) as contained in the Company's Response to RFP, TBD, Operations and Maintenance Plan.

"O&M Services" means all operation and maintenance services described in the O&M Scope of Work to be provided by Company in accordance with this RFP and the Agreement.

"O&M Services Termination Fee" means the amount described on Agreement as O&M Services Termination Fee based on the applicable date of termination of the Agreement by MSB under Agreement Section 4.2.

"Operation and Maintenance Scope of Work" or "O&M Manual' has the meaning set forth in Draft Agreement and is further explained in the Appendices of the Agreement.

"Performance Guarantees" or "Performance Standards" means the Proposer's guarantees of performance as set forth in Appendix 1 of the Agreement and on the Proposal Forms.

"Person" means any individual, corporation, joint venture, limited liability company, company, voluntary association, partnership trust, unincorporated organization, the State of Alaska, or any political subdivision of the State of Alaska, including, but not limited to, the MSB.

"Processible Waste" means Solid Waste, which the Facility is designed to accept and manage while in compliance with Applicable Law. Processible Waste does not include any waste

included in the definition of “Non-Processible Waste”, except for Non-Processible Waste, which can be processed in small quantities when mixed with other Processible Waste.

“Project” or “Waste Management Project” means all work and services included within the scope of the Draft Agreement.

“Project Schedule” means the CPM schedule that is prepared by Company and approved by the MSB for the Work pursuant to this Agreement which must reflect that Commencement of Operations Date must occur by TBD, barring any delay caused by MSB or Force Majeure event or an amendment to this contract which changes the date.

“Project Site” or Landfill Project Site” means real property located in the MSB Landfill site (as identified in Attachment A) or other site as provided by the Proposer and approved by the MSB. The MSB has identified a portion of the Central Landfill property for the septage treatment Facility through Assembly legislation dated 2015. The planned site is near the SW corner of the Central Landfill property. Construction at this site is still subject to ADEC Solid Waste approval.

“Proposal” and “Response to Request for Proposals” means the document submitted in response to this RFP detailing the Proposer's plan to design, permit, finance, construct, acceptance test, operate, and maintain the Project.

“Proposal Submittal Date” means the date and time on which the Proposal is required to be submitted to the MSB by the Proposer, as stated in Section 7.3.1.

“Proposer” means the entity (including any corporation, joint venture, partnership, subconsultants, subcontractors and other business entities) submitting a Proposal in response to this RFP.

“Reference Project” means a project submitted by the Proposer for evaluation that meets the requirements of Section 7.3.4 and presented in enough detail to satisfy the requirements of Section 7.4.1 of this RFP.

“Rejects” means materials or trash that are removed from the Facility processing stream for disposal.

“Request for Proposals (RFP)” means the documents issued by the MSB for soliciting proposals for the Work and the O&M Services, entitled "Design, Build, Operate, and Finance (DBOF) Request for Proposals (RFP)" including supplemental addenda, documentation and attachments.

“Response to Request for Proposal or “Response” means the "'Company's Response to RFP", which includes supplemental information provided.

“Residue”[To be defined later based upon the Project] means remaining waste or septage materials such as Non-Processible Waste, oversized waste, char, unrecyclable materials, residuals, rejects, bottom ash, fly ash, grate siftings, scrubber residue, unspent lime and other

material(s) which remains and is not marketable after gasification, filtration, composting, recycling, or processing in any manner, or combustion of waste or processing of septage in the Facility.

"Scheduled Construction Commencement Date" means the first date on which all of the Construction Commencement Date Conditions shall be satisfied or waived, as agreed to in writing by the parties pursuant to the Agreement, Construction Documents are complete, financing, permitting, and all other Work MSB determines necessary for the Notice to Proceed with construction of the Facility(ies) to be issued. The Scheduled Construction Commencement Date may differ for each Facility if more than one Facility is provided in the Project.

"Selected Proposer" means the Proposer selected to enter into negotiations.

"Septage" means the by-products from the pretreatment of household and other sanitary facility's wastewater (sewage) in a septic tank, pit latrine, or other system. Septage is generally pumped from the tank by a disposal service company for transport to a wastewater treatment facility for further processing. Septic tanks are generally receiving blackwater from flush toilets as well as greywater and contain fecal matter.

"Service Fee" means the fee paid to the Company by the MSB for providing services during the Term as defined in this RFP and the Draft Agreement.

"Solid Waste", "Waste", or "MSW" means garbage, refuse, abandoned, or other discarded solid or semi-solid material, regardless of whether subject to decomposition, originating from any source

"Substantial Completion" or Substantially Complete" means the date when all of the following events have been accomplished and verified by the MSB's Contract Representative: (i) the Facility(ies) has been substantially completed in accordance with the Construction Documents; (ii) the ADEC has issued a Certificate to Operate; (iii) a letter requesting Substantial Completion has been received from Company that includes a detailed punch list of outstanding items that in the aggregate cost less than One Hundred Thousand Dollars ($100,000) to complete that, if not completed, would not delay the commencement of operations; and (iv) the Engineer of Record of the Company has issued a Certificate of Substantial Completion. Note that Substantial Completion may differ for each Facility if more than one Facility is provided in the Project.

"Standard Tipping Fee" or Tipping Fee" means the normal rate charged by MSB for Municipal Solid Waste disposed in the Central Landfill. The Tipping Fee is published on the MSB Solid Waste website and is currently $137 per ton for MSW. Different rates apply for other classes of waste. For example, C&D is $127/ton.

"State" means the State of Alaska.

"Term" has the meaning set forth in Section 4.6 of this RFP and in the Agreement.

“Waste Management Facility” or “Facility” means the waste facility (Solid Waste and/or septage) to be designed and constructed by Company on Tract A pursuant to the terms of Agreement Section 2.1.5, including all buildings, structures, equipment, piping, wells, and related or required appurtenances that are to be designed and constructed by as set forth in this RFP and the Agreement, including improvements performed under Change Orders and Work Change Directives, if any.

“Work” means the design, architectural, engineering, permitting, utility extensions and hook-ups, construction, start-up testing and start up, operations expenses, Acceptance Testing, and necessary costs and services until the Commencement of Operations Date, and any and all other services required for the construction of the Facility(ies) in accordance with the Construction Documents. All Work will be performed by the Company or the Company's Contractors and Company's Designers.

1.5 ORGANIZATION OF THIS RFP

This RFP is organized into eight sections as follows:

Section 1, Introduction provides an overview of the contents and purposes of this RFP and outlines the MSB's objectives and commitment.

Section 2, General Background Information describes the MSB’s solid waste system, its disposal strategies, and the characteristics of its waste stream.

Section 3, Overview of Expected Facilities and Services outlines the Project Site and surrounding areas for the Facility(ies). It also describes specific parameters related to design, permitting, financing, construction, commissioning, acceptance testing, operation, and maintenance of the Waste Management Project.

Section 4, Draft Agreement Terms and Conditions describes the purpose and scope of the Draft Agreement, requirements for the Draft Agreement, and the process for proposing changes to the Draft Agreement.

Section 5, Technical Approach describes the general technical requirements of the Project.

Section 6, Procurement Process describes the overall procurement process for the Project, including a summary discussion of how Proposals will be evaluated and selected.

Section 7, Proposal Submittal Requirements describes the specific submittal requirements for the RFP as well as the criteria that will be used to evaluate and rank Proposals.

Section 8, Proposal Forms that must be completed by the Proposer with information relating to the Proposer and the proposed Project.

1.6 MSB ADVISORS

The MSB is advised by consultant HDR Alaska, Inc.

1.7 CONFIDENTIALITY

All Proposals received in response to the procurement documents will become the property of the MSB and will not be returned. It is the MSB's intent, to the extent permitted by law, to keep all Proposals confidential until the release of the Project's Notice of Award.

The MSB acknowledges that some information provided by Proposers may be considered proprietary, confidential, and/or exempt from disclosure. If a Proposer believes that portions of its Proposal are proprietary, confidential, or exempt from disclosure to third parties, the Proposer must clearly label the specific portions sought to be kept confidential and specify the exemption that the Proposer is relying upon. In the event that the MSB receives a request for public records to which part or all of a Proposer's response is responsive and cannot be protected by MSB as permitted by law, the MSB will promptly provide the Proposer notice of the request so that it can seek at its own expense a protective order to preserve the confidentiality of the requested materials. If the Proposer does not seek a protective order within 10 days of the notice the MSB's provides it of the request, it will be in the MSB's sole discretion to determine whether it believes the requested materials are subject to disclosure.

Notwithstanding the foregoing, Proposers shall agree that they will not hold the MSB responsible or liable in any way for any losses that a Proposer may suffer from the disclosure of information or materials to third parties.

For other details on confidentiality, see the Communication Protocol in Attachment B.

1.8 INQUIRIES AND CORRESPONDENCE

Any inquiries regarding this RFP, the overall procurement process, or Project requirements must be received and accepted in writing by the MSB Purchasing Division, 350 E. Dahlia Avenue, Palmer, Alaska 99645 in full compliance with the Communication Protocol in Attachment B.

Inquiries or correspondence that does not conform to the Communication protocol, or directed to individuals outside the MSB Purchasing Division may result in rejection of any proposal associated with the offending individual or proposer.

The MSB requires contact with the MSB to come in writing via the lead firm. Proposers should note that the MSB will provide responses to questions in writing to all potential Proposers.

SECTION 2

GENERAL BACKGROUND INFORMATION

2.1 INTRODUCTION

Solid and liquid waste management within the MSB are currently driven by different regulatory and governance requirements. The MSB is seeking a solution or solutions to manage some or all of the following materials, all of which is continuing to grow in time due to increased population:

2.2 SOLID WASTE

Solid waste management in the Borough is the responsibility of the MSB through MSB Code which requires the operation of a waste collection system in order to ensure the health and welfare of residents is not negatively affected. To that end, the MSB owns and operates a system of five transfer stations and eight transfer sites. Transfer stations are operated by Borough employees and transfer sites are operated at contracted facilities or unattended. The active Class I municipal waste landfill is the Central Landfill and is owned and operated by the MSB. The Central Landfill is located at 1201 N. 49th State Street approximately three miles west of Palmer. The Central Landfill is the primary disposal site for waste in the Borough. It is a lined sanitary landfill and meets the requirements of RCRA Subtitle D regulations and is operated by MSB staff. At the current rate of fill, the Central Landfill has over 160 years of life remaining. As of 2019 the charge for municipal solid waste is currently $137 per ton while construction and demolition debris (C&D waste) is $127 per ton. The Central Landfill has one closed cell equipped with a minimal landfill gas collection system but is currently not flaring or using the gas. The landfill is currently working to renew its Sequencing Plan to include an updated gas and leachate management plan.

C&D wastes generated in the MSB are allowed to be placed in non-lined C&D monofills which are regulated by the Alaska Department of Environmental Control (ADEC). The MSB does not own or operate any C&D monofills or landfills.

The MSB does not have flow control of commercial or industrial MSW within the Borough. There are no mandatory collection requirements and no source separated collection programs for recyclables for waste generators in the Borough, although there are recycling opportunities offered through a recycling program. The Borough Recycling Facility is run by the non-profit Valley Community for Recycling Solutions (VCRS). Recycling drop off is completed at VCRS and some of the MSB transfer stations. Certain other scrap metal including items such as appliances, barbecues, bicycles, car parts, engine parts or blocks, exercise equipment, lawn mowers, metal tanks, satellite dishes, washers, dryers, etc. are stockpiled and sold. Composting of organic wastes is encouraged. All MSW collected in the Borough is landfilled at the Central Landfill. The residential and commercial waste generated is collected by private companies which deliver waste directly to the Central Landfill. Self-haul household waste can be transported to the Central Landfill and is currently approximately 17% of the system's aggregate waste.

2.3 SEPTAGE

Septage management in the Borough is the responsibility of the residents and commercial, industrial, institutional and governmental facilities. As such, septage is not a controlled waste stream so its attractiveness to the proposed facility will be based on financial and logistic terms. Septage is generally transported to the Turpin Street Station Wastewater Treatment Facility, operated by the Anchorage Water and Wastewater Utility (AWWU). Closure of the Turpin Street Station, which AWWU says will occur in 2021, will drive up costs for disposal of septage due to the estimated additional hour of travel time. The MSB has identified a portion of the Central Landfill property for the septage treatment facility through Assembly legislation dated 2015. The planned site is near the SW corner of the Central Landfill property. Construction at this site is still subject to ADEC approval.

2.4 WASTE STREAM CHARACTERISTICS

Waste stream characteristics are documented in a waste characterization study conducted over the past year.

2.4.1 Current and Expected Future Waste Generation

Proposers are expected to be familiar with municipal Solid Waste and/or septage, the varying composition that can be expected, and the difficulties in characterization of waste. Additional Waste and/or septage composition information may be provided if the MSB performs Waste and/or septage sampling and analysis in the future.

The capacity requirements for the Project shall be set forth in the Agreement and will take into account potential increases in population and Waste and septage generation. The MSB will not guarantee potential composition or quality of Waste or septage but has established design criteria for Waste energy content to be used for capacity throughput purposes and for energy output purposes, as required for a Project. The following table summarizes solid waste for the years 2009 through 2019. Refer to Section 2.4.2 for reference Waste and septage for design purposes.

Year	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015***	**2016**	**2017**	**2018**	**2019****
MSW Commercial	48921	50446	49136	50520	50869	51659	36772	52395	52324	51786	49745
MSW Residential	8146	7273	8493	6917	7927	6996	4972	6779	6475	5885	5116
MSW Total	57067	57719	57630	57437	58796	58654	41744	59174	58799	57671	54861
C&D	10357	10926	11362	9812	11631	13220	9682	13562	13614	12924	11706
Total	**67,425**	**68,646**	**68,992**	**67,249**	**70,427**	**71,874**	**51,426***	**72,736**	**72,412**	**70,595**	**66,566****

*2015 numbers are incomplete due to lost data. ** 2019 numbers are through November 30, 2019.

Solid Waste. The MSB collected and measured waste from refuse trucks throughout a quarterly sampling program, designed to obtain characterization data for Waste. Separate quarterly samples from trucks containing residential waste and construction and demolition (C&D waste) were analyzed between the fourth quarter 2018 and the third quarter of 2019. Charts presenting the summary results are provided in Figure 2-1 and Table 2-1 for waste and Figure 2-2 and Table 2-2 for C&D waste. Additional data from each truck sampled for each quarter are summarized in Attachment D.

Figure 2-1. Total MSW Generation (by Material) Collected by the MSB during 2018 – 2019 Quarterly Waste Composition Study

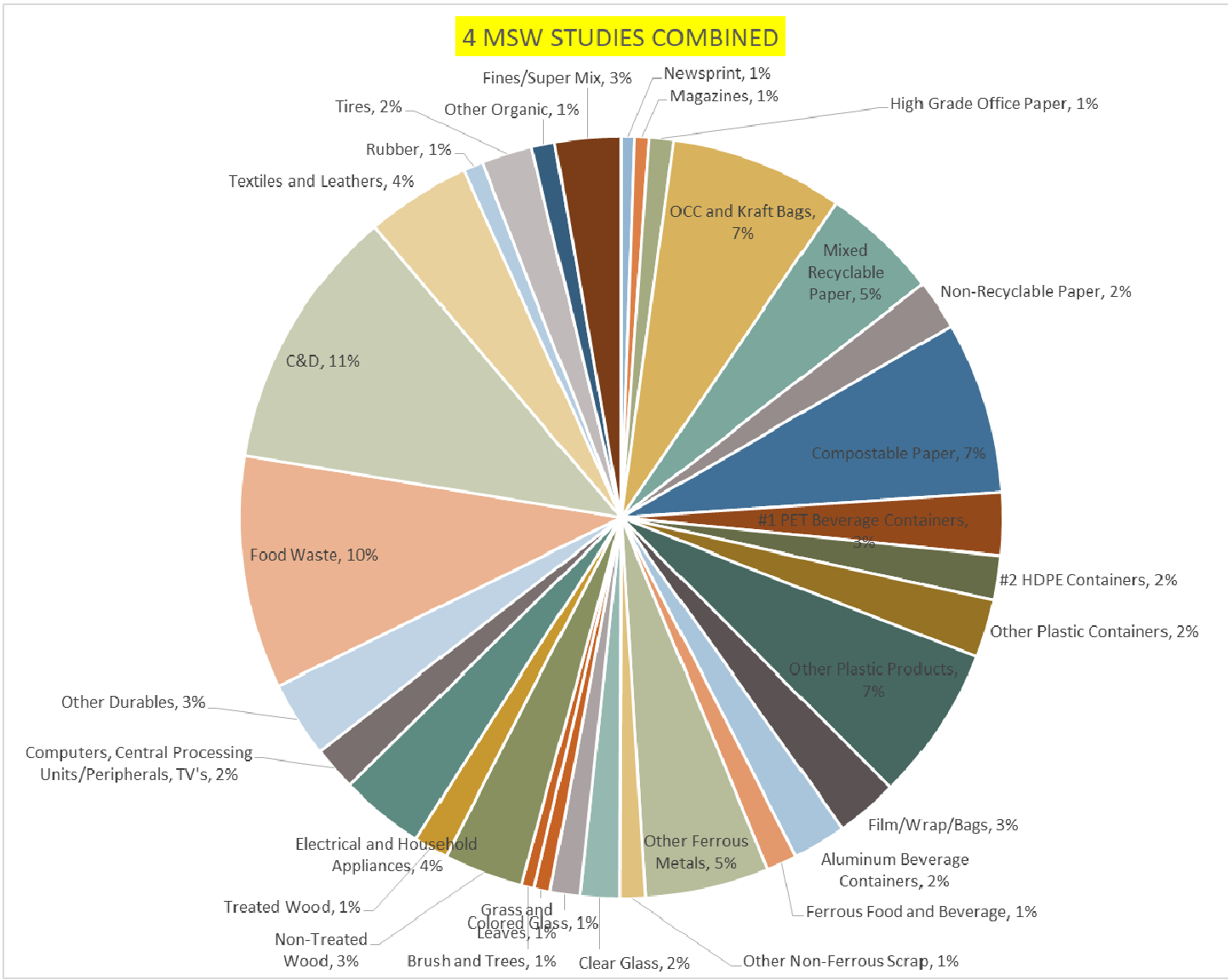
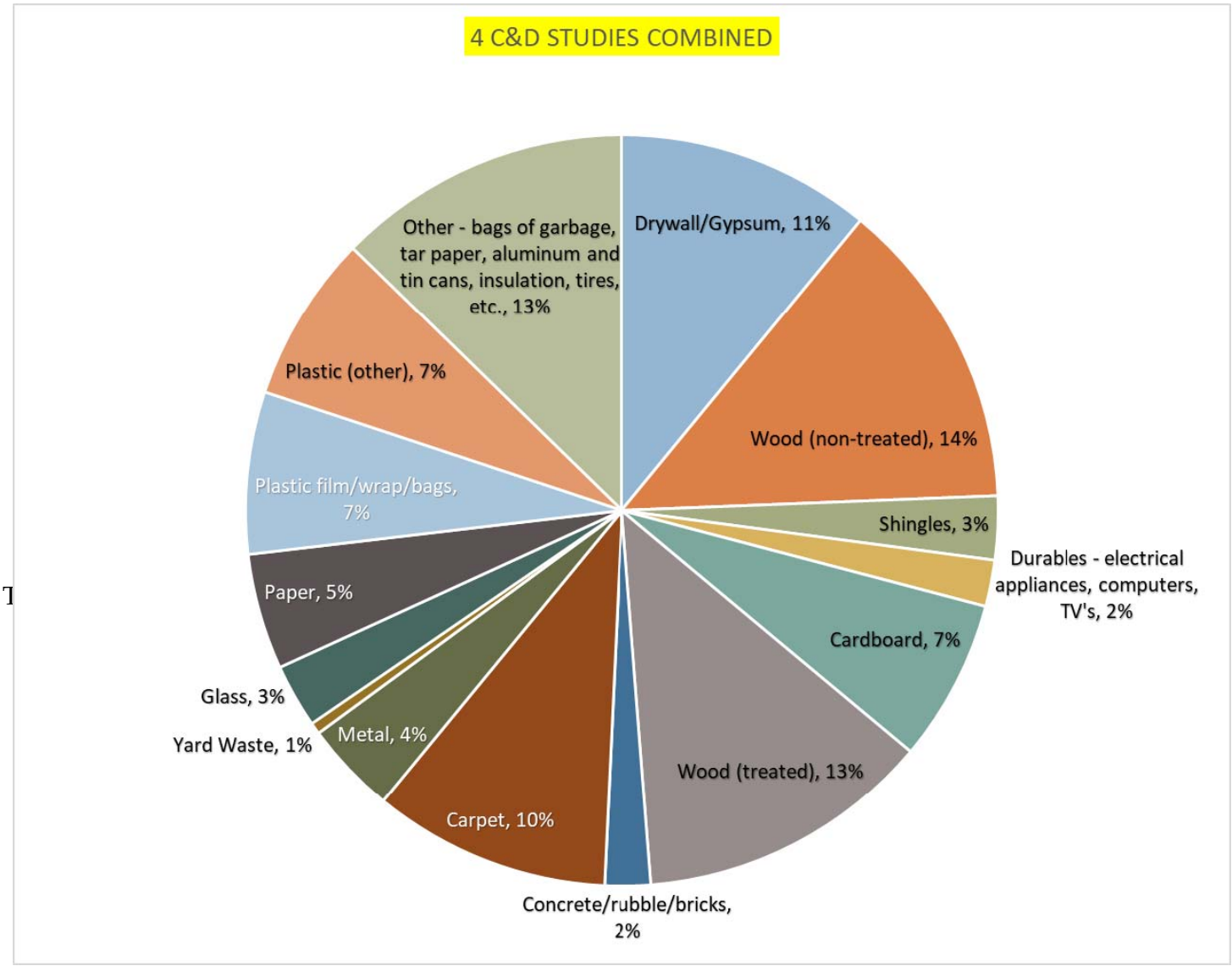


Table 2-1. Total MSW Generation (by Material) Collected by the MSB During Each Quarter and Average for the 2018 – 2019 Waste Composition Study

SUMMARY	MSW DEC 2018	MSW FEB 2019	MSW MAY 2019	MSW AUG 2019	TOTAL DIVIDED BY 4
Newsprint	0%	1%	0%	0%	1%
Magazines	1%	0%	1%	1%	1%
High Grade Office Paper	1%	1%	2%	1%	1%
OCC and Kraft Bags	8%	7%	4%	10%	7%
Mixed Recyclable Paper	3%	7%	7%	4%	5%
Non-Recyclable Paper	1%	3%	3%	2%	2%
Compostable Paper	8%	7%	7%	7%	7%
#1 PET Beverage Containers	4%	1%	3%	3%	3%
#2 HDPE Containers	2%	1%	4%	1%	2%
Other Plastic Containers	1%	2%	2%	4%	2%
Other Plastic Products	5%	5%	8%	8%	7%
Film/Wrap/Bags	3%	3%	2%	2%	3%
Aluminum Beverage Containers	3%	3%	1%	3%	2%
Ferrous Food and Beverage	1%	2%	0%	2%	1%
Other Ferrous Metals	3%	3%	5%	10%	5%
Other Non-Ferrous Scrap	2%	1%	1%	0%	1%
Clear Glass	4%	1%	0%	1%	2%
Colored Glass	2%	1%	0%	2%	1%
Other Mixed Cullet	0%	0%	0%	0%	0%
Grass and Leaves	0%	1%	1%	1%	1%
Brush and Trees	0%	0%	2%	0%	1%
Non-Treated Wood	2%	3%	5%	4%	3%
Treated Wood	3%	0%	1%	2%	1%
Electrical and Household Appliances	6%	4%	3%	2%	4%
Computers, Central Processing Units/Peripherals, TV's	5%	2%	0%	1%	2%
Cell Phones and Chargers	0%	0%	0%	0%	0%
Other Durables	2%	0%	6%	5%	3%
Liquid HHW	0%	0%	0%	0%	0%
Automotive and Lead Acid Batteries	0%	0%	0%	0%	0%
Other Batteries	0%	0%	0%	0%	0%
Mercury Containing Products	0%	0%	0%	0%	0%
Other HHW	0%	0%	0%	0%	0%
Food Waste	8%	12%	8%	12%	10%
C&D	6%	19%	16%	3%	11%
Textiles and Leathers	5%	4%	2%	6%	4%
Diapers	1%	0%	0%	0%	0%
Rubber	1%	0%	0%	2%	1%
Tires	0%	3%	4%	1%	2%
Sharps	0%	0%	0%	0%	0%
Other Organic	1%	1%	0%	1%	1%
Other Inorganic	0%	0%	0%	0%	0%
Fines/Super Mix	10%	0%	0%	0%	3%
Other	0%	0%	0%	0%	0%
	100%	100%	100%	102%	101%

Figure 2-2. Total C&D Waste Generation (by Material) Collected by the MSB during 2018 - 2019 Waste Collection Study



T

Table 2-2. Total C&D Waste Generation (by Material) Collected by MSB During Each Quarter and Average for the 2018 – 2019 Waste Collection Study

SUMMARY	C&D DEC 2018	C&D FEB 2019	C&D MAY 2019	C&D AUG 2019	TOTAL DIVIDED BY 4
Drywall/Gypsum	24%	3%	8%	9%	11%
Wood (non-treated)	8%	1%	21%	24%	14%
Shingles	1%	0%	9%	1%	3%
Durables - electrical appliances, computers, TV's	4%	4%	0%	0%	2%
Cardboard	1%	9%	12%	6%	7%
Wood (treated)	10%	20%	15%	6%	13%
Concrete/rubble/bricks	0%	0%	3%	5%	2%
Carpet	5%	24%	5%	7%	10%
Metal	5%	3%	5%	3%	4%
Yard Waste	0%	0%	1%	1%	1%
Glass	6%	2%	3%	0%	3%
Food Waste	0%	0%	0%	0%	0%
Paper	8%	7%	4%	1%	5%
Plastic film/wrap/bags	12%	8%	3%	5%	7%
Plastic (other)	11%	4%	4%	10%	7%
Other - bags of garbage, tar paper, aluminum and tin cans, insulation, tires, etc.	5%	16%	10%	20%	13%
	100%	101%	103%	98%	101%

The MSB is seeking a solution or solutions to manage some or all of approximately 72,000 or more tons per year (tpy) of Solid Waste consisting of approximately 50,000 tpy of municipal solid waste (MSW) from residential and commercial generators and approximately 15,000 tpy of Construction and Demolition (C&D) waste. All reference to tonnages for respective feedstock is understood to be an estimate of future volumes based on currently generated quantities.

Septage. Approximately 15 million gallons of septage is generated per year. All reference to tonnages for respective feedstock is understood as being an estimate of future volumes based on currently generated quantities as provided by AWWU.

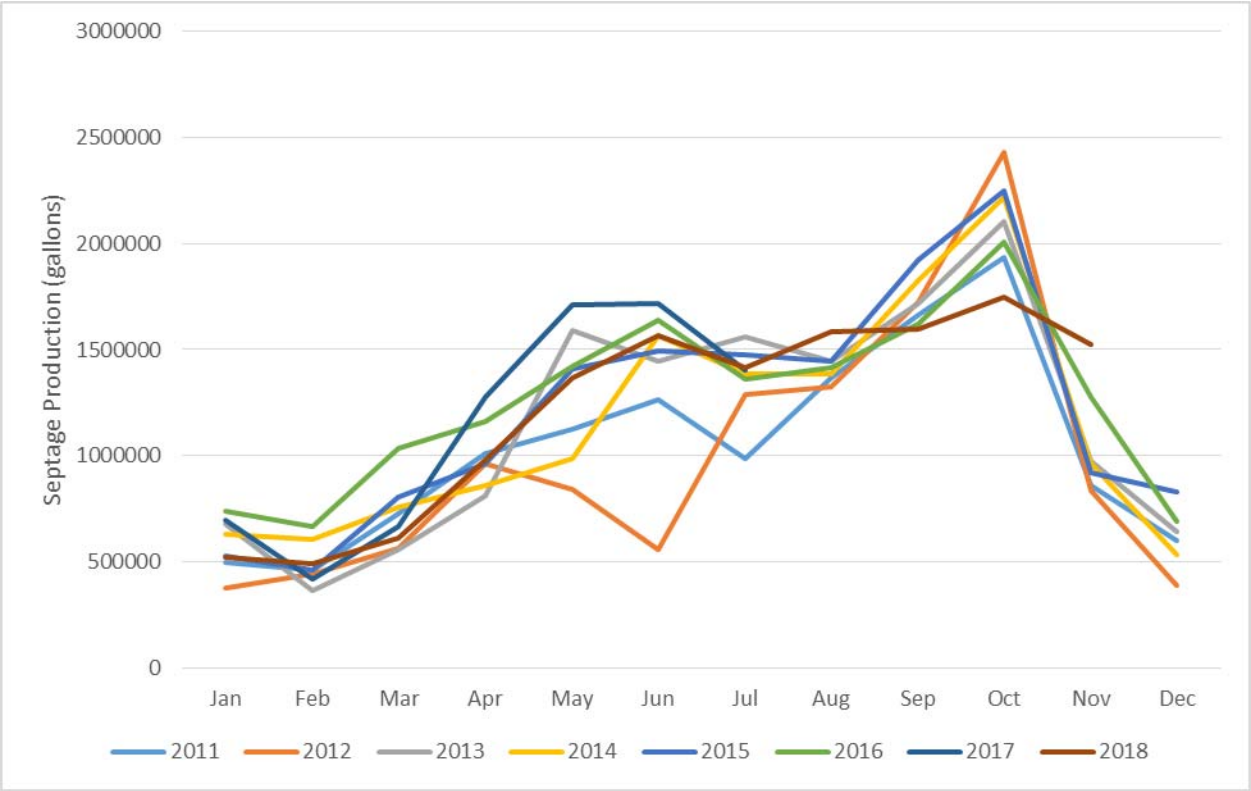
Table 2-3 below summarizes the approximate makeup of the septage.

Table 2-3. Quantity and Composition Data of Septage

Constituent	Units	Septage
Flow	MG/yr	15
Flow	Gpd	41,096
COD	mg/L	3,490
BOD	mg/L	1,850
TSS	mg/L	2,380
TS	mg/L	3,680
TDS	mg/L	1.300
TKN	mg/L	217

The septage quantities produced vary significantly throughout the year. Figure 2-3 below provides a graphical representation of the septage production per month from 2011-2018 and shows a typical sharp increase in the septage pumping activities and volume in the month of October.

Figure 2-3. Monthly Variation of Borough Septage Production (2011-2018)



2.4.2 Reference Waste and Septage

The MSB expects that the Waste delivered to the Project will have higher heating values ("HHV") between 4,500 and 5,500 BTU per pound. The MSB will not guarantee waste or septage composition or quality (ultimate or proximate analysis). Proposers are required to provide their guaranteed throughput, commodity production, energy generation, and residue for a range of HHVs on Proposal Form 9. The Proposers are required to rely on their knowledge of the variability of waste and/or septage and provide ample margin when providing their guarantees. Proposers shall provide assumptions used in their Proposal.

For Waste throughput guarantees, the Facility annual average design basis shall be 5,500 BTU per pound and for Waste energy guarantees, if required, the annual average design basis shall be 5,000 BTU per pound. During Facility operation, it is the Company's responsibility to demonstrate the actual annual average HHV if different from the design basis HHV.

The MSB expects the septage delivered to the Project will vary in quantity, quality, and composition as is typical for similar septage. Proposers are required to provide their guaranteed throughput, commodity production, energy generation, energy consumption, and solids generation, and/or other appropriate performance guarantees for septage processing on Proposal Form 9 based upon the Proposer's Project. The Proposers are required to rely on their

knowledge of the variability of septage and provide ample margin when providing their guarantees.

2.4.3 Anticipated Future Waste Diversion Activities

The MSB currently supports a recycling program. The MSB maintains a system of containers at five of its transfer stations while also supporting the MSB recycling facility (Valley Community for Recycling Solutions (VCRS)) with a $150,000 annual grant as well as an annual payment of $52,000 on the facility (owned by the MSB). While the MSB transports recyclables generated at the transfer stations to VCRS, some recyclables make their way to the facility with private haulers. Refer to Sections 2.2**Error! Reference source not found.**, 2.4.1, and 3.2 for further discussion regarding current programs and Project integration. The Management Agreement for VCRS as well as quarterly reports for four quarters are provided in Attachment E.

2.4.4 Septage and Waste Delivery Commitment

As set forth in Section 2.4.1 of this RFP, approximately 15 million gallons of septage are generated per year in the Borough. The cost for septage disposal is expected to increase. The MSB does not have ownership of the septage and thus cannot guarantee delivery to the Company Facility.

As set forth in Section 2.4.1 of this RFP, the MSB received approximately 70,000 tons of waste at the Central Landfill in 2018. It is the MSB's intent to cause all Waste which is currently delivered to the Central Landfill to be available for disposal at the facility by redirecting at the MSB scale facility but MSB cannot guarantee the quantity given fluctuations in the population, economy, etc. The MSB delivery commitment will be set forth in the Draft Agreement.

The MSB has a vision to extend the life of the Central Landfill or possibly replace the Central Landfill with a process that beneficially uses the wastes, converting wastes to energy or useful products. Central to this vision is the development of an integrated waste management solution to manage Solid Waste and/or septage in lieu of direct landfilling saving in terms of capital infrastructure and long term gas and water monitoring costs and in other ways. On a preliminary basis, the MSB has identified a portion of the Central Landfill site property as shown in Attachment A that could be available for siting and development of a future integrated waste management solution(s).

Respondents to this RFP should note that it is the intent of the MSB to engage an integrated waste management solution that would allow for management of liquid septage streams and MSW. Septage management is a priority because of the scheduled closure of the current AWWU disposal facility. Although MSB prefers responses that address all of the waste streams, MSB is also open to solutions that only address specific waste streams.

2.5 PROJECT SITE AND SURROUNDING AREAS

The Project will be located at 1201 N. 49th State Street approximately three miles west of Palmer or at a site proposed by the Company and approved by MSB. On a preliminary basis, the MSB has identified a portion of the Central Landfill site property that could be available for

siting and development of some form of future integrated waste management solution. Figure 1, Attachment A shows the Project Site. The exact location and arrangement of the Project will be defined based on the specific requests in the selected Proposal.

Site condition and status information regarding roads, utilities, property features such as buffer areas, wetlands, etc. can be found in Attachment A.

2.5.1 Long-Term Planning

In the long-term, the MSB plans to continue to expand reduction and recovery activities. The MSB has a Landfill Development Plan (LDP) that addresses specific Central Landfill site plans. The MSB has a vision to extend the life of the Central Landfill or possibly replace the Central Landfill with a process that beneficially uses the MSW, converting it to energy or useful products. Central to this vision is the development of an integrated waste management solution to manage Solid Waste in lieu of direct landfilling. It is the intent of the MSB to engage an integrated waste management solution that at minimum would allow for management of both the MSW and the septage liquid streams. Although MSB prefers responses that address all of the waste streams, MSB is also open to solutions that only address specific waste streams.

2.6 OTHER FACILITIES

There are no other municipal landfills currently in operation in the MSB. C&D wastes generated in the MSB are allowed to be placed in non-lined C&D monofills. The MSB operates a C&D landfill cell and is in the process of building another.

The MSB does not currently manage septage and there are no current disposal locations within the MSB.

2.7 ENVIRONMENTAL AND PUBLIC OUTREACH INFORMATION

As available, the MSB will provide relevant information about the Landfill Project Site to support the Company development of all permitting and approvals. The Company shall provide all relevant information for other proposed sites.

The Company shall be responsible for public outreach and shall have at least one public meeting to engage community outreach. A project fact sheet, public engagement document, and graphics depicting the Company's plans shall be developed and mailings to all residents within at least a one (1) mile radius of the Central Landfill shall be provided. All such outreach materials shall be reviewed and approved by the MSB prior to release to the public.

A group of concerned citizens and neighbors has recently organized under the name Crevasse Moraine Neighbors United (CMNU). They have raised a number of concerns regarding the Project, Central Landfill and Project Site and are actively interested in this Project. Refer to Attachment C for more information. The Company will need to reach out to CMNU, regulatory agencies, and any other interest groups and stakeholders, with the MSB, regarding actions necessary to address the concerns raised. Completing this contact and maintaining good neighborly relations will be an integral part of this Project.

2.8 REFERENCE DOCUMENTS AVAILABLE

The following documents are available for this Project:

1. The MSB Landfill Development Plan, 2014. Note, a new plan is in the process of being completed which will be a part of the new permit required in 2020.

2. Site Selection Engineering Analysis for the Central Landfill Project site (CH2M Hill, 2015.

3. Preliminary Engineering Analysis (Clark Engineering, 2018).

4. The Landfill operates under ADEC Permit SW1A0007-20. Expires December 4, 2020. New permit will be submitted in July 2020.

For the purpose of this RFP, all reference documents should be used for informational purposes only. These documents may be out of date and do not necessarily represent existing conditions. The reference documents and all proposal documents will be provided upon request.

2.9 GEOTECHNICAL INFORMATION

The MSB geotechnical information for the Central Landfill site is available to the Proposers as Attachment F5 and in Site Selection Suitability Analysis. The Proposers may need to obtain additional geotechnical information for their Project.

If other site(s) are proposed for this Project the Company shall be responsible for all geotechnical information and all foundation design.

2.10 REFERENCE VALUES

For the purpose of the Proposal, the Proposers shall use the reference values listed below for Palmer, Alaska where available and for Anchorage, Alaska where noted. It should be noted that these values are being used to provide a basis for comparison and should be used for informational purposes in the preparation of the Proposal only. These values are not guaranteed by the MSB nor will they be guaranteed in the final Agreement.

Annual Average Ambient Temperature = 35.2 °F

Average annual relative humidity = 63.8% (Anchorage, Alaska)

Maximum relative humidity = 100%

Maximum outdoor ambient temperature = 76 °F (Anchorage, Alaska)

Minimum outdoor ambient temperature = -14 °F (Anchorage, Alaska)

Altitude above MSL = 220 ft.

Design (1%) wet bulb temperature = 58 °F (Anchorage, Alaska)

Design (1%) dry bulb temperature = 68 °F (Anchorage, Alaska)

Summer design (2%) dry bulb temperature = 83.8 °F (Anchorage, Alaska)

Mean coincident wet bulb temperature = 64 °F (Anchorage, Alaska)

Winter design dry bulb temperature = -23 °F (Anchorage, Alaska)

Seismic Zone = 4 UBC

Average Wind speed = 5.7 mph

Average Annual Rainfall = 16 in.

2.11 RELIANCE ON THE MSB PROVIDED INFORMATION

For the purpose of this RFP, all documents provided by the MSB should be used for informational purposes only. The MSB does not warrant the current accuracy of these documents and Proposers are strongly encouraged to conduct independent research to verify information contained in the documents.

SECTION 3

OVERVIEW OF EXPECTED FACILITIES AND SERVICES

3.1 INTRODUCTION TO SCOPE OF SERVICES

This section of the RFP provides a general description of the Project facilities and services that will be provided by the Company.

3.2 SCOPE OF SERVICES

The Company shall design, permit, finance, construct, commission, acceptance test, operate, and maintain a Waste Management Project and all associated support facilities. The Company will be responsible for receiving septage and/or waste at the Company's Facility(ies) and marketing, contracting, storage, hauling, and management of all products, services, and residues resulting from their Facilty(ies). Respondents to this RFP should note that it is the intent of the MSB to engage an integrated waste management solution that at minimum would allow for management of both the liquid septage streams and the MSW but will consider solutions that manages either septage or MSW. Septage management is a priority for the MSB and the MSB may choose to proceed with a septage-only Project.

The MSB intends to continue recycling, composting, and other waste reduction programs in the Borough, however the Company shall clearly address in its Proposal how the Company will integrate and partner with the VCRS and with these programs. The Proposal shall fully describe their proposed Project addressing the equipment arrangement, equipment specifications, staffing, commodities recovered, residues remaining, and how the Project will function as required in Proposal Form 10. Identify any potential partnership opportunities with VCRS that would be possible for your Project to foster based on materials that will or will not be processed at the proposed Waste Facility. Although MSB prefers responses that address all of the waste streams, MSB is also open to solutions that only address specific waste streams. Mining the existing Central Landfill may be addressed and included in the Project by the Proposers, however the MSB recognizes that landfill mining is a very difficult and challenging process and does not anticipate Central Landfill mining is practical for this Project.

The Project may include:

1. Septage Facility

2. Solid Waste Facility

3. Interconnection to electrical grid

4. Systems and Equipment required to generate, contract, and sell any recyclables, energy products such as solid fuel, electricity, steam, hot water, or gaseous or liquid fuels or other products and materials. This may include loading, compacting equipment, and other equipment proposed. The Company shall be responsible for the

transport and/or disposal of such Residue from solid waste and/or septage and products in the Central Landfill.

3.2.1 Permitting

The Company will be responsible for obtaining and complying with all permits necessary to design, construct, commission, acceptance test, operate, and maintain the Waste Management Project. The number and type of permits will vary according to the specific design and operating concepts proposed.

The MSB conditional use permit code can be found at https://www.matsugov.us/boroughcode. If the proposed Project will surpass any of the thresholds identified in the MSB code (Chapter 17.61 Core Area Conditional Use Permit) for the Project, the Company will be required to apply for a permit through the MSB and go through the Planning Commission for approval which includes public hearing(s).

The MSB recognizes that activities necessary to secure permits prior to the notice to proceed with construction may be extensive. The MSB has an interest in the ability of the Company to successfully obtain the necessary permits and to maintain efficient long-term business relationships with permit agencies. Therefore, the MSB reserves the right to monitor and participate in the permitting processes. The MSB will assist in providing information that it has in its possession that may be required by permitting agencies to support permit applications. The MSB may attend permit hearings and pre-application meetings and shall be invited by the Company. Company shall inform the MSB of plans to address permits far enough in advance to allow for pre-planning meetings prior to the meeting and pre-submittal review prior to sending submittals to ADEC.

The MSB's activities related to permitting shall in no way release the Company from its obligation to obtain and comply with all permits necessary for the Project

As part of the permitting and on-going operations activities, the Company shall address issues raised by CMNU and any other Project stakeholders. Refer to Attachment C. The MSB will assist the Company with its efforts.

3.2.2 Financing

The Company will be required to arrange financing for construction of the Waste Management Project. MSB is requiring Proposers to provide Construction Financing for the Project utilizing a loan upon terms and from a commercial bank or other lender or financing instrument reasonably acceptable to the MSB. After completion of the Work, Company shall provide long-term financing for the Project. The Proposer shall fully explain their financing plan and funding sources.

The MSB may pay the Company a Service Fee to process municipal solid waste as appropriated and approved by the Assembly. The Service Fee payment provisions, if any, will be agreed to during the negotiation of the agreement.

The MSB will not pay for septage treatment or disposal, the Company will collect payment directly from users for the services provided. The Company will establish a service fee structure for septage received at the Facility.

The MSB will accept only one Proposal from each Proposer. A Proposer must, subject to the following limitations, include in its Proposal a taxable financing alternative ("Financing Alternative"), and corresponding Project documentation necessary to implement the Financing Alternative.

The Proposer should assume that the Capital Reserve Component of the Service Fee, if required, will be established and fixed at or prior to financial closing, and shall not be subject to modification over the Term of the Agreement except for limited exceptions specified in the Agreement. The Service Fee shall not include any pass-through of variable-rate interest costs or refinancing costs.

Under the guarantee of financing, if the Company plans to issue project revenue debt at the commencement of Project construction but is unable to do so for any reason, it must commit to use internally generated funds or corporate debt to pay construction costs. The risk of a "take-out" of this construction financing not occurring for any reason, or at rates or upon terms unfavorable to the Company, shall be the Company's risk.

The equity component of Project capitalization will be provided by the Proposer or an equity investor identified by the Proposer.

The MSB must have the option to own the Project at the end of the Term for nominal consideration. See Section 4.4.4.

The Proposer must provide full details of its taxation assumptions in a pro forma to demonstrate that the Proposer has given full consideration to all tax implications in preparing its Proposal. Each Proposer is responsible for obtaining and relying on tax and finance advice from its own advisors and experts, including obtaining such of its own advance rulings or interpretations in relation to the Project as it considers necessary or appropriate.

3.2.3 Design and Construction Services

The Company shall be responsible for designing and constructing a Project and all other associated infrastructure necessary to provide the services described in this RFP while complying with the Performance Guarantees presented in Appendix 1 of the Agreement and the Minimum Technical Requirements presented in Appendix 1 of the Agreement. All such engineering, architectural, surveying and similar services shall be completed in accordance with all State of Alaska laws, regulations, and statutes and the Company shall obtain formal design review by the applicable regulatory agencies. The Company shall provide all engineering services necessary for the construction of the Project.

Appendix 1 describes the anticipated minimum technical requirements necessary to adequately protect the MSB's interests while developing a technically sound and operationally reliable Waste Management Project. Proposers must present a proposal that meets the minimum design

requirements. However, the MSB recognizes that construction and/or operational efficiencies may be available via modification to the requirements of Appendix 1 of the Agreement. Accordingly, proposers must present a proposal design that meets requirements while complying with the expected performance quantities in Appendix 1 and submitted in the Proposers RFP. Proposers may identify opportunities to realize or maximize these efficiencies by proposing technical solutions that will yield measurable benefits to the MSB yet may not be fully compatible with the RFP as currently written as part of an alternative proposal. Proposers shall explicitly identify any changes or deviation from the RFP and the associated benefits to the MSB in its alternative proposal.

3.2.4 Design and Construction Objectives

The design and construction objectives for the Waste Management Project are to assure:

- Minimization and mitigation of environmental and social impacts;
- Optimization of present and future waste reduction and/or septage management processes;
- Minimization of the cost of service to the MSB;
- Sound design and quality construction for long-term operational reliability;
- A project schedule that achieves project efficiencies, quality, and timelines; and
- Attention to quality to ensure prudent, long-term use of resources.

A. Facility Sizing

Based on expected population and economic growth, historical production, and planned increases and changes in septage management, the Proposer may design a septage Facility capable of receiving and processing up to 15 million gallons of septage or more per year, if approved by MSB, while taking into account scheduled downtime, production variability, processing efficiency variations, and potential population growth.

Based on expected population and economic growth, historical deliveries to the Central Landfill, and planned increases in waste diversion and recovery, the MSB anticipates the Waste Facility capacity will be at least 40,000 tpy and can be sized for up to 70,000 tpy or more, if approved by MSB while taking into account scheduled downtime, processing efficiency variations, and potential population growth.

B. Project Quality Standards

In order to meet its quality objectives for the Project, the MSB expects:

- Design and construction services that are consistent with the Agreement (including submittal of Design Development Documents and Construction

Documents in accordance with the submittal schedule proposed in the RFP requirements of Agreement Appendix 1) and result in a Waste Management Project that meets all Performance Guarantees;

- Durable, dependable and high-quality materials, equipment and installation that are compatible with industry standards;

- Emphasis on the use of natural lighting and the maximization on worker productivity in design; and

- Company provided systems to ensure that problems are discovered early, corrected adequately and do not recur as summarized in the Company's Quality Control/Quality Assurance, Risk Management and Loss Prevention Program (QC/QARMLPP).

- Company shall provide record drawings and engineering certification letter upon final completion of Project construction.

Therefore the Waste Management Project shall be designed and constructed in accordance with good engineering practice. All equipment and materials shall be new and unused unless approved by the MSB. All facility equipment shall be of utility grade where utility grade is defined to be of heavy-duty construction, of a quality suitable and commonly used for high-availability, long-term service in utility applications.

3.2.5 Operation and Maintenance Services

The Company shall be responsible for operating and maintaining a Facility(ies), all other associated infrastructure and actions necessary to provide the services described in this RFP for the Term while complying with the Performance Guarantees of the DBOF Agreement and to develop and maintain good working relationships with all stakeholders. Company shall provide a complete set of O&M Manuals to the MSB. Specific maintenance and repair requirements and inspection authority to measure performance and address any noted shortcomings are outlined in the Agreement.

3.2.6 Other Services

A. Environmental Permitting

Permitting and approval documents necessary for the Project will be prepared by the Company and, as required, shall publish in accordance with ADEC requirements. Following publication of the document, if required, a public comment period will be initiated.

Preparation of the permitting and approval documents will begin after the MSB has awarded the Agreement. The preparation of the all permitting, approvals, hearings, meetings, and all other requirements shall be the responsibility of the Company. The Company shall provide copies of all permits and updates to permits to the MSB.

The MSB will provide available support for the permitting process, as the MSB deems is needed, by furnishing technical or operational information as requested by the Company.

B. Marketing, Sale and Distribution of Recovered Materials, Fuels, Energy, and other Beneficial Byproducts

If the Company determines that recovered materials, fuels, energy, and other beneficial byproducts should be sold to a third party, the marketing, sale, and distribution of those materials shall be the responsibility of the Company. All revenues generated from the sale of recovered materials and other beneficial byproducts shall be retained by the Company as indicated in Section 4.4.2.

C. Residue, Bypass and Excess Processible Waste, Non-Processible Waste, Septage, and Products Transportation and Disposal

The Company will be responsible for handling and disposal including all disposal costs and Tipping Fees of all Residue, Bypass and Excess Processible Waste, and Non-Processible Wastes, septage, septage byproducts and non-marketable products received by or produced at the Company's Facility(ies).

SECTION 4

SIGNIFICANT GROUND LEASE AND DRAFT AGREEMENT TERMS AND CONDITIONS

4.1 PURPOSE AND SCOPE

A Ground Lease and Draft Agreement are included with this RFP. This Section discusses certain significant terms and conditions that are reflected in the Ground Lease and Draft Agreement. In the event of any discrepancies between the Ground Lease and Draft Agreement with the provisions of this Section, the Ground Lease and Draft Agreement will control.

Certain Appendices to the Draft Agreement and the Agreement itself will require Proposal-specific information to properly complete the particular Appendix. Proposers should be aware that, if selected, information submitted in their Proposal will be included in the Appendices to the Agreement and the Agreement. Proposal-specific information that may become part of the Agreement and Appendices following negotiation with the MSB includes, but is not limited to:

- Financing Plan
- Drawings and Specifications
- Construction Requirements
- Transition and Acceptance Testing Protocols
- Shutdown Schedule
- Critical Path Schedule
- Key Personnel, Staffing, and Organizational Chart including Minimum Staffing Plan
- Equipment Lists and Replacement Schedule
- Draft Quality Management Plan
- Waste Management Project Operations and Management Plan
- Performance Guarantees
- Pricing
- Pro forma

The Agreement will also incorporate other information from the Selected Proposal including information from the Proposal Forms.

4.2 AGREEMENT REQUIREMENTS

The Ground Lease and Draft Agreement and Appendices constitute the risk allocation, responsibilities, and obligations sought by the MSB. While Proposers may suggest modifications to the Ground Lease and Draft Agreement pursuant to Section 4.8 of this RFP, Proposals shall be based upon and will be evaluated on the terms of the Ground Lease and Draft Agreement and Appendices.

4.3 PERIODS OF WORK AND COMMENCEMENT OF OPERATIONS DATE

The Draft Agreement defines Work and the Commencement of Operations Date.

4.3.1 Periods of Work (Contract Date to Commencement of Operations Date)

The execution of the Agreement between the Company and the MSB is anticipated to occur by SEE SECTION 1.1.4 SCHEDULE. (i.e., "Contract Date"). The Work will commence on the Contract Date and end on the Commencement of Operations Date. The Work incorporates design and construction to substantial completion, commissioning and startup, and satisfactory completion of the Acceptance Test.

Acceptance will occur once the Company has successfully completed the Acceptance Tests and documented compliance with the Acceptance Test Standards as set forth in the Agreement in Appendix 1, and once the Company has attained certain other conditions contained in the Draft Agreement.

4.3.2 Term (Commencement of Operations Date to End of Contract)

The Term will commence on the Commencement of Operations Date and will end on the last day of the Term or upon a termination of the Agreement prior to the end of the Term. The Term includes the on-going operation and maintenance of the Waste Management Project throughout the Term.

4.4 BUSINESS TERMS AND CONDITIONS

4.4.1 The MSB's Payment Obligations are Subject to Appropriation.

As described below, the MSB anticipates the parties will enter into an Agreement that obligates it to make certain payments for solid waste Projects. Any MSB payment obligation will be subject to annual appropriation by the MSB Assembly. In the event the Assembly fails to appropriate sufficient funds to pay any of the MSB's obligations under this Agreement, MSB will notify the Company at the beginning of the period for which funds have not been appropriated, terminate this Agreement, and thereupon be released of all of its obligations hereunder, including but not limited to its obligations to make all further payments thereafter due under this Agreement.

The MSB will agree to include in its budget all payments required by the Agreement in accordance with applicable law. The MSB pledges to use its best efforts to obtain

appropriations by the MSB Assembly in amounts sufficient to pay all amounts required by the Agreement.

4.4.2 Payment Provisions

The Company's compensation for Contract Services will depend on whether the services provided for the Project are for management of Solid Waste and/or septage as described separately. **The ultimate pay provisions will be negotiated and included in the final Agreement.**

Solid Waste. The MSB will receive all Solid Waste at the MSB scale facility at the Central Landfill and will collect the Standard Tipping Fee for MSW (currently $137 per ton) and C&D waste (currently $125 per ton). The Company's sole compensation for the Contract Services for receipt and processing of Solid Waste will be through the payment of a Service Fee (except in the event of certain occurrences as described further in the Draft Agreement). It is anticipated that the Service Fee for the type of waste processed will be less than the Standard Tipping Fee for MSW and for C&D waste. The Service Fee will consist of several components:

- Base Operation Fee Component. The intent of this component is to cover the operating (*i.e.* non-capital) costs of processing all the Solid Waste received from the MSB up to the Contract Facility Capacity and is based on the Company proposed per-ton fee for processing the Solid Waste received. The MSB anticipates the Facility Capacity will be at least 40,000 tpy and can be sized for up to 70,000 tpy or more, as approved by MSB. The Company shall clearly state the guaranteed waste reduction accounting for all materials requiring Central Landfill disposal including any septage residuals. The Company shall propose the Base Operation Fee in its Proposal and the Contract Facility Capacity. It is anticipated the Base Operation Fee will be less than the Central Landfill Standard Tipping Fee. After weighing at the MSB truck scale facility, the MSB will direct waste suppliers to the Company Facility or to the Central Landfill. The Company is obligated to receive and the MSB is obligated to deliver Solid Waste in the amount agreed to by both parties up to the Contract Facility Capacity, as agreed to during negotiations. The Company and the MSB shall agree upon daily, weekly, and monthly ranges for Solid Waste delivered by the MSB that the Company must receive. Allowances for scheduled and unscheduled downtime shall be proposed by the Company and agreed to by the MSB. This per-ton fee will remain constant (except for escalation outlined in Agreement Appendix 3, which will be based upon Proposal Form 19), and will be paid by the MSB to the extent that the Company accepts and processes the Solid Waste received up to the Contract Facility Capacity.

- Excess Operation Fee Component. The intent of this component is to cover the costs of processing Solid Waste above the MSB's annual delivery commitment and the Company's Contract Facility Capacity established for the Base Operation Fee Component. The Excess Operation Fee Component will be charged on a per-ton basis, for actual Solid Waste deliveries above MSB's annual delivery commitment. The Company may request all Solid Waste received by the MSB be delivered to the Company Facility and as needed after the Solid Waste received exceeds the daily, weekly, monthly,

ranges and annual Facility capacity be sent to the Central Landfill. The MSB is not obligated to deliver Solid Waste beyond the Facility capacity or to assure all Waste delivered meets any quality requirement not agreed to by the MSB. The Company will be paid the Excess Operation Fee for each ton of Solid Waste received for all tons received annually that exceed the Contract Facility Capacity. The per ton Excess Operation Fee is anticipated to be larger than the Base Operation Fee but less than the Central Landfill Standard Tipping Fee for MSW and the C&D tipping fee for C&D and shall be proposed by the Company in its Proposal.

- Rejects, Process Residue and/or Bypass Waste. The Company may dispose of all acceptable municipal solid wastes including but not limited to Rejects, Process Residue and Bypass Waste such as recycling rejects, unmarketable commodities or waste products, ash, slag, reagents, waste or other materials in a form suitable for landfilling, that are generated or bypassed by the Facility for disposal in the Central Landfill. All such materials shall be nonhazardous wastes. The Company shall pay the higher of the Standard Tipping Fee or the Base Operating Fee for disposal of the solid wastes in the Central Landfill. The Company shall pay the Standard Tipping Fee or the Base Operating Fee for any Excess Waste accepted by the Company and Rejects and Process Residue or other materials resulting from Excess Waste that is returned to the MSB for disposal. The Company shall be solely responsible for any hazardous wastes produced or generated from its Project.

- Pass Through Costs. No pass through costs are anticipated.

- Liquidated Damages. The Company will be responsible for the payment of liquidated damages in certain circumstances of non-performance as set forth in the Ground Lease and Draft Agreement including but not limited to schedule compliance and performance compliance with all guarantees.

- Capital Reserve Component. Refer to the draft Agreement.

- Recyclables and Metal Recovery. All revenue generated by the Company from products produced from commodities and materials such as ferrous and nonferrous metal, containers, OCC, paper, film plastic, or other plastic materials, glass, compost, and aggregate, recycled or recovered by the Project shall be retained by the Company. The Company shall incur all costs for generation and marketing all products and disposal of any materials that are not marketable.

- Energy and/or Fuels Generation. All revenues generated from net electrical power production, gaseous, liquid or solid fuels generated and sold by the Project shall be retained by the Company. The Company shall incur all costs for generation and marketing all energy and fuel products.

The Base Operation Fee Component and the Excess Operation Fee Component will escalate based upon an index to be agreed upon by the parties, and subject to annual appropriation by the Borough Assembly.

- The Company must report the quantities of Solid Waste received and processed, Rejects, Process Residue, Bypassed Waste, Recyclables, Metals, Energy and Fuels produced on a quarterly basis to the MSB and provide an annual report of the Project operations for the past year and proposed changes anticipated over the next five years to the MSB. The annual operating report shall provide operating statistics including but not limited to tons of Solid Waste received, any Bypass Waste that is turned away with the reasons for not accepting, tons of Rejects, Process Residue, Recyclables, Metals, and Fuels produced, energy generated and sold, status of all permits, any reported complaints and regulatory notices and violations, plans to address any operational or regulatory issues, planned operational changes, operating projections, and other pertinent information. The quarterly reports shall include operating statistics for all Solid Waste received, Bypass Waste, Rejects, Process Residue, Recyclables, Metals, Energy and Fuels produced, and any environmental records and any regulatory issues and complaints obtained in the last quarter. The annual report shall be provided by March 1 of each calendar year of the Contract term and the quarterly reports shall be provided within 30 days following the end of the respective quarter.

Septage. The MSB does not intend to pay service fees relating to septage treatment or disposal. The Company's sole compensation for the Contract Services for receipt and processing of septage shall be established by the Company for the services rendered by the Company.

- The Company will collect payment for the services provided. The Company shall provide in their Proposal the anticipated service fee structure and proposed escalation means per 1,000 gallons of septage received for the Facility.

- The Company must report the quantities of septage received and processed on a quarterly basis to the MSB. The quarterly reports shall include operating statistics for septage received and turned away, solids produced, and any monitoring well records and any regulatory issues and complaints obtained in the last quarter. The quarterly reports shall be provided within 30 days following the end of the respective quarter.

- The Company shall provide an annual report of the Facility operations for the past year and proposed changes anticipated over the next five years to the MSB. The annual operating report shall provide monitoring well test results and trends, operating statistics including but not limited to gallons of septage received, any septage that is turned away with the reasons for not accepting, tons of solids produced, status of all permits, any reported complaints and regulatory notices and violations, plans to address any operational or regulatory issues, planned operational changes, operating projections, and other pertinent information. The annual report shall be provided by March 1 of each calendar year of the Contract term.

- The Project shall be located on land provided by the MSB at the Central Landfill unless otherwise agreed to by the MSB. Company shall pay the MSB for Ground Lease of the Project Site and the MSB's only role in the Facility will be to provide the land for the Facility if the Facility is located at the Central Landfill.

- The Company shall provide all equipment and services necessary as required for their Facility including but not limited to roadways, scale facilities, fencing, structures, equipment, monitoring wells, odor control systems, rolling stock, permitting, and all other requirement for the Facility. The Company will control access by customers interested in using the Company's Facility.

- Septage solids and residuals shall be monofilled or composted by the Company on the Project Site leased from the MSB following all regulatory requirements, unless otherwise approved by the MSB. If the Company desires to have any septage solids and residuals placed in the Central Landfill, the Company shall pay the Standard Tipping Fee or the tipping fee for disposal of similar solid wastes, whichever is higher. Wastes shall comply with IAW RCRA landfill requirements and Title 40 CFR Sections 264.314 and 265.314 described as SW-846, a Test Method 9095B: Paint Filter Liquids test is required for any "solids" going into the construction and demolition debris. If the material cannot pass the test it must go into the lined municipal solid waste cell and is subject to the contaminated soils from inside the borough fee, currently $150 per ton and subject to change annually.

- The Company shall measure septage amounts used for invoicing septage haulers and reporting to MSB, using a tare weight system, unless otherwise approved by the MSB.

4.4.3 Security

Guarantor/Guaranty Agreement

Proposers must have a Project Guarantor to guarantee all the obligations of the Company under the Agreement. Proposers must demonstrate to the MSB that the Guarantor has the capability and legal commitment to guarantee the obligations of the Company under the Agreement. The Project Guarantor Commitment is attached to this RFP as Proposal Form 6.

If at any time during the Term a Material Decline in the Guarantor's Credit Standing exists or occurs, the Company shall be required to provide the MSB with a Letter of Credit meeting the requirements of the Ground Lease and Draft Agreement upon request, or, alternatively, to provide such other credit enhancement as may be determined by the MSB in its sole and absolute discretion.

Payment and Performance Bonds

The Company shall obtain and maintain appropriate performance and payment bonds as set forth in the Ground Lease and Draft Agreement that are designed to assure compliance with all schedule, construction and performance guarantees.

The Company shall require its general contractor to provide appropriate performance and payment bonds to the Company.

Letter of Credit

Upon execution of the Agreement, the Company will provide an irrevocable, direct-pay Letter of Credit to the MSB for the period up to the Construction Commencement Date in the amount of $2,000,000 and substantially in the form attached as an attachment to the Draft Agreement. The Letter of Credit shall be extended on a year-to-year basis following the Construction Commencement Date throughout the Term. The Letter of Credit is security for the Company's obligations to meet certain conditions, including the financing of the Project. The bank providing the irrevocable Letter of Credit shall be a domestic or foreign commercial bank whose long-term and short-term debt is rated "Aa2" or higher by Moody's and "AA" or higher by Standard & Poor's, and if there is a split rating, then the lower of the two shall apply. The bank shall be subject to approval of the MSB, which shall not be unreasonably withheld or delayed. In the event that the bank no longer meets the above qualifications, the Company shall replace the irrevocable Letter of Credit immediately with a comparable security acceptable to the MSB.

Insurance

The Company will be required to provide insurance and evidence of coverage satisfying the requirements of Agreement. Insurance for the Work is to be included in the Proposer's Guaranteed Maximum Price, but costs are to be listed separately in Proposal Form 15. The Company is required to provide insurance and evidence of coverage satisfying the requirements of the Agreement for the Term.

4.4.4 Ownership and Financing

Ownership Structure

The Waste Management Project shall be owned by the Company during the Term, provided that the MSB will have the option to purchase the unencumbered Waste Management Project for $1.00 at the end of the Term. In developing the financing, the Proposer should assume that the Proposer owns the Waste Management Project and provides the MSB an end-of-Term purchase option for $1.00. If the Project Site is located at the Central Landfill, the Project Site including any improvements to the Project Site will be owned by the MSB. The Project Site will be leased to the Company if necessary for financing purposes. The lease will terminate concurrently with the termination of the Agreement. Proposers shall assume that they will not own the "residual value" of the Waste Management Project at the termination of the Agreement.

Financing Plan

The Company shall be responsible for financing the Project in accordance with the Agreement. Proposers are required to submit a detailed Financing Plan as provided in Section 7.5.6 of this RFP. The Financing Plan shall be commercially reasonable and demonstrably achievable. It may provide for construction financing taken out by permanent financing or for immediate permanent financing. Proposers may propose the use of internally generated funds or debt secured by corporate credit or debt secured by the Agreement. The Financing Plan cannot use

the general credit of the MSB. Investment banking firms expected to be responsible for debt underwriting or placement shall be identified, and their qualifications presented.

Firm Financing Commitment

The MSB is seeking a firm financing commitment. This commitment will assure that the Project will actually be financed and financed on a timely basis. The MSB does not intend to award the Agreement to a Company which provides merely a "best efforts" commitment to secure the financing necessary to build the Project on the required schedule.

The Security Instruments securing the Company's performance under the Agreement will also secure the financing commitment. Thus if the Company fails to fund the Project, the Letter of Credit may be used to pay the MSB any damaged suffered as a result.

4.5 PERFORMANCE GUARANTEES

This RFP specifies project requirements while allowing the Proposers flexibility and creativity. The MSB desires to promote creativity and cost competitiveness in the procurement process and, therefore, flexibility with respect to selection and configuration of Solid Waste and/or septage processing systems and overall Project design. Nonetheless, the Proposal must include processes, systems, and facilities that meet the Performance Guarantees set forth in the Draft Agreement or equivalent Performance Guarantees including guarantees related to throughput, environmental performance, Central Landfill diversion, energy production, and residue quality and quantity. Refer to Section 2.4.2 regarding reference waste and septage.

4.6 TERM

The initial Term of the Agreement will begin on the Commencement of Operations Date and will end on the 20th anniversary of the Commencement of Operations Date. Refer to Section 1.1.2 and the Agreement regarding Term extensions and related topics.

4.7 ADDITIONAL CONTRACTUAL REQUIREMENTS

4.7.1 MSB Business License and Taxes

After execution of the Agreement, the Company, at its sole expense, shall obtain and keep in force any and all necessary business licenses and permits. The Company shall also be responsible for payment of any applicable business taxes.

4.7.2 Special Program Requirements

Proposers should be aware that the MSB and State have several statutory, regulatory, and administrative requirements and practices related to fair employment and other requirements.

The Company shall keep themselves fully informed of all laws, ordinances, codes, rules and regulations, governmental general and development plans, setback limitations, rights-of-way, and all changes thereto, which in any manner affect the Agreement and the performance thereof

The Company shall comply with all such present laws, ordinances, codes, rules and regulations, including the giving of all notices necessary and incident to the proper and lawful prosecution of the work, and all changes thereto.

If any discrepancy or inconsistency is discovered between the Agreement and any such law, ordinance, code, rule or regulation, the Company shall report it in writing to the MSB Purchasing Officer in accordance with Section 1.8 and Section 6.4.

4.7.3 Venue for Litigation

The Proposer agrees, by submitting a Proposal under the RFP that any civil action arising from this Agreement shall be brought in the superior court for the third judicial district of the state of Alaska at Palmer. The law of the state of Alaska shall govern the rights and obligations of the parties.

4.7.4 Non-Discrimination in MSB Contracts

During the performance of the Agreement, the Company will be required to agree as follows:

> The Company shall comply with all requirements set forth in Federal and State laws and regulations relative to Title VI of the Civil Rights Act of 1964, as amended, which provide for non-discrimination in federally assisted programs.
>
> The Company shall not discriminate against any employee or applicant for employment because of race, ancestry/national origin, religion, color, disability, age, marital status, military status, veterans' status, sexual orientation, lactation, arrest and court record, citizenship, or any other classification protected by state or federal law. The Company shall assure that applicants are employed and that employees are treated during employment without regard to race, ancestry/national origin, religion, color, disability, age, marital status, military status, veteran's status, sexual orientation, lactation, arrest and court record, citizenship, or any other classification protected by state or federal law. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training. The Company agrees to post in conspicuous places notices to be provided by the contracting officer setting forth the provisions of the nondiscrimination clause.
>
> The Company shall in all solicitations or advertisements for employees placed by or on behalf of the Company, state that all applicants shall receive consideration for employment without regard to race, ancestry/national origin, religion, color, disability, age, marital status, military status, veteran's status, sexual orientation, lactation, arrest and court record, citizenship, or any other classification protected by state or federal law.
>
> In the event of the Company's noncompliance with the nondiscrimination clauses of this Agreement, this Agreement may be canceled or suspended in whole or in part and the Company may be declared ineligible for further MSB contracts until such time that the

Company by satisfactory evidence, in good faith, ceases such discriminatory practices or procedures.

The Company who subcontracts any portion of the contract shall assure the MSB that such subcontractor shall abide by the nondiscrimination provisions stated herein and agrees that any subcontractor who is found in violation of such provisions shall subject the principal Company's contract with the MSB to be terminated or suspended pursuant to Section (4) above.

The MSB may direct any Proposer or subcontractor to submit a statement in writing signed by an authorized officer, agent, or employee of the contracting party that the signer's practices and policies do not discriminate on the grounds of race, ancestry/national origin, religion, color, disability, age, marital status, military status, veteran's status, sexual orientation, lactation, arrest and court record, citizenship, or any other classification protected by state or federal law, and that the terms and conditions of employment under the proposed contract shall be in accordance with the purposes and provisions stated herein.

4.8 PROCESS FOR PROPOSED CHANGES TO THE GROUND LEASE AND DRAFT AGREEMENT

If a Proposer believes that significant benefits to the MSB (such as improved quality or better value) would result from a different allocation of risks, modifications to the Project concept, or modifications to the language of the Ground Lease and Draft Agreement, the Proposer may propose exceptions, modifications, or a description regarding a particular requested change to the Ground Lease and Draft Agreement and Appendices. The MSB's preference for the submittal of the written comments is by an electronic markup of the Ground Lease and Draft Agreement (including the Appendices) provided in "track changes" in Microsoft Word.

Proposers are advised that the extent and nature of proposed changes will be considered in the MSB's evaluation of Proposals. Substantial changes to the business arrangement presented in the Ground Lease and Draft Agreement may result in less favorable evaluations.

SECTION 5

TECHNICAL APPROACH

5.1 GENERAL

The MSB expects several basic technical requirements to be met in the Proposals and, ultimately, in the design of the Waste Management Project. The Waste Management Project must be compatible with the MSB's current and planned recycling and diversion efforts; it must result in significant waste volume reduction so as to minimize the amount of waste materials requiring landfilling or further processing; it must meet all good industry standards and safety measures generally required for similar facilities; it must be environmentally advantageous; and it must be sensitive to and have a plan to address local environmental and community issues. Solid waste Projects must be configured to recover commercially marketable resources, as applicable. These requirements are outlined more specifically below and in the Agreement.

The Proposers must describe their development and operating plans and environmental advantages associated with its proposed Waste Management Project. The MSB encourages Proposers to meet with regulatory agencies as they develop their technical approaches to ensure efficient permit acquisition processes. The MSB will assist the Proposers in identifying agencies that may have a regulatory interest in the Project if questions are raised through the Purchasing Division.

5.2 SITE AND UTILITIES

The Central Landfill Project Site is described in Section 2.5. The Company is fully responsible for the Project Site. If the Company proposes to use another site that is acceptable to the MSB, the Company shall be responsible for all services and improvements for other sites.

5.3 SERVICES

The Company will be responsible for designing, permitting, financing, constructing, commissioning and acceptance testing, operating, and maintaining the Project and required support facilities for the Term of the Agreement and any approved extensions of the Term. The Company will be responsible for managing all Waste and/or septage delivered to the Project in a safe and environmentally sound manner. This will include, but may not be limited to, screening for Non-Processible Waste, marketing and recycling any recovered materials, processing Processible Waste and loading any non-marketable Residues and all other materials onto Company vehicles for transportation to the Central Landfill or other appropriate location for disposal.

5.4 OVERALL PROJECT OBJECTIVES

The Project objectives are outlined in Section 1.3 and include:

- Technical and commercial maturity;

- Process and feedstock flexibility (does not apply to septage Projects);
- Maximum energy output flexibility (does not apply to septage Projects);
- Cost effectiveness;
- Sustainability;
- Maximize beneficial reuse (does not apply to septage Projects);
- GHG emission reduction;
- Effective Project Delivery Team;
- Single Point of Responsibility; and
- Company Responsibility for Capital.

5.5 AESTHETIC AND ARCHITECTURAL CONCEPTS

The Waste Management Project will be visually pleasing to the public yet capable of blending into the surrounding terrain and natural setting. Clean function and attractive lines shall be presented to those passing by, arriving to and viewing the facility. The Waste Management Project should also utilize consistent architectural and aesthetic concepts to ensure consistency and achieve pleasing contextual characteristics.

5.6 TECHNICAL DATA TO BE SUBMITTED

The Technical Data to be submitted with the Proposal is outlined in Section 7 and includes limits of construction, various site plans, a conceptual drainage plan, building system schematic drawings, electrical one-line diagram, P&ID drawings for major equipment, process flow diagrams for major subsystems, and other facility drawings and diagrams. Data related to Performance Guarantees may also be required to complete the Draft Appendices to the Agreement.

SECTION 6

PROCUREMENT PROCESS

6.1 PROCUREMENT PROCESS SCHEDULE AND PROJECT IMPLEMENTATION

The MSB is undertaking this procurement process under the authority granted in the State of Alaska. The MSB will review all Proposals received and will seek clarifications and undertake discussions with the Proposers. Such clarifications and discussions may be in the form of one or more meetings, conference calls, or written communications. Upon the conclusion of clarifications and discussions, the MSB may request Best and Final Offers from all Proposers. Following receipt of Best and Final Offers (if requested), no further material changes to the Best and Final Offers will be permitted, and the Evaluation Committee will determine the most advantageous Proposer based upon the criteria and weighting set forth in this Section 6. If the MSB does not require Best and Final Offers, the Evaluation Committee will undertake its evaluation when the MSB determines that additional clarifications and discussions are not necessary. Shortly after the Evaluation Committee identifies the most advantageous Proposer, a Notice of apparent Successful Proposer will be issued. Competing proposers will be afforded the opportunity to protest the award in accordance with MSB Code 3.08.342. Final approval of any award will be subject to approval of the MSB Assembly.

6.2 MSB RIGHTS AND OPTIONS

The MSB reserves, holds without limitation, and may exercise, at its sole discretion, the following rights and conditions with regard to this procurement process. Neither the MSB nor its elected officials, staff, agents, employees, representatives, or consultants will be liable for any claims or damages resulting from any aspect of this procurement process. By responding to this RFP, Proposers acknowledge and consent to the following MSB rights and conditions:

1. To terminate the procurement process or decide not to award a contract as a result thereof by written notice to the Proposers;

2. To change or alter the schedule for any events associated with this procurement process upon notice to the Proposers, including, without limitation, the date for receipt of Proposals or any other deadlines and dates set forth in this RFP;

3. To eliminate any Proposer that submits an incomplete or inadequate response or is not responsive to the requirements of this RFP or is otherwise deemed to be unqualified during any stage of the procurement process;

4. To request clarifications of information or to conduct clarification discussions, at any time, with one or more Proposers;

5. To amend the scope of services, at any time, to omit services therein or to include services not currently contemplated therein;

6. To prepare and issue such amendments and addenda to this RFP, including any amendments or addenda that may expand or cancel any portion or all of the work described in this RFP;

7. In the event the MSB receives questions concerning the RFPs from potential Proposers prior to the deadline for response, the MSB reserves the right to provide such questions, and the MSB 's responses, if any, to all potential Proposers;

8. To request Best and Final Offers.

9. To hold discussions with Proposers for the purpose of arriving at an Agreement that will be most advantageous to the MSB;

10. To enter into, or decline to enter into, the Agreement with the Selected Proposer following discussions and receipt of Best and Final Offers, if applicable;

11. To conduct investigations with respect to the qualifications and experience of each Proposer and to request additional evidence to support any such information;

12. To take any action affecting the RFP process or the Project that is determined to be in the MSB 's best interests;

13. To reject any and all Proposals and to accept the Proposals in whole or in part as best suited in the interest of the MSB, giving due consideration to price, quality of product and proven dependability and ability of each Proposer with respect to ability to serve the MSB; and

14. To request any information that the MSB deems necessary

6.3 PRE-PROPOSAL CONFERENCE/SITE TOUR

The MSB will hold a Pre-Proposal Conference and site tour SEE SECTION 1.1.4 SCHEDULE. Attendance at the conference and site tour is not mandatory but is strongly encouraged.

The schedule and meeting locations are as follows:

Pre-Proposal Conference:	SEE SECTION 1.1.4 SCHEDULE.
Central Landfill Tour:	After Pre-Proposal Conference
Location of Pre-Proposal Conference:	MSB Central Landfill, 1201 N. 49th State Street, Palmer, AK 99645

For a map, see Attachment A.

6.4 INTERPRETATIONS, QUESTIONS, AND REQUESTS FOR CLARIFICATION

Any questions and clarification requests regarding the RFP, the overall Procurement Process, or Project requirements shall be directed to Mr. Rustin Krafft, MSB Purchasing Division , as outlined in Section 1.8 and shall be submitted to the MSB no later than SEE SECTION 1.1.4 SCHEDULE.

The MSB Purchasing Officer is the official point of contact for the MSB for this procurement. All communication between the Proposer and the MSB shall be with the MSB Purchasing Officer. Any other communication will be considered unofficial and non-binding on the MSB. Proposers may rely only on written statements issued by the MSB Purchasing Officer. Oral statements may not be relied on for any purpose.

6.5 COMMUNICATION PROTOCOL

The MSB has a communication protocol to assure that all interested parties have equal access to information on the Project. In addition, the protocol is intended to assure that all Proposals and related information about the selection process are kept confidential. All Proposers shall comply with the Communication protocol included in Attachment B.

6.6 CONTACTS WITH REGULATORY AGENCIES

Proposers are encouraged to contact regulatory agencies for information and clarifications during the Proposal development period. However, the MSB does not warrant any information provided by the regulatory agencies or other third party organizations or individuals.

6.7 USE OF PROPOSALS

Regardless of whether the MSB awards a contract, the MSB may use the data, information, concepts, and ideas contained in any Proposal for the municipal purposes of the MSB in any manner or combination it so elects, without notice to or the consent of the Proposer(s). Such "municipal purposes" do not include the publication, distribution, or sale of such Proposals to third parties not employed by or under contract to the MSB, except in connection with requests for Proposals to perform construction work or design, or consulting services on behalf of the MSB. Notwithstanding the foregoing, the MSB agrees that any use of such Proposals by the MSB without the Proposer's verification or adaptation for the specific purpose intended shall be at the sole risk of the MSB.

6.8 ACCESS AND PROPOSER INVESTIGATIONS DURING PROPOSAL PREPARATION

The MSB recognizes that Proposers may need access to the Landfill Project Site during the Proposal preparation period. Proposers may only access the site after obtaining written authorization from the MSB. In order to receive authorization for access, Proposers must contact the MSB Purchasing Division at purchasing@matsugov.us at least one week prior by email or the mailing address 350 East Dahlia Ave., Palmer, Alaska.

The MSB will have the right to be present during any Proposer site visits. Proposers will be required to define the areas they wish to access and describe methods to be implemented to limit the use to the requested area.

6.9 PROPOSAL EVALUATION AND SELECTION

6.9.1 Evaluation Process Overview

In the evaluation of the Proposals the MSB will consider the information submitted in response to the RFP with respect to the Proposal Evaluation Criteria set forth in Section 6.9.2.

The Proposal evaluation committee ("Evaluation Committee") will evaluate the responses to this RFP. Technical, legal, and financial consultants and others may serve as advisors to the Evaluation Committee. Proposals with Projects that only address septage will be compared to other septage-only Projects. Proposals with Projects that only address waste will be compared to other waste-only Projects. Proposals with both septage and waste components will be evaluated for both septage and waste components.

6.9.2 Proposal Evaluation Criteria

Proposals will be evaluated based on the Evaluation Criteria contained herein. The MSB will compare all Proposals in developing its ranking of Proposals.

The MSB will evaluate technical, management, and financial qualifications and experience provided in each Proposal and incorporate this evaluation into its ranking of Proposals. In this consideration of qualifications and experience, the MSB will pay particular attention to how well the qualifications and experience support the Proposer's ability to deliver the specific Project concepts and approach proposed.

The MSB and the Evaluation Committee reserve the right to conduct an independent investigation of a Proposer's technical qualifications by contacting project references (including actual site visits), accessing public information, or contacting independent parties. Additional information may be requested during the evaluation of technical qualifications.

Criteria that will be used in the evaluation of the Proposals will include:

A. <u>Qualifications and Experience</u>

This criterion evaluates the Proposer's ability to successfully and seamlessly undertake the Project by reviewing the technical qualifications and experience of the contracting party, principal subcontractors, and key individual team members with respect to the specific scope that each will perform. Specific items included in this criterion include:

- Proposer Team and individuals' Design-Build/Design-Build-Operate/Design-Build-Operate-Finance experience. Particular emphasis will be placed on the experience of the proposed project manager, and the proposed construction manager on projects for Solid Waste and/or septage facilities of similar size and complexity as this Project;

- Proposer Team and individuals' engineering, permitting, and design experience;

- Construction and construction management experience;

- Operation and maintenance experience; and

- Financial strength of Proposer and Guarantor, including the Proposers' and their Guarantors' financial strength specifically to determine if it is sufficient to successfully undertake and guarantee successful completion of the Project.

B. Technical and Environmental Approach

This criterion evaluates the Proposer's technical and environmental approach to the Waste Management Project. Specific considerations include:

- Approach to avoiding or minimizing environmental and social impacts, including the impacts of construction and operation; including management of waste and/or septage streams, as applicable, such as air emissions, groundwater impacts, Non-Processible Waste, products and residue disposal and ongoing or new neighborhood or regulatory issues including but not limited to those listed in Attachment C. Particular emphasis will be placed on the Proposals plan for, as applicable, minimizing the hauling of waste to the Central Landfill, GHG emissions, and on the air and water quality guarantees.

- Technical feasibility and reliability, s applicable, including issues such as the feasibility and reliability of the proposed Waste Management Technology and equipment; demonstrated ability of the design and proposed operating strategy to meet the specified waste and/or septage throughput, product output and residue requirements; and portion and amount of the waste and/or septage streams that are processible with the technology proposed. Particular emphasis will be placed on the extent that overall waste and/or septage reduction is maximized (by weight and volume).

- Performance Guarantees – As applicable, energy, fuels, recyclables, and other products recovery and efficiency, including Annual Net Electricity Generation Guarantee (kWh/Ton) or other energy or fuel production guarantee, recyclables and metals proposed to be recovered, anticipated efficiency of metals recovery as well as the ability to efficiently comply with the other performance guarantees including but not limited to residue quality and quantity and electricity utilization and demand.

- Quality, durability, and redundancy, including such issues as overall quality of proposed materials, equipment, and the overall Project; proposed Operations and Maintenance Plan(s); and integration of features and techniques to preserve Project residual value at the end of the Contract Term.

- Construction approach, including issues such as construction sequencing; need for temporary facilities and operations; safety records and safety programs, and requirements for construction laydown areas.

- Ability to deliver the Project, including issues such as the ability to meet the MSB's objectives; the proposed approach for managing and coordinating; the proposed permitting approach, including, as applicable, issues such as air permitting, the proposed schedule and ability to meet time requirements, and previous experience that the proposed team has had delivering similar projects together as a team. This criterion also includes an assessment of the recent, current, and projected workloads of the Proposer Team and individuals.

C. Service Fee and Costs

Under this criterion, the Proposals will be evaluated on cost effectiveness for the MSB, based on the information provided in Proposal Subsection 6.2 and Data Form 15.

The MSB will evaluate the Proposal cost-effectiveness. The MSB will at its sole discretion evaluate the impacts of each Proposal on the MSB's costs and adjust Proposal costs to reflect these impacts. (For example, if, as applicable, a Proposer's approach to disposal of residue increases the MSB's operating costs, the MSB will make the appropriate adjustments to the Proposer's costs.)

The MSB will compare Proposals by evaluating the lowest cost Proposal, subject to a determination by the MSB that the Financing Plan for the lowest cost Proposal is feasible. As applicable, the MSB will utilize the weighted average for scoring the Proposals.

Proposal prices shall be inclusive of all applicable taxes.

The following assumptions, as applicable, will be included in MSB's analysis:

- 20-year Term
- Annual discount rate of 5 percent (nominal)
- Electricity rate current published Matanuska Electric Association, Inc. (MEA) rate for power providers ($ per kWh.).

D. Financing Plans

This criterion includes the evaluation of the Proposer's Financing Plan including:

- Overall structure of the Financing Plan and its relative benefits to the MSB
- Completeness of the Financing Plan and compliance with the requirements of this RFP
- Demonstration that the financing alternative will achieve investment-grade credit ratings from at least two of the major rating agencies
- Likelihood of the Proposer to carry out the Financing Plan

- Allocation of financial risk between the MSB and the Proposer
- Viability of the proposed credit structure
- Accuracy, definitiveness, and reasonableness of the Financing Plan.
- Relationship of the Financing Plan to the proposed Capital Reserve Component of the Service Fee.

E. Business and Contractual Considerations

This criterion includes the evaluation of business and contractual elements including:

- Nature and Extent of Exceptions / Modifications to MSB's Proposed Agreement and Risk Assumption. This is expected to include an evaluation of the Proposer's ability and willingness to assume the risk allocation specified in the proposed Agreement and an assessment of the proposed modifications/exceptions to the Agreement.

6.9.3 Proposal Evaluation Criteria Weightings

Based on the MSB's specific Project objectives, the Proposal Evaluation Criteria described above and in Section 7 will be weighted as outlined below.

Category (Listed in order of relative weight)
Technical and Environmental Approach
Life-cycle Costs
Qualifications and Experience
Business and Contractual Considerations
Financing Plan

6.10 EVALUATION AND RANKING OF PROPOSALS

6.10.1 Proposal Evaluation

The Evaluation Committee will evaluate the Proposals in accordance with the Proposal Evaluation Criteria and Proposal Evaluation Criteria Weightings described in Sections 6.9.2 and 6.9.3 respectively. The Evaluation Committee may be supported by third-party technical, legal, and financial experts to assist in the evaluation process.

6.10.2 Interviews

At its sole discretion, the Evaluation Committee may hold interviews during the evaluation and selection process.

6.10.3 Reference Checks

The Evaluation Committee will verify experience and qualifications including verification of quality on past projects through interviews and site visits to reference facilities, as the MSB deems necessary. Qualifications of firms and individuals may be verified in this manner. In addition, the MSB retains the right to interview and/or visit facilities that have not been listed as references but where Proposer team members, including specific individuals, have worked.

6.10.4 MSB Requests for Clarification or Resubmissions

At its sole discretion, the Evaluation Committee may ask written questions of Proposers, seek written clarifications, conduct in-person or telephone discussions on Proposals with Proposers, and solicit revised Proposals during the evaluation and selection process including through a best and final offer process.

6.11 DISCUSSION AND NEGOTIATION PROCESS

Following receipt of Proposals in accordance with Section 6.1, the MSB will conduct discussions with the Proposers, as required. The discussions will be used to promote understanding of the MSB's requirements and of the Proposals and to facilitate arriving at an Agreement that will be most advantageous to the MSB. The MSB may require clarifications and discussions in the form of one or more meetings, conference calls, or written communications. The MSB however reserves the right to not request clarifications or conduct any discussions following receipt of Proposals. This is not intended to guarantee that the MSB will hold the same number or duration of discussion with each Proposer. If the MSB determines that there is a need for any substantial clarification or change in the RFP including modification of the Ground Lease and Draft Agreement, the MSB will issue an addendum which shall be distributed to all Proposers. The contents of any Proposal will not be disclosed so as to be available to competing Proposers during the discussion and negotiation process. Following discussions, the MSB may request the Proposers submit Best and Final Offers. The MSB will select the Proposal for negotiations that the MSB feels best achieves its objectives.

If a Change in Law occurs before the Contract Date, and such change requires a change to a Proposal, such change must be addressed in writing to the MSB.

6.12 EXPENSES OF THE PROPOSERS

The MSB accepts no liability for the costs and expenses incurred by firms in responding to this RFP, responses to clarification requests and resubmittals, potential interviews, and subsequent negotiations. Each Proposer that enters into the procurement process shall prepare the required materials and submittals at its own expense and with the express understanding that they cannot

make any claims for reimbursement from the MSB for the costs and expenses associated with the process.

6.13 OTHER PROCUREMENT REQUIREMENTS

6.13.1 Protests

See MSB 3.08.342.

6.13.2 Conflict of Interest

No officer, employee, or agent of the MSB, nor any member of the immediate family of any such officer, employee, or agent as defined by MSB ordinance, shall have any personal financial interest, direct or indirect, in the Agreement, either in fact or in appearance. The Company must comply with all federal, state, and MSB conflict of interest laws, statutes, and regulations. Proposers must represent that the Proposer presently has no interest and shall not acquire any interest, direct or indirect, in any program to which the Agreement will pertain, which would conflict in any manner or degree with the performance of the services and obligations there under. Proposers further will be required to covenant that, in performance of the Agreement, no person having any such interest shall be employed.

6.13.3 Independent Contractor

The Company will perform the Agreement as an independent contractor and shall indemnify and save the MSB and its officers and employees harmless from any and all deaths, injuries, losses and damages to persons or property, and any and all claims, demands, suits, action and liability therefor, caused by error, omissions or negligence in the performance of the Agreement by the Company or its subcontractors, agents, and/or employees.

6.13.4 Method of Award

Any award resulting from this solicitation shall be made in accordance with MSB 3.08.260 and will be to the qualified and responsible proponent(s) whose final proposal(s) is/are determined to be most advantageous to the borough. No criteria other than those set forth in the request for proposals may be used in proposal evaluation.

6.13.5 Multiple Awards

The Matanuska-Susitna Borough reserves the right to issue multiple awards as a result of this solicitation.

6.13.6 Non-Debarment Requirements

The Proposer shall certify that it is not debarred by the State of Alaska or the United States Federal government at the time of submitting a Proposal and shall further certify that it shall immediately notify the MSB should its debarment status change anytime during the term of the

Agreement. Proposers shall submit Proposal Form 21 (Non-Debarment Certificate of Compliance) to comply with this section.

SECTION 7

PROPOSAL SUBMITTAL REQUIREMENTS

7.1 PROPOSAL OVERVIEW

The required work for the Project is generally outlined in Section 3 of this RFP and further described within the Ground Lease and Draft Agreement and Appendices to the Agreement. Proposers should rely on the Ground Lease and Draft Agreement and Appendices for a full understanding of the work. Proposals must include detailed presentation, in graphic and written form, that clearly provides the Proposer's approach for achieving the work required.

In addition to the textual discussions required by this Section, Proposers must complete Proposal Forms included in Section 8. Textual discussions should reference the Proposal Forms.

The MSB wishes to minimize the receipt of extraneous and unnecessary information. Therefore, Proposers are urged to be complete, but concise, in their Proposals. Sales brochures are not desired unless directly related to the response and referenced in the text of the Proposal.

Requests for interpretation or clarification by any Proposer must be made to the MSB Purchasing Division at the address given in Section 1.8. Responses to material requests for information will be provided to all recipients of this RFP. Any and all such interpretations and supplemental instructions will be made in the form of written addenda that will be sent to all recipients of this RFP and will become part of this RFP. Receipt of all addenda shall be acknowledged by Proposers by completing Proposal Form 1.

7.2 PROPOSAL FORMAT

Narrative pages should generally be 8-1/2 inches by 11 inches, although 11 by 17 inch pages may be used for summary and comparison information. Section and subsection headings shall be provided and font size shall be selected to facilitate reproduction and review.

Proposers shall provide the appropriate information in accordance with the content and format requirements set forth in this RFP. Proposals shall incorporate graphics (i.e., process diagrams and drawings) as necessary to clearly present each Proposal option.

Proposals must be separated by tabs into the following sections and subsections:

1. Transmittal Letter and Attachments

2. Executive Summary and Project Abstract

3. Reference Project Experience

4. Technical Proposal

    4.1. Overview Description of the Waste Management Project

4.2. Waste and/or Septage Management Technology

4.3. Facility(ies) and Site

A. Site/Civil Work

B. Architectural Work

C. Foundation Requirements and Structural Work

D. Building Services

E. Communications Systems

F. Power Supply and Electrical Systems

G. Support Facilities

H. Licenses, Permits and Approvals

4.4. Measures to Reduce Environmental Impacts, Maximize Waste and/or Septage Reduction, and Promote Sustainability

4.5. Performance Guarantees and Facility Operations

A. Performance Guarantees

B. Acceptance Test

C. Normal Operations

D. Operations During Scheduled / Unscheduled Shutdowns

4.6. Facility Drawings and Diagrams

4.7. Preliminary Operations, Maintenance, Repair, and Replacement and Preliminary Operations and Maintenance Plans

5. Management and Organization Proposal

5.1. Project Implementation Approach

5.2. Project Schedules

5.3. Quality Management Plan

5.4. MSB Coordination and Communication Plan

6. Business/Financial Proposal

    6.1. Project Guarantor Commitment

    6.2. Service Fee and Additional Financial Information

    6.3. Project Financing Plans

    6.4. Non-Discrimination in Employment, Contracting and Services and Other Select Contracting Requirements:

    6.5. Markup of the Ground Lease and Draft Agreement and Appendices

7. Additional Proposal Forms

8. Experience, Qualification, and Financial Information Update

9. Appendices to the Proposal (as necessary)

Failure of a Proposer to organize the information as required by this RFP may result in the MSB, at its sole discretion, deeming the Proposal unresponsive to the requirements of the RFP. Proposers are encouraged to reduce the repetition of identical information within several sections of the Proposal by making the appropriate cross-references to other sections of their Proposal however the Proposal sections shall be provided using a similar structure, the Proposal must clearly distinguish between Reference Facility submittal sections and Project submittal sections. Appendices for certain technical information such as drawings, charts, forms, and tables, may be used to facilitate efficient Proposal preparation.

7.3 PROPOSAL SUBMITTAL REQUIREMENTS

Each Proposal submittal package shall be completely sealed and properly addressed with the name of the Proposer and Proposal Name marked on the front of the package and on the cover of each copy of the Proposal.

Proposals must be signed by the Chief Executive Officer of the firm that will be the Company or by another officer with the authority to commit the Company. Unsigned Proposals may be rejected.

Proposals addressing only septage shall be no longer than 100 pages of text. Proposals addressing only solid waste shall be no longer than 150 pages of text. Proposals addressing both septage and solid waste shall be no longer than 250 pages of text. Page limits do not include tab pages or dividers used to separate sections of the proposal.

7.3.1 Proposal Deadline

All Proposals, including all attachments, must be submitted in writing and must be in a sealed package, addressed to:

Matanuska-Susitna Borough
Purchasing Division
350 E. Dahlia Avenue
Palmer, Alaska 99645

The package should state "Proposal for the MSB Waste Management Project." Proposals must be signed and acknowledged by the Proposer in accordance with the instructions herein. Proposals will not be subject to a public opening.

All Proposals must be delivered to and be received by MSB at the aforementioned address no later than SEE SECTION 1.1.4 SCHEDULE.

Proposals that are received after the time mentioned may not be considered, and any Proposals so received after the scheduled closing time shall be returned to the Proposer unopened.

Proposals may be sent in by mail or delivered personally; however, if sent by mail, the responsibility for delivery on time to the Purchasing Division is solely the responsibility of the Proposer. Faxed or e-mailed responses will not be accepted.

7.3.2 Number of Copies

Proposers shall submit one (1) signed original hardcopy of its Proposal, five (5) copies, one (1) electronic copy in searchable PDF format on a CD, one (1) redacted hardcopy (redacting proprietary information), and one (1) redacted electronic copy in searchable PDF format on a CD (redacting proprietary information).

7.3.3 Substantial Completeness Review

Each Proposal will be subject to a substantial completeness review to determine that all of the submission is substantially complete and compliant with the requirements of this RFP. The substantial completeness review will assess whether the required information and forms have been substantially provided without alternations in the Proposal. Proposers that fail to provide a substantially complete Proposal will not receive further evaluation or consideration for this Project.

7.3.4 Evaluation of Mandatory Submission Requirements

The "Mandatory Submission Requirements" require that Proposers provide complete and consistent information for one Reference Project that:

- Uses the same thermodynamic, chemical, biological, or mechanical process as the proposed Project;

- Is operating at a substantially similar throughput level as the proposed Project (or has a processing line with substantially similar throughput level); if the Reference Project contains multiple processing lines, the scale up of the processing lines to meet the

throughput requirements of the proposed Project must not exceed a ratio of two-to-one; and

- Has continuously operated commercially on an integrated full-scale and full feature facility for two years on Municipal Solid Waste feed stock, and for septage facilities at least one year for facilities that is substantially similar to that of the MSB (however, an award of contract will not be made to a Proposer unless the solid waste technology has a proven commercial track record of at least two years at the time of award). Experience based solely on pilot or laboratory scale systems is not acceptable.

A Proposal that has passed the substantial completeness review will be subjected to a review of the Mandatory Submission Requirements with respect to a Reference Project. The Mandatory Submission Requirements will be subjected to a pass/fail evaluation and failure to pass this evaluation will result in the Proposal not receiving further evaluation or consideration. Proposers should carefully review each Mandatory Submission Requirement and ensure that all of the requested requirements are met.

7.4 PROPOSER'S TEAM EXPERIENCE

Proposer shall provide the following information to demonstrate the Proposer's team experience with projects similar to the Project proposed for the MSB.

7.4.1 Reference Project

The purpose of the technical evaluation is to determine whether or not the technology(ies) proposed for the Waste Management Project meets the technical expectations of the MSB. Technical experience, including issues such as the feasibility and reliability of the proposed Waste Management Project and associated equipment and integrated systems; demonstrated ability of the design and proposed operating strategy to meet the specified waste and/or septage throughput, product output and residue requirements; portion and amount of the waste and/or septage stream that is processible with the technology proposed; and the integration of the Waste Management Project with existing and anticipated facilities at the Central Landfill.

Proposers must submit, at minimum, one technical information package for one Reference Project. At the Proposers' option, Proposers may submit a separate complete technical information package for up to one additional Reference Project (i.e. maximum two Reference Project packages) and a list of other reference facilities with details regarding the development and financing approach for the facility, feedstock managed, and operational track record as well as indicative costs. A description must be supplied for each Reference Project submitted. Copies of Data Forms may be used to aid with comparison to the Project but forms applicable to the Reference Project must be clearly labeled at the top of each page: "Reference Project." Only one Reference Project submitted must meet the mandatory technical requirements set forth in Section 7.3.4.

The MSB will evaluate the information provided for each of the evaluation criteria described in Sections 7.4.1.1 through 7.4.1.9 below.

7.4.1.1. System Design – Technology Components

This criterion evaluates the extent to which the proposed technology components correspond to those used in the Reference Project.

- Technology components assemble a complete and integrated system with recovery of marketable energy and products and management of all residue and emissions, as applicable.

- The Reference Project includes the same technology components as are proposed for the Waste Management Project.

- The Reference Project technology components correspond to the proposed technology in the sequence of unit operations and key aspects of each unit operation.

- All waste and/or septage received by the Reference Project, as applicable, net of solid products for recyclable materials or energy markets and solid residue for disposal has been processed by the Reference Project.

7.4.1.2. Processing Line Scale-Up

This criterion evaluates the scale of the technology in the Reference Project, in terms of throughput design capacity per processing line in tons of Waste feedstock processed per hour and/or thousands of gallons per day of septage, relative to the scale of the technology proposed for the Waste Management Project. The ratio of the throughput capacity of the highest-capacity processing line in the Waste Management Project design to the capacity of the highest-capacity processing line in the Reference Project must be no greater than 2:1.

7.4.1.3. System Reliability

This criterion evaluates the ability of the Reference Project to meet performance requirements over a continuous one year period (Reference Period).

7.4.1.4. Capacity Factor

This criterion evaluates the capacity factor of the Reference Project over the Reference Period. The Reference Project shall have demonstrated a capacity factor of greater than 80 percent during the Reference Period. The capacity factor will be calculated by multiplying the actual tons of Waste or thousands of gallons of septage processed during the annual Reference Period by 100 and dividing by the daily design capacity of the Reference Project (tpd or thousands of gal/d) multiplied by 365:

$$\frac{\text{Actual tons processed} \times 100}{\text{Daily Design Capacity (tpd)} \times 365} = \text{Capacity Factor (\%)}$$

7.4.1.5. Acceptable Diversion

This criterion evaluates the ability of the Reference Project to divert feedstock materials from landfill disposal or manage septage over the Reference Period.

7.4.1.6. Material Recovery (if applicable)

This criterion evaluates the ability of the Reference Project to recover marketable recyclables, metal or other materials from the waste and/or septage processed over the Reference Period (if applicable). The Reference Project should have recovered materials including recyclables, metals, fuels, compost, or other materials which were marketed to beneficial uses, other than energy production (if applicable).

7.4.1.7. Energy Recovery (if applicable)

This criterion evaluates the ability of the Reference Project to recover energy (electricity, thermal, or other) from the waste and/or septage processed over the Reference Period (if applicable).

7.4.1.8. Environmental Performance

This criterion evaluates the ability of the Reference Project to measure emissions and to limit emissions to below applicable compliance limits during the Reference Period. The Reference Project shall have demonstrated the ability to comply with local regulatory requirements for air, land and water in the jurisdiction in which the Reference Project operates, during the Reference Period and shall not have experienced any significant or chronic incidents of non-compliance with applicable regulatory limits. The Reference Project shall have demonstrated the ability to reduce GHG emissions when compared to alternative waste and/or septage management. The impact the Reference Project had on the generation of landfill gas and the need for landfill gas collection systems for the Reference Project and the alternative management shall be addressed.

7.4.1.9. Nuisance Emissions

This criterion evaluates the ability of the Reference Project to prevent or mitigate nuisances such as odor, noise, dust, vectors, and litter. The Reference Project shall have demonstrated design features and operational practices for nuisance prevention and shall not have been issued notices or orders by a regulatory agency for significant nuisance impacts during the Reference Period which were not resolved expeditiously.

7.4.2 Proposer Team Experience

The purpose of the Proposer team evaluation is to evaluate the proposed organizational structure and the relevant corporate experience of the legal entities that will undertake the major roles in delivery of the Project.

7.4.2.1. Organizational Structure of the Proposer

This criterion evaluates the organizational structure and governance of the Proposer. The legal entity assuming each key role in the Proposer's team must be clearly identified and the roles and responsibilities of each member of the Proposer's team during each phase of the Project life-cycle must be clearly explained. Also, the ownership, governance, and organizational structure of the Proposer must be clearly explained and must show the Project Lead to have both an ownership position and decision authority within the Proposer.

7.4.2.2. Experience of the Project Lead

This criterion evaluates the scope and scale of the Project Lead's current capabilities considering Project Lead's role and responsibilities in the Proposer's team and also evaluates the experience of the Project Lead in fulfilling the role of Project Lead on projects of similar scale and scope. The Project Lead should be a well-established entity whose scope and scale of current operations supports the conclusion that it is capable of undertaking this Project and whose recent project experience includes having successfully fulfilled a lead role similar to that of the Project Lead on projects of similar size and scope.

7.4.2.3. Experience of the Project Technology Provider

This criterion evaluates the scope and scale of the current capabilities of the proposed technology provider, considering the technology provider's role and responsibilities in the Proposer's team, and also evaluates the experience of the technology provider in fulfilling the same role on projects of similar scale and scope. The technology provider should demonstrate the following attributes and experiences:

- Be a well-established entity that has provided the technology component at one or more of the Reference Projects;
- Have recently undertaken projects of similar size and scope other than the Reference Project;
- Have current operations of a scope and scale that supports the conclusion that it is capable of undertaking this project; and
- Clearly demonstrate a history of success in providing technology for projects including by identifying other projects developed by the Proposer using similar technology.

7.4.2.4. Experience of the Project Designer

This criterion evaluates the scope and scale of the Project designer's current capabilities considering Project designer's role and responsibilities in the Proposer's team and also evaluates the experience of the Project designer in fulfilling the role of Project designer on projects of similar scale and scope. The Project designer should be a well-established entity whose scope and scale of current operations supports the conclusion that it is capable of undertaking this

Project and whose recent project experience includes having successfully fulfilled a lead role similar to that of the Project designer on projects of similar size and scope.

7.4.2.5. Experience of the Project Constructor

This criterion evaluates the scope and scale of the general contractor's current capabilities considering general contractor's role and responsibilities in the Proposer's team and also evaluates the experience of the general contractor in fulfilling the role of general contractor on projects of similar scale and scope. The general contractor should be a well-established entity whose scope and scale of current operations supports the conclusion that it is capable of undertaking this Project and whose recent project experience includes having successfully fulfilled a lead role similar to that of general contractor on projects of similar size and scope.

7.4.2.6. Experience of the Project Operations and Maintenance Provider

This criterion evaluates the scope and scale of the Project operations and maintenance provider's current capabilities considering the Project operations and maintenance provider's role and responsibilities in the Proposer's team, and also evaluates the experience of the Project operations and maintenance provider in fulfilling the role of operations and maintenance provider on projects of similar scale and scope. The Project operations and maintenance provider should be a well-established entity whose scope and scale of current operations supports the conclusion that it is capable of undertaking this Project and who has a current history of successful operation and maintenance of waste management facilities.

7.4.2.7. Health and Safety Policy and Records

This criterion evaluates the health and safety policy and record of the Project's general contractor and operations and maintenance provider. Both the general contractor and the operations and maintenance provider should demonstrate that they have a corporate health and safety policy that is endorsed by the senior management of the corporation and that their health and safety record is average or better.

7.4.3 Financial Capability

The purpose of the financial evaluation is to evaluate the financial approach proposed for the Project and the financial condition, capacity and experience and track record of the financial team to support the ability to implement the proposed financial approach.

7.4.3.1. Financial Approach

This criterion evaluates the proposed approach to construction financing for the Project. A clearly articulated and detailed narrative should be provided demonstrating that the financing team's approach will achieve sufficient financing for the Project and will include types, sources, and form of financing to be used.

7.4.3.2. Financial Condition

This criterion evaluates the financial condition of the financing team members and their ability to support the obligations of the Company under the Agreement.

7.4.3.3. Financial Capacity

This criterion evaluates the aggregate financial capacity of the financing team members. Proposers should provide evidence that the financing team members have an aggregate capacity to provide construction financing for the Project.

7.4.3.4. Track Record and Experience of the Project Financer and the Financing Team Members

This criterion evaluates the Project financer's experience undertaking similar roles to those proposed for this Project and the track record and the experience of the Project financer and other financing team members. The financing team members should demonstrate a successful track record of borrowing, construction financing for major infrastructure projects, and the Project financer should demonstrate its experience fulfilling the lead financing role on projects of similar scale and scope.

7.5 PROPOSAL CONTENTS

Proposers must provide the appropriate information in accordance with the content and format requirements set forth in each of the following Proposal sections for their Project.

7.5.1 Tab 1: Transmittal Letter and Attachment

The Proposal shall include a transmittal letter and the transmittal letter attachment as represented in Proposal Form 1. The transmittal letter shall contain the name, address, telephone number, fax number, and e-mail address of the Proposed Company and the principal contact person. The transmittal letter shall also include a listing of companies that are part of the team and identify the Project Guarantor.

7.5.2 Tab 2: Executive Summary and Project Abstract

Proposers shall submit an Executive Summary detailing the key aspects of their Proposal. This section shall include a clear statement of the Proposer's understanding of the RFP, identify the major Project participants and their respective roles in the Project, include a Project Organization Chart, briefly describe the Proposal, and summarize how the proposed services and team meet the requirements of the RFP and Ground Lease and Draft Agreement and Appendices. This Section shall also identify any enhancements included in the Proposal.

The Executive Summary shall not exceed 15 typed pages and shall be accompanied by a figure showing the team organizational structure. No pricing information should be included in the Executive Summary.

7.5.3 Tab 3: Reference Project Experience

Section 3 of the Proposal shall present the Reference Project Experience demonstrating the Proposer's experience with similar projects. All topics addressed in Section 7.4 shall be provided in this section.

7.5.4 Tab 4: Technical Proposal

Section 4 of the Proposal shall present the technical aspects of the Proposer's plan to design, build, operate, and maintain the Project. Proposers shall provide a description of the Facility(ies) components as well as the information necessary to convey a clear understanding of the Project.

The Technical Proposal shall be in sufficient detail to allow the MSB to evaluate the Proposer's ability to comply with the Performance Guarantees and other technical requirements outlined in the Ground Lease and Draft Agreement and Appendices.

Some of the Appendices anticipate that additional information will be incorporated based on the selected Proposal. To facilitate this, technical information shall be provided in an electronic format that can be easily incorporated into the Appendices in order to finalize the Ground Lease and Draft Agreement. Where draft plans are indicated as attachments to the Appendices, Proposers shall submit such draft plans in sufficient detail to convey the Proposer's approach and allow it to be evaluated by the MSB. Proposers shall also include a "Mass Flow Diagram(s)" that shows materials and volume percentages to more completely explain the processes employed at the facility. Outline format, provided it conveys sufficient information, is acceptable.

Proposal Subsection 4.1: Overview Description of Waste Management Project

Proposers must provide drawings showing the limits of the construction site(s) and operation site(s), which clearly define the limits of work during the Work and Operation Period. The construction site(s) drawings must show areas, such as sensitive areas and buffers, to be avoided during construction. These drawings will become a part of the Appendices to the Agreement.

Proposers must clearly describe the specifics of the Waste Management Project and provide a general overview of the Facility(ies) and any MSB / Company interface requirements.

Proposers must identify the selected locations for the Waste Management Project. If on the Landfill Project Site or other site, the rationale behind selecting the location(s) the Company prefers to use. If the Proposer offers a site(s) other than the Central Landfill, Proposers must provide a site description including a drawing with the proposed Facility layout(s), reasons for use of the site, and Proposer's control or interest in the site.

All major components of the Waste Management Project, as appropriate, must be described, including those associated with waste and/or septage, products and Residue transfer, hauling storage, and the management process itself.

A discussion of how the Waste Management Project will be operated and maintained must be provided, including compliance with the Agreement, and must address the approach to handling

variations in waste and/or septage stream quantity and components. This discussion must also include the Proposer's approach to identifying, processing and disposing Non-Processible Wastes and/or septage that cannot be handled by the process. This section must also demonstrate the Waste Management Project's ability to comply with the Performance Guarantees contained in the Draft Agreement and Appendices of this RFP.

Proposal Subsection 4.2: Waste and/or Septage Management Technology

Proposals must describe the waste and/or septage management technology in sufficient detail for the MSB to review the proposed design and its reliability. Detailed information on the following systems and components must be provided:

- Waste and/or septage management process
- Product and Energy Production Systems, if provided
- Process Instrumentation and Controls
- Process Residual Management Systems

The rationale underlying the proposed waste and/or septage Management Technology, including the relationship between the size and configuration of major components must be discussed. Within this section, Proposers must also describe or provide:

1. The proposed design to meet Agreement Appendix 1 requirements;
2. An analysis of how the proposed waste and/or septage management system can meet the approval of regulatory agencies; and
3. An expected timeline for the permitting process.

In order to convey the flexibility of operation at the Waste Management Project and any requirements should expansion be required, Proposers must also include the estimated 24-hour waste and/or septage capacity for the Waste Management Project as proposed.

Proposal Subsection 4.3: Facility(ies) and Site

A. Site/Civil Work

Construction Site Plan(s), Operations Site Plan(s), a Final Site Plan, and a Conceptual Drainage Plan shall be included in the Proposal. These plans will be incorporated into the final Agreement.

The Construction Site Plan(s) must identify the limits of work, including clearing limits; all permanent and temporary on-site structures, facilities, and utilities; staging and laydown areas; temporary and permanent stockpiles; roadways and traffic circulation; parking areas; clearing and grading; site drainage; temporary and permanent stormwater control and treatment facilities;

landscaping; and undisturbed wetlands and wetland buffers, disturbed wetlands, and artificial/ enhanced wetlands proposed for mitigation. Site section drawings showing typical sections through developed areas must also be provided.

The Operations Site Plan(s) must show permanent facilities and the limits of the area for which the Proposer plans to retain operational and maintenance responsibility.

Operations Site section drawings showing typical sections through the developed portion of the Operations Site(s) must be included.

The Construction Sites Plan(s) and Operations Site Plan(s) must be accompanied by a brief narrative that addresses the proposed approach for site development for the Facility(ies). This narrative must address construction laydown areas, proposed access and worker parking, clearing and grubbing limits and methods, temporary and permanent stockpiles, earth movement, cut and fill balance, proposals for use/disposal of excess excavated material, temporary and permanent stormwater infiltration, treatment, and detention facilities. The narrative must also address how the Proposer intends to meet the security requirements set forth in the Agreement Appendices.

The Final Site Plan(s), showing completed facilities, shall include all new and expanded facilities; final parking and traffic circulation; landscaped areas; and permanent storm water infiltration, treatment, and detention facilities. Proposals shall also include drawings showing how areas disturbed during construction will be restored following the completion of construction including landscaping.

The Final Site Plan(s) and related drawings shall be accompanied by a narrative that addresses the proposed approach for site development, primarily addressing any permanent changes in site drainage, access and traffic circulation, and parking.

The Conceptual Drainage Plan(s) shall include existing and proposed flow control, water quality, and conveyance systems for the Facility site(s), including approximate sizes, existing and proposed peak flow rates and proximity to natural discharge locations as applicable. Proposals shall include sufficient calculations to demonstrate that the proposed permanent stormwater management system includes sufficient capacity and treatment capability to meet the requirements set forth in the Agreement.

B. Architectural Work

Proposers must describe their proposed architectural concepts for the Waste Management Project. Appropriate plan views and elevations of Facility(ies) structures must be provided to depict:

- How the architectural concept addresses the functional requirements of the Facility(ies);
- Facility(ies) aesthetics;
- Building layouts and access between structures,

- Building exterior and interior dimensions;
- Materials of Construction;
- Exterior Finishes.

A brief narrative must be included describing the suitability of the proposed architectural concepts for a 50-year useful life. Technical Proposals must include a color architectural rendering of the Facility(ies) in a format suitable for presentations. The vantage-point of the renderings must be clearly identified on the rendering.

The MSB assumes that Proposers will desire that the Facility(ies) reflect the Proposer's creative approaches to both the process design and technology while promoting public and employee acceptance of the Facility(ies). The MSB encourages Proposers to integrate graphical displays and other features that express these considerations into the architectural design and to describe these features in their Proposals.

Proposals must indicate measures provided to comply with the Americans with Disabilities Act.

C. Foundation Requirements and Structural Work

Proposals must include a discussion of the approach to the design of the structural aspects of the Facility(ies), including foundation systems, and structural floor, wall, and roof systems proposed for all buildings and other structures.

Proposers shall provide a list of all geotechnical and seismic assumptions to be used in foundation designs in this section.

D. Building Services

Proposals must fully describe all building services. Building services must include:

Heating, Ventilation, and Air Conditioning; Electrical Power and Lighting(including natural lighting); Plumbing; Sanitary Facilities; Potable Water Supply; Fire Protection; Security Systems for buildings and the Operation Site(s); Telephone System and Utility Connections; and Hazardous Materials Storage and Disposal.

Proposals must supplement discussions of building service systems with system schematic drawings, where appropriate, to illustrate proposed systems. Proposals must specify whether on-site septic disposal is proposed and provide soils information to verify the suitability of any proposed disposal area. Special provisions for disposal of laboratory wastes must be described. Where applicable, Proposals must indicate measures provided to comply with the Americans with Disabilities Act.

E. Communications Systems

Proposals must include a description of the voice and data communication systems to be provided. Proposals must address:

(1) Facility(ies) internal communication system; (2) Facility(ies) external communication system; and (3) Real time communication of waste and/or septage management process control data, including descriptions of the real time data that will be provided to the MSB. Proposals must provide schematic drawings to supplement the discussion where appropriate to illustrate the proposed systems. For each system, Proposals must describe the applicable systems' power supply(ies), number and location of stations, etc.

F. Power Supply and Electrical Systems

Proposals must describe all major systems and electrical equipment. This section must include descriptions of:

- All power distribution transformers
- Electrical generation systems, if applicable
- Lightning protection system
- Motor control centers
- Electrical equipment rooms
- Protective relays and circuitry
- Site Lighting

For each major component, Proposals must include, at a minimum, the number of units, location, horsepower, voltage rating, motor classification, and rate of power usage. Proposals must provide an electrical one-line diagram and a lighting plan for the Facility(ies).

Proposals must also include a discussion of backup power capability that will be included for meeting the reliability requirements outlined in Agreement Appendix 1. This discussion should include descriptions of the make and manufacturer of backup generators and any provisions to stage the installation of equipment over time.

G. Support Facilities

Proposals must describe facilities to be provided. The function, size and purpose of each facility must be described, including how each facility will be equipped.

H. Licenses, Permits and Approvals

Proposers must describe their plan to obtain each license, permit, approval, or other authorizations needed to construct and operate and maintain the Waste Management Project. The plan should be based on the Permits and Approvals identified in Agreement Appendix 1 as well as any additional permits and approvals which may be necessary. Proposals must identify any permits listed in Appendix 1 that they believe will not be required due to the specific nature of their Proposals, as well as any permits not listed in Appendix 1 that will be required due to the specific nature of their Proposal. Proposals must state where and to what degree coordination or assistance from either the MSB or others in obtaining such approvals is required, and identify the lead person/team assigned to complete this task.

Proposals must state the name of the applicable license, permit, or approval, the estimated time required to obtain each license, permit or approval, and any other parties that must assist in obtaining them. Proposals must also identify issues that could delay issuance of permits beyond the time frames identified in Proposals and strategies for managing any such delays.

Proposal Subsection 4.4: Measures to Reduce Environmental Impacts, Maximize Waste Reduction, and Promote Sustainability

Proposers must describe their plan to reduce environmental impacts during the construction and operation of the Waste Management Project including but not limited to the concerns addressed in the letter provided in Attachment C. The Proposal must include a detailed description of all equipment and systems proposed for environmental purposes. Proposers shall clearly describe the potential impacts their Project will have on the future generation of landfill gas, the quantity of landfill gas expected from all materials remaining from the Project that require landfilling, and the need for future landfill gas collection systems. The plan should address impacts related to, but not limited to, the following:

- Air Quality, including guarantees on Proposal Form 12;
- Surface Water Quality and Management;
- Groundwater Quality and Management
- Noise Impacts;
- Traffic Impacts;
- Odor Impacts;
- GHG Emissions Reduction;
- Central Landfill Gas Collection System impacts; and
- Other Neighborhood impacts.

Proposers must outline their plan to maximize waste management at the Waste Management Project. This should include a description of actions that will be taken relative to recovery of recyclables and metal from the waste stream, interface with VCRS, marketing of these materials and other products, fuel production, and any other actions that will divert waste from being hauled to and disposed in the Central Landfill or other locations.

Proposers must also describe their plan to promote the sustainability of the Project with particular emphasis on encouraging long term and stable recyclable, fuel, and other markets and effective use of resources and engagement with local community interests, during construction and operations.

Proposal Subsection 4.5: Performance Guarantees and Facility Operations

A. Performance Guarantees

Proposers must identify their proposed guarantees and describe their approach to meeting the Performance Guarantees outlined in Agreement Appendix 1. Specific discussions of aspects that will be incorporated into the design and operation of the Facility(ies) that will allow the Proposer to meet the Performance Guarantees including, but not limited to, recent developments in technology, specific operational techniques, and lessons learned should be included in this section.

Proposals must include a methodology for the calculation of the actual Higher Heating Values of Waste to complete, and be incorporated into Appendix 1, if applicable. The adjustment factors of the calculation must be set to optimize where actual average annual HHV is 5000 BTU/lb. This subsection shall include Proposal Forms 9 and 11.

B. Acceptance Test

Proposers must describe their approach to complying with the Acceptance Test requirements set forth in Agreement Appendix 1. An outline of the Acceptance Plan must be provided.

C. Normal Operations

Proposers should be aware that the MSB wants to encourage efficient operation of the Waste Management Project over the term of the Agreement in a manner that is consistent with the MSB's objective of maintaining the facility(ies) to a high standard of care that includes: 1) continuous good housekeeping to preserve aesthetics and protect against deterioration; 2) ongoing maintenance and repair, 3) prudent renewal and replacement of major equipment; 4) cost-effective upgrades of obsolete equipment and systems; and 5) application and use of maintenance management and performance management information systems.

Accordingly, this section of the Proposal must include the general facility management philosophy, a description of the Company's workplace expectations for employees, and references to the Operations and Maintenance and Maintenance, Repair and Replacement Plans described in Proposal Subsection 4.7.

As to all plant maintenance, repairs and replacements, assurance must be provided that required maintenance, repairs and replacements will be made to a specified standard and in a timely manner and will not be deferred due to cost pressures or other factors, and that at the expiration of the contract term the Waste Management Project will be in a sound, proper and well-maintained condition without the necessity for the MSB to undertake a major overhaul when assuming Waste Management Project management responsibilities if the buyout option in Section 4.4.4 is exercised. Proposers are requested to set forth an approach to this issue that will serve the MSB's maintenance, repair and replacement goals. Part of the MSB's assurance in this area will be derived from the specific duties to be assumed with respect to maintenance, repairs and replacements. The Summary Operations and Maintenance Plan and Renewal and Replacement Plan proposed by Proposers must be outlined in sufficient detail to convert into contractual terms.

Proposers shall also describe their approach to management of products and disposal of Residue from the management process. Specific attention should be paid to the quantity of material, potential contaminants, suitability for landfilling, and any required management and disposal contingency plans.

D. Operations During Scheduled / Unscheduled Shutdowns

Proposers shall describe their approach to management of waste and/or septage for the Waste Management Project during scheduled and unscheduled shutdowns. This section should describe measures to safeguard against, minimize the impact of, and to resolve shutdowns efficiently and quickly. Specific focus should be placed on how the waste and/or septage stream(s) will be handled in the event of a shutdown.

It is the MSB's expectation that the Waste Management Project will be the primary method of waste and/or septage disposal for the Borough, therefore the Waste Management Project must be highly reliable. Proposers shall include a shutdown schedule that outlines the yearly shutdowns and a proposed number of days per year that the Facility(ies) will not operate due to unscheduled shutdowns. The negotiated shutdown schedule and negotiated unscheduled shutdown days number will be included in the Agreement.

Proposal Subsection 4.6: Facility Drawings and Diagrams

As a minimum, Proposals must include the drawings listed below. Some of these drawings were described briefly in the subsection descriptions above. These drawings will be incorporated as part of the final Agreement.

- Site Construction Plan(s) (including limits of construction)
- Final Site Plan(s) and Sections
- Traffic Flow (may be included in Site Plans)
- On-site and off-site parking and staging area drawing

- Process Flow Diagrams or preliminary P&IDs
- Mass and Energy Balances
- Water Balance(s)
- Boiler firing diagram showing design throughput at varying heating values and varying unit loads, if applicable.
- Structural Plan(s) and Section Drawings
- Preprocessing Facility(ies) General Arrangements, if applicable
- Facility(ies) General Arrangements
- Electrical One-line Diagram(s)
- Fire Protection System(s)
- Site Drainage Plans (Stormwater Control and Treatment)
- Site Utilities Plans, including sanitary sewage, fire protection, and utility water
- Architectural Plans, Elevations, and Renderings
- Other drawings to be submitted as needed to fully describe Proposals

Proposal Subsection 4.7: Preliminary Operations, Maintenance, Repair, and Replacement and Preliminary Operations and Maintenance Plans

Proposers shall describe the Operations and Maintenance Plan(s) and the Maintenance, Repair and Replacement Plan(s). These plans must address the proposed approach for ordinary maintenance and for major maintenance, repairs and replacements to comply with the Ground Lease and Draft Agreement. They must include an equipment inventory, schedule for shift and preventative maintenance, and related operator training. The Maintenance, Repair and Replacement Plan(s) description must consist of a plan for replacement of major items (over $25,000 per replacement or renewal) at the Date of Construction Price Escalation over the term of the Agreement. This schedule will be included in the Service Fee Payment.

This plan(s) must include sufficient detail and cross-referencing so that this information, together with Proposal Form 13 is sufficient to complete Appendix 1 of the Draft Agreement. Proposers are encouraged to review the Ground Lease and Draft Agreement for additional requirements. The plan must address the tracking of groups of different lived equipment, and include depreciation and the repairs, replacements, and renewals required to obtain, at a minimum, the manufacturer's useful life.

7.5.5 Tab 5: Management and Organization Proposal

Proposal Subsection 5.1: Project Implementation Approach

Proposers must describe their internal team communications plan, their approach to public involvement and external project communications, and their approach to Project partnering with all Project stakeholders to assure Project quality and performance.

Proposers must also submit an implementation schedule that includes project schedules that present the major activities necessary to implement their Proposal. The project schedules should commence with the Contract Date and extend to the time that the Waste Management Project initiates full-scale operation. The proposed Project schedules must include each major milestone outlined in the Proposed Milestone Payment Schedule, along with all other major activities for completing the Project. The schedules must clearly distinguish between pre- and post-Notice-to-Proceed activities. In addition, within this section, Proposers must identify the dates) after Notice to Proceed on which receipt of ADEC approvals) is anticipated. Proposers must also identify suggested MSB review periods during design to meet the requirements of Agreement Appendix 1.

Proposal Subsection 5.2: Project Schedules

Proposers shall include Project Schedules (a Project Construction Schedule and a Development Work Schedule) that present the major activities necessary to implement their Proposal. The schedules should commence with the Contract Date and identify major milestones. The schedules must clearly distinguish between pre- and post-Notice to Proceed activities. A Guaranteed Maximum Work duration, including a guaranteed Scheduled Commencement of Operations Date, as part of the Project Schedule must be provided in this section. The Company may receive schedule relief as set forth in the Draft Agreement.

Proposal Subsection 5.3: Quality Management Plan

This section of the Proposal must describe the Proposer's overall quality plan, including its Quality Control/Quality Assurance, Risk Management and Loss Prevention Program (QC/QARMLPP) for all phases of the project, including permitting, design, construction, commissioning, start-up, and acceptance testing, and operation.

Minimum requirements for the QC/QARMLPP are set forth in Agreement Appendix 1. In preparing this section, Proposers should discuss their overall quality program, including quality control and assurance, with respect to the quality objectives established by the MSB. These objectives include:

- Defining quality level goals and expectations, and developing and implementing procedures to insure that quality is an integral consideration in each and every task.

- Including aesthetics and workmanship in quality objectives along with the ability of the Project to meet Performance Guarantees.

- Maintaining the overall responsibility for quality with the Company. While implementation of quality-realized programs can be delegated, this overall responsibility cannot be delegated.

- Ongoing involvement of individuals responsible for permitting and environmental mitigation through the construction phase-will help assure project quality.

- Integration of construction contractors into the design process and designers (engineers and architects) into the construction process.

- Independent verification of workmanship, materials, and quality control procedures. Effective QC/QARMLPP, including adequate resources dedicated exclusively to the program's implementation. Design and construction QC/QARMLPP staff must be independent of production staff and empowered to enforce the program's objectives, define quality expectations, independently verify quality, and investigate the causes of poor quality work. Use or even partial reliance on, the monitored organization's production staff to implement construction QC/QARMLPP activities is to be discouraged due to conflicts of interest and time.

- Inspection of work in progress rather than at completion of work components.

- When problems are encountered, focusing on correcting the systems that led to the problem rather than simply on its repair.

- Continuous training and ongoing communication with subcontractors.

- Continuous communication with the MSB regarding quality issues and project changes.

Proposal Subsection 5.4: MSB Coordination and Communication Plan

This section shall describe, in detail, the Proposer's approach to communicating and coordinating with the MSB's technical staff, as well as the MSB's on-site project management staff during each Project phase. The Company's internal Communication Plan and an initial draft of the Company's proposed plan for communication with the MSB shall be provided.

7.5.6 Tab 6: Business/Financial Proposal

This section must present the business and financial aspects of the Proposal. Proposers must submit sufficient information so that the MSB can evaluate the Proposer’s ability to satisfy the conditions of the Ground Lease and Draft Agreement.

The subsequent subsections outline the type of information that must be included in the Proposer’s business and financial submission.

Proposal Subsection 6.1: Project Guarantor Commitment

Proposers must describe how it plans to use a Project Guarantor to guarantee all of the Company's obligations under the Ground Lease and Draft Agreement for the Project. Proposers must provide a commitment from the Project Guarantor for the Project. The Project Guarantor is to complete and submit Proposal Form 6 as described in Section 4.4.3.

Proposal Subsection 6.2: Service Fee and Additional Financial Information

Proposers are encouraged to review the Ground Lease and Draft Agreement to fully understand the Service Fee formula. The Service Fee must include all applicable components set forth below and in the Ground Lease and Draft Agreement including the Capital Reserve component of the Service Fee.

The MSB will evaluate and compare the cost effectiveness of the Proposals based on the proposed Service Fee. However, the MSB recognizes that changes in capital markets conditions, general inflation from the date of contract award to the date of financial closing, and other factors may cause certain elements of the proposed Service Fee to change. To provide transparency into pricing, and to establish a framework for finalizing the Project's design and commercial terms, the MSB requires each Proposer to describe certain key components of the proposed Service Fee in detail.

Base Operation Fee.

- The Proposer must provide the detailed information specified in Proposal Form 16. The information shall refer to the first year of Waste Management Project operations.

- The Proposer must indicate any indexing on Proposal Form 19 that would change the first-year Base Operation Fee from the amount proposed in Proposal Form 16.

Excess Operation Fee

- The Proposer must provide the detailed information specified in Proposal Form 16. The information shall refer to the first year of Waste Management Project operations.

- The Proposer must indicate any indexing on Proposal Form 19 that would change the first-year Excess Operation Fee from the amount proposed in Proposal Form 16.

Pass Through Costs

- No pass through costs are anticipated.

Capital Reserve Component

- The Proposer must provide the detailed information regarding the Guaranteed Maximum Price for the Waste Management Project specified in Proposal Form 15.

- The Proposer must indicate the proposed duration of the Work.

- The Proposer must provide the overall capital budget (uses of funds) for the Project, including debt service and working capital reserves, capitalized interest, and recovery of any costs not included in the Guaranteed Maximum Price specified in Proposal Form 15.

- The Proposer must indicate any indexing on Proposal Form 19 that would change the Guaranteed Maximum Price and/or overall capital budget prior to financial closing.

- The Proposer must specify the ratio of debt and equity proposed as sources of funds to finance the overall capital budget.

- The Proposer must specify the interest rate assumptions used to establish the proposed debt pricing, and specify any indexing that could cause the debt interest rate to change prior to financial closing. Any changes in the debt interest rate subsequent to financial closing will be solely for the account of the Proposer.

- The Proposer must provide a schedule showing the sizing of the debt portion of capitalization, the debt interest rate, and the debt amortization profile used to establish the debt service component of the Capital Reserve Component. The Proposer must structure the schedule as a level debt amortization.

- The Proposer must specify the nominal return on equity proposed for inclusion in the Capital Reserve Component of the Service Fee. The nominal return on equity shall be levelized for each year. It is understood that the nominal return on equity is not a guarantee of the actual return on equity to be realized by the equity investor. The actual return on equity will depend upon the actual results of construction and operation of the Project and cannot be predicted with certainty. The Proposer must specify the extent to with the proposed nominal return on equity is subject to indexing or adjustment prior to financial closing.

- The Proposer must provide a schedule showing how the sizing of the equity portion of capitalization and the nominal return are used to establish the equity return component of the Capital Reserve Component.

- The Proposer must provide a pro forma detailing the revenue streams assumptions as well as expenses, taxing assumptions, etc.

This subsection shall include Proposal Forms 15-20.

Proposal Subsection 6.3: Project Financing Plans

The Proposer must demonstrate that it has the capacity to finance the Project from design and construction through the full Term.

The Proposer must provide a financing plan as discussed in in Section 3.2.2. The Proposer must provide a full description of the complete Financing Plan for the Project, including the amounts and timing of required funds through the Work and the complete Term, including all the operating services and the lifecycle maintenance. The sources of funds must match the demand for funds throughout both the Work and the Term. The Financing Plan cannot use the general credit of the MSB. The Financing Plan must demonstrate the sources of finance and the level of commitment of the financing, and include the following information:

1) Full details of each source of financing, including equity, any construction or standby facilities, subordinated debt, bank debt, capital markets debt, and internally generated funds;

2) Explicit relationship of the proposed plan of finance to the proposed Service Fee, and specifically the Capital Reserve Component of the proposed Service Fee, consistent with this Section and Section 6.9.2.

3) For each investor providing equity, subordinated debt, mezzanine debt, or other equity-like instrument, identification and description of the investor and written confirmation as to their willingness to provide funding and the amount of funding available.

4) If guarantees are to be provided as part of the financing package, written confirmation by each shareholder's parent company, stating that it is able to provide a parent company guarantee in relation to the availability of the equity / quasi-equity for the Project, and that it has adequate funds available;

5) Full description (including, where applicable, copies of all relevant agreements) evidencing and confirming the extent of support (including performance guarantees) that is to be provided in respect of the obligations and liabilities of the Project Company by each of the Project Company's shareholders, subcontractors and associated third parties, including details of any parent and ultimate parent company involvement in any and all such elements of support; and

6) The Proposer must provide summary terms for each component of the capital structure proposed for the Project, including:

    a) The identity of the arranger or underwriter

    b) Type of financing facility

    c) Purpose of facility

    d) Availability period

e) The amount of financing proposed or committed and currency in which it is to be provided

f) The drawdown schedule

g) Repayment or redemption schedules, maturity dates and prepayment terms (including make-whole clauses)

h) Details of the performance security package to be provided by each of the Project contractors, including details of letters of credit or other security, bonding or guarantee requirements and costs (from either parents or third parties)

i) Arrangement, underwriting, commitment, agency and all other fees

j) Interest rates (with respect to debt) and nominal return (with respect to equity) specifying base rate, other credit spreads and all margins and including any ratchet mechanism

k) Requirements for reserve accounts

l) Any proposed hedging arrangements in respect of interest rates

m) Events of default and other similar arrangements

n) Step-in arrangements consistent with the Agreement

o) Conditions precedent

p) Due diligence requirements

q) Any other restrictions, requirements or conditions that may materially impact the Proposer's ability to raise financing or drawdown on committed financing after Financial Close

r) If the Financing Plan is dependent on a credit rating, an indicative credit rating from one or more Ratings Services

s) A confirmation letter from the Proposer's Financial Advisor stating that the Financing Plan is achievable and robust

t) Details of any working capital requirements and details of how these requirements will be met

u) Details of any standby facilities provided to satisfy the requirements of the Agreement

v) To the extent that other forms of finance, other than debt and equity, are to be used the Proposer is to provide appropriate details equivalent to those requested above for equity and debt finance.

7) The Proposer must describe and provide details of its proposed interest rate hedging strategy, if any that may be used, including the time period over which a hedge is expected to be in place and the proportion of the debt repayments that are to be hedged.

8) With respect to any publicly offered financing, the Proposer must provide evidence of interim financing or a confirmation letter from the Proposer's Financial Advisor stating that such debt can be issued by Financial Close.

Proposal Subsection 6.4: Non-Discrimination in Employment, Contracting and Services and Other Select Contracting Requirements

Proposers must state in their Proposal that they understand that the requirements of Section 4.7.4 will be made a part of the Agreement and must describe the following:

- Programs to assure non-discrimination in employment and services of the Proposer and principal subcontractors;

- Apprenticeship programs and use of apprentice labor of the Proposer and Principal subcontractors. Affirmative efforts to use women and minority-owned business enterprises; and

- Compliance with other ordinances and requirements described in the RFP.

Proposal Subsection 6.5: Markup of the Ground Lease and Draft Agreement and Appendices

Proposers shall include their markup as an Appendix to their Proposal per the specific requirements of Section 4.8 of this RFP.

7.5.7 Tab 7: Additional Proposal Forms

Proposal Forms not included elsewhere in the Proposal shall be included in this Section of Proposals.

7.5.8 Tab 8: Experience, Qualification, and Financial Information

Proposers shall include up-to-date resumes for team members including, at a minimum, those listed in Proposal Form 4.

7.5.9 Tab 9: Appendices to the Proposal (as Necessary)

Proposers shall include any other appendices and documents to the Proposal not addressed elsewhere or as required to clarify their Proposal.

SECTION 8

PROPOSAL FORMS

Proposers shall provide all the requested information and complete all details provided in the Proposal Forms attached to this RFP. All Proposal Forms shall be completed in ink or typewritten and submitted in accordance with the instructions set forth in Section 7.

The Proposal Forms require Proposer-specific information to be inserted in order to be properly completed. Once the Proposer is selected, certain Proposal-specific information submitted in their Proposal and the Proposal Forms may be included as part of the Agreement, as appropriate.

Electronic versions of the Proposal Forms in Microsoft Word® format will be provided to Proposers.

PROPOSAL FORM A
CHECKLIST OF FORMS

Business Forms

☐	Proposal Form A	Checklist of Forms
☐	Proposal Form 1	Transmittal Letter and Attachment
☐	Proposal Form 2	Non-Collusion Affidavit
☐	Proposal Form 3	Participating Entities - Group List
☐	Proposal Form 4	Participating Entities - Individual Descriptions
☐	Proposal Form 5	[RESERVED]
☐	Proposal Form 6	Project Guarantor Commitment and Attachment
☐	Proposal Form 7	Bank Letter of Intent to Issue Letter of Credit
☐	Proposal Form 8	Insurance Company Letter of Intent
☐	Proposal Form 21	Non-debarment Certificate of Compliance

Technical Forms

☐	Proposal Form 9	Throughput, Landfill Reduction and Other Performance Guarantees
☐	Proposal Form 10	Specifications of Major Equipment/Systems
☐	Proposal Form 11	Process Residue, Product Materials and Liquid Discharge Data
☐	Proposal Form 12	Air Pollutant Emissions
☐	Proposal Form 13	Major Equipment Replacement Schedule
☐	Proposal Form 14	Key Personnel Commitments of Time

Financial/Price Forms

☐	Proposal Form 15	Guaranteed Maximum Price Breakdown
☐	Proposal Form 16	Operation and Maintenance Price Breakdown
☐	Proposal Form 17	Cost of Capital by Source
☐	Proposal Form 18	Solid Waste Service Fee Breakdown
☐	Proposal Form 19	Escalation Indices
☐	Proposal Form 20	Maximum Electricity Utilization/Demand

PROPOSAL FORM 1
TRANSMITTAL LETTER AND ATTACHMENT

(To be typed on Proposer's Letterhead)

[Date]

ABC

Matanuska-Susitna Borough

Purchasing Division

350 E. Dahlia Avenue
Palmer, Alaska 99645

Re: Proposal for MSB Waste Management Project

_____ (the "Proposer") hereby submits its Proposal in response to the Request for Proposals for the Waste Management Project issued by the MSB (the " MSB ") on SEE SECTION 1.1.4 SCHEDULE., as amended.

As a duly authorized representative of the Proposer, I hereby certify, represent, and warrant, on behalf of the Proposer team, as follows in connection with the Proposal:

1. The Proposer acknowledges receipt of the RFP and the following addenda:

_____	_____
_____	_____
_____	_____

2. The submittal of the Proposal has been duly authorized by, and in all respects is binding upon, the Proposer. Attachment 1 to this Transmittal Letter is a Certificate of Authorization which evidences my authority to submit the Proposal and bind the Proposer.

3. The Proposer has completely reviewed and understands and agrees to be bound by the requirements of the RFP.

4. The Proposer's obligations that will be contained in the Agreement will be guaranteed irrevocably, absolutely, and unconditionally by _____ as evidenced by the Guarantor Acknowledgment certificate submitted as Proposal Form 6. The Guarantor

Certificate of Authorization submitted as Attachment 1 to Proposal Form 6 evidences the individual's authority to submit the Guarantor Acknowledgment certificate and bind the Guarantor.

5. All information and statements contained in the Proposal are current, correct, and complete, and are made with full knowledge that the MSB will rely on such information and statements in determining whether the Proposer will proceed to the next phase of the procurement.

6. The Proposal has been prepared and is submitted without collusion, fraud, or any other action taken in restraint of free and open competition for the services contemplated by the RFP.

7. Neither the Proposer, the Guarantor, nor any Proposer team member is currently suspended or debarred from doing business with any governmental entity.

8. The Proposer has reviewed all of the engagements and pending engagements of the Proposer and the Guarantor, and no potential exists for any conflict of interest or unfair advantage.

9. No person or selling agency has been employed or retained to solicit the award of the Agreement under an arrangement for a commission, percentage, brokerage or contingency fee, or on any other success fee basis, except bona fide employees of the Proposer or the Guarantor.

10. The principal contact person who will serve as the interface between the MSB and the Proposer for all communications is:

NAME: _____

TITLE: _____

ADDRESS: _____

_____

_____

PHONE FAX: _____

E-MAIL: _____

11. The key technical and legal representatives available to provide timely response to written inquiries submitted, and to attend meetings requested by the MSB, are:

Technical Representative:

NAME: _____

TITLE: _____

ADDRESS: _____

_____

_____

PHONE FAX: _____

E-MAIL: _____

Legal Representative:

NAME: _____

TITLE: _____

ADDRESS: _____

_____

_____

PHONE FAX: _____

E-MAIL: _____

_____

Name of Proposer

_____

Name of Designated Signatory

_____

Signature

_____

Title

(Notary Public)

State of _____

County of _____

On this _____ day of _____, 20XX, before me appeared **[**DESIGNATED SIGNATORY**]**, who is **[**INSERT TITLE**]** of **[**INSERT PROPOSER**]**, a **[**INSERT STATE AND ENTITY TYPE**]**, personally known to me to be the person described in and who executed this Transmittal Letter and acknowledged that she/he signed the same freely and voluntarily for the uses and purposes therein described.

In witness thereof, I have hereunto set my hand and affixed my official seal the day and year last written above.

_____

Notary Public in and for the State of _____

(Seal)

_____

(Name Printed)

Residing at _____

Commission Number _____

ATTACHMENT 1

CERTIFICATE OF AUTHORIZATION*

I, _____, a resident of [INSERT CITY] in the State of [INSERT STATE], DO HEREBY CERTIFY that I am the Clerk/Secretary of [INSERT PROPOSER NAME], a [corporation] duly organized and existing under and by virtue of the laws of [INSERT STATE]; that I have custody of the records of such [corporation]; and that as of the date of this certification, [INSERT DESIGNATED SIGNATORY NAME] holds the title of [INSERT TITLE] of the [corporation], and is authorized to execute and deliver in the name and on behalf of the [corporation] the Proposal submitted by the [corporation] in response to the Request for Proposals for the Waste Management Project, issued by the MSB on MONTH XX, 20XX, as amended; and all documents, letters, certificates and other instruments which have been executed by such officer on behalf of the corporation in connection therewith.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal

of the corporation this _____ day of _____, 20XX

(Affix Seal Here)

_____

Clerk/Secretary

** Note: Separate certifications shall be submitted if more than one corporate officer has executed documents* as *part of the Proposal. Proposers shall make appropriate conforming modifications to this Certificate in the event that the signatory's address is outside of the United States.*

PROPOSAL FORM 2
NON-COLLUSION AFFIDAVIT

STATE OF _____)

: SS.:

COUNTY OF _____)

I, **[**INSERT DESIGNATED SIGNATORY NAME**]**, a resident of **[**INSERT CITY**]**, in the State of **[**INSERT STATE**]**, of full age, being duly sworn according to law, on my oath depose and say that:

1. I am the **[**INSERT TITLE**]** of, **[**INSERT PROPOSER**]**, formed in the state of **[**INSERT STATE**]**, the Proposer making the Proposal in response to the Request for Proposals for the Waste Management Project issued by the MSB on MONTH XX, 20XX, as amended, and that I executed said Proposal with full authority to do so;

2. The prices in this Proposal have been arrived at independently without collusion, fraud, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other Proposer or with any competitor;

3. Unless otherwise required by law, the prices which have been quoted in this Proposal have not been knowingly disclosed by the Proposer and will not knowingly be disclosed by the Proposer prior to opening, directly or indirectly, to any other Proposer or to any competitor; and

4. No attempt has been made or will be made by the Proposer to induce any other person or entity to submit or not to submit a Proposal for the purpose of restricting competition.

I, hereby affirm under the penalties of perjury that the foregoing statements are true.

_____
Name of Proposer

Name of Designated Signatory

Signature

Title

(Notary Public)

State of _____

County of _____

On this _____ day of _____, 20XX, before me appeared **[**DESIGNATED SIGNATORY**]**, who is **[**INSERT TITLE**]** of **[**INSERT PROPOSER**]**, a **[**INSERT STATE AND ENTITY TYPE**]**, personally known to me to be the person described in and who executed this Transmittal Letter and acknowledged that she/he signed the same freely and voluntarily for the uses and purposes therein described.

In witness thereof, I have hereunto set my hand and affixed my official seal the day and year last written above.

_____

Notary Public in and for the State of _____

(Seal)

_____

(Name Printed)

Residing at _____

Commission Number _____

PROPOSAL FORM 3
PARTICIPATING ENTITIES – GROUP LIST

All entities that will be significant participants in providing the contract services (the "Participating Entities") are identified below. Such entities shall include, as applicable, (1) the Company (which may be a new company formed for the sole purpose of executing and performing the Agreement); (2) the entity that will assist the Company in permitting; (3) the entity that will design the Facility(ies); (4) the entity that will construct the Facility(ies); (5) the entity that will operate the Facility(ies), (6) the Guarantor; (7) the entity that will finance the project; and (8) any other significant participant or subcontractor.

1) The Company: _____

2) Permitting Entity: _____

3) Design Entity: _____

4) Construction Entity: _____

5) Operating Entity: _____

6) Guarantor: _____

7) Financing Entity: _____

8) Other: _____

Include a copy of Proposal Form 4 for each entity listed above. Each member of a joint venture should be listed separately.

_____
Name of Proposer

_____
Name of Designated Signatory

_____
Signature

_____

Title

PROPOSAL FORM 4
PARTICIPATING ENTITIES[1] – INDIVIDUAL DESCRIPTIONS

(Complete Proposal Form 4 for each Participating Entity)

Entity Name:

Type of Entity:

Address:

Names of partners, officers and stockholders who own 10 percent or more of the shares:

---

[1] Company and any JV members or parent firms Form of Business (Corporation, Partnership, Joint Venture, Other)

Form of Business (Corporation, Partnership, Joint Venture, Other):

State formed in (or to be formed in):

Contact Person(s):

Voice Telephone Number:

Fax Telephone Number:

E-Mail Address:

Role(s) (e.g., Company, Guarantor):

Attach a brief summary of the services and responsibilities of each Participating Entity, limited to one page or less in length for each entity.

PROPOSAL FORM 5
[RESERVED]

PROPOSAL FORM 6
PROJECT GUARANTOR COMMITMENT

(to be typed on Guarantor's Letterhead)

_____ (the "Proposer") has submitted herewith a Proposal in response to the Request for Proposals for the Waste Management Project (the "RFP") issued by the Matanuska-Susitna Borough (the "MSB") on MONTH XX, 20XX, as amended. The RFP requires the Selected Proposer to enter into an Agreement to: (1) provide all necessary design, permitting, construction, financing, commissioning, start-up, operation, and maintenance of the Project; (2) cause the Project to meet certain Performance Guarantees; and (3) perform the other related services and ancillary services described in the RFP if the Proposer is approved by the MSB for execution of the Agreement.

The Guarantor has reviewed the RFP and the Proposal, which together will form the basis of the Agreement. The Guarantor hereby acknowledges its intentions to guarantee the performance of all of the obligations of the Proposer under the Agreement, as negotiated based on the RFP and the Proposal, in the event that the Proposer is awarded the Agreement, and to execute a separate Guaranty Agreement in the form, as negotiated based on the RFP and the Proposal.

_____
Name of Guarantor

_____
Name of Authorized Signatory

_____
Signature

_____

Title

** If more than one Guarantor is proposed, each firm shall be jointly and severally obligated and shall independently provide an executed copy of this Guarantor Acknowledgment. If a Guarantor is a joint venture, each firm in the joint venture shall be jointly and severally obligated and shall independently provide an executed copy of this Guarantor Acknowledgment.*

Attachment 1

GUARANTOR CERTIFICATE OF AUTHORIZATION*

I, _____, a resident of **[**INSERT CITY**]** in the State of **[**INSERT STATE**]**, DO HEREBY CERTIFY that I am the Clerk/Secretary of **[**INSERT GUARANTOR**]**, a **[**corporation**]** duly organized and existing under and by virtue of the laws of the State of **[**INSERT STATE**]**; that I have custody of the records of such **[**corporation**]**; and that as of the date of this certification, **[**INSERT AUTHORIZED SIGNATORY NAME**]** holds the title of **[**INSERT TITLE**]** of the **[**corporation**]**, and is authorized to execute and deliver in the name and on behalf of the **[**corporation**]** the Guarantor Acknowledgment submitted by the corporation as part of **[**INSERT PROPOSER**]** (the Proposer's) response to the Request for Proposals for the Waste Management Project (the "RFP") issued by the Matanuska-Susitna Borough (the "MSB") on MONTH XX, 20XX, as amended; and all documents, letters, certificates and other instruments which have been executed by such officer on behalf of the **[**corporation**]** in connection therewith.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the **[**corporate**]** seal of the **[**corporation**]** this _____ day of _____, 20XX.

(Affix Seal Here)

_____
Clerk/Secretary

**Note*: *Separate certifications shall be submitted if more than one corporate officer has executed the Guarantor Acknowledgment as part of the Proposal. Proposers shall make appropriate conforming modifications to this Certificate in the event the signatory's address is outside of the United States.*

PROPOSAL FORM 7
BANK LETTER OF INTENT TO ISSUE LETTER OF CREDIT

(to be typed on Bank or Financial Institution's letterhead)

Matanuska-Susitna Borough
Department of Finance
350 E. Dahlia Avenue
Palmer, Alaska 99645

Re: Waste Management Project

Director of Finance:

_____ (Proposer) has submitted herewith a Proposal in response to the Request for Proposals for the Waste Management Project (the "RFP") issued by the Matanuska-Susitna Borough (the "MSB") on MONTH XX, 20XX, as amended, to provide design, construction, financing, permitting, commissioning, acceptance testing, operation, and maintenance of the Waste Management Project and all support facilities ("Project"). The most advantageous Proposer will enter into an Agreement to cause the Waste Management Project to meet certain Performance Guarantees; to comply with all applicable permits, licenses, approvals and other Applicable Law; and to provide related and ancillary services, all as defined and described in the RFP, and covered by the Proposal submitted by the Proposer in response thereto, which Proposal is made a part hereof.

The Bank hereby certifies that it intends to issue on behalf of the Proposer, as additional security for the Company's obligations under the Agreement, an irrevocable standby letter of credit in the amount of $2,000,000 for the benefit of the MSB in the event the Proposer is awarded the Agreement.

_____
Name of Bank

_____
Name of Designated Signatory

Signature

Title

PROPOSAL FORM 8
INSURANCE COMPANY LETTER OF INTENT

(to be typed on insurance company's letterhead or an authorized broker of the insurance company's letterhead)

Matanuska-Susitna Borough

Department of Finance

350 E. Dahlia Avenue
Palmer, Alaska 99645

Re: Waste Management Project

Director of Finance:

_____ (Proposer) has submitted herewith a Proposal in response to the Request for Proposals for the Waste Management Project (the "RFP") issued by the Matanuska-Susitna Borough (the "MSB") on MONTH XX, 20XX, as amended, to provide design, construction, financing, permitting, commissioning, acceptance testing, operation, and maintenance of the Waste Management Project and all support facilities ("Project"). The most advantageous Proposer will enter into an Agreement to cause the Waste Management Project to meet certain Performance Guarantees; to comply with all applicable permits, licenses, approvals and other Applicable Law; and to provide related and ancillary services, all as defined and described in the RFP, and covered by the Proposal submitted by the Proposer in response thereto, which Proposal is made a part hereof.

The insurance company hereby certifies that it intends to provide all required insurance set forth in this RFP in the event the Proposer is awarded the Agreement.

_____
Name of Insurance Company

_____
Name of Designated Signatory

Signature

Title

PROPOSAL FORM 9
THROUGHPUT, LANDFILL REDUCTION AND OTHER PERFORMANCE GUARANTEES

Throughput Performance Guarantees

The Proposer agrees that the Facility(ies) will operate in accordance with the following Performance Guarantees for Annual Solid Waste and/or septage Throughput. Company shall base Waste throughput capacity, Facility Contract Capacity, on 5,500 Btu/lb Waste. Refer to Proposal Form 10 for Energy Recovery Systems.

Annual Average Waste Heating Value (Btu / lb)	Annual Throughput Guarantee (Tons / Year)
4,201 - 4,500	
4,501 - 4,800	
4,801 - 5,100	
5,101 - 5,400	
5,401 - 5,700	
5,701 - 6,000	
6,001 - 6,300	

Septage Annual Throughput Capacity Guarantee (Gallons/Year) _____

Landfill Reduction Performance Guarantees

Net Landfill Reduction Percentage (As measured by Annual Tonnage all wastes and septage Residues Received by MSB across the truck scales from the Company divided by Total tons of Solid Waste received by MSB at the Central Landfill (tpy) times 100.

Tonnage Residue from Solid Waste and/or septage Project x 100 = Landfill Waste
Annual Throughput Guarantee Reduction Percentage

Guaranteed Annual Landfill Reduction Percentage _____%*

*Note the Landfill Reduction Percentage does not address total septage received by the Company. Therefore if the Project only addresses septage and septage residuals are received at the Central Landfill directly or indirectly from the Project, the Guaranteed Annual Landfill Reduction Percentage could be negative.

Other Performance Guarantees

Proposer shall provide other Performance Guarantees for Solid Waste and/or septage processing that can be incorporated into the Agreement and be used demonstrate and verify the Project is performing as required by the Agreement. A number of criteria are presented below which may or may not be applicable to the Proposer's Project and can be incorporated into the Agreement as performance Guarantees. Proposer shall delete those criteria that are not applicable, provide verifiable Performance Guarantees for applicable criteria, and/or provide additional verifiable Performance Guarantees applicable to their Project.

If the Project includes Solid Waste processing, the Company guarantees the following daily, weekly, and monthly tonnage ranges subject to scheduled and unscheduled downtime.

Solid Waste Receipt	Minimum, Tons	Maximum, Tons
Daily		
Weekly		
Monthly		

If the Project includes Solid Waste processing, the Company guarantees the following limits on scheduled and unscheduled downtime

Downtime	Maximum Annual Days Unavailable
Scheduled	
Unscheduled	

If Project includes recycling or recovery of certain components of the Solid Waste stream as commodities for sale to recycling markets, the recovery efficiency for each commodity shall be guaranteed.

Waste Material	Recovery Percentage, %
Cardboard (OCC)	
Ferrous Metal	
Scrap Metal	
Aluminum Beverage Cans (UBC)	
Mixed Paper	
PET containers	
HDPE Containers, Natural	
HDPE Containers, Colored	
Glass	
Mixed Containers	
Clean Wood	
Aggregate	
Bulky Plastics	
Film Plastics	
Other_____	
Other _____	
Other _____	

If Project includes electrical generation, net electricity sold shall be guaranteed. Company shall base electrical generation capacity on 5,000 Btu/lb Waste. Refer to Proposal Form 10 for Energy Recovery Systems.

Annual Average Waste Heating Value (Btu /lb)	Annual Net Electricity Generation Guarantee (kWh/Ton), if applicable
4,201 - 4,500	
4,501 - 4,800	
4,801 - 5,100	
5,101 - 5,400	
5,401 - 5,700	
5,701 - 6,000	
6,001 - 6,300	
Throttle Conditions Proposed (psig)	
Throttle Conditions Proposed (F)	
Maximum Steam Load (lb/hr)	

If the Project includes other energy generation, the net energy generation that is sold by the Company shall be guaranteed. Company shall base Facility energy generation capacity on 5,000 Btu/lb Waste. Refer to Proposal Form 10 for Energy Recovery Systems. A brief description of the form of the energy (steam, hot water, gaseous, liquid or solid fuel, as well as evidence of viable markets for the energy and any other information necessary to demonstrate viability of the Project shall be provided.

Annual Average Waste Heating Value(Btu /lb)	Annual Net Energy Generation Guarantee (kWh/Ton), if applicable
4,201 - 4,500	
4,501 - 4,800	
4,801 - 5,100	
5,101 - 5,400	
5,401 - 5,700	

5,701 - 6,000	
6,001 - 6,300	
Energy Form	
Market	
Other Description	

Provide Performance Guarantees for electrical power consumption (kWh per ton or kWh per year), auxiliary fuel needs, water consumption, reagent, flocculants, lime, activated carbon, ammonia, urea, or other air pollution control chemicals.

Provide emission guarantees for water, groundwater, air, and nuisance (noise odor, litter) emissions.

Provide Performance Guarantees for ash and residue production, and septage solids generation.

Provide additional Performance Guarantees as appropriate for the Project.

Notes:

1. The above applicable Guarantees will be included in Appendix 1 of the Agreement.
2. See Agreement Appendix 1 for background on Performance Guarantees.

PROPOSAL FORM 10
SPECIFICATIONS OF MAJOR EQUIPMENT/SYSTEMS

(Copy and complete this form for all Major Equipment/Systems; Provide a detailed process description and associated general arrangement (GA), site, and piping and instrumentation (P&ID) and other drawings fully describing all major equipment and systems for the Project including but not limited to number of processing lines, equipment and process capacities, dimensions, manufacturers, and characteristics. Attach additional pages, as needed to describe your specific Project in full detail. Some examples of the types of information for various types of projects is provided below as limited examples. Examples provided are not intended to be comprehensive. Modify as appropriate for your proposed Project)

Waste Receiving

Describe the tipping floor, as appropriate, length, width, number of trucks that can unload, and clear height; ventilation (air changes or ACFM); dust, odor, vector, and litter control; lighting. Provide a drawing showing building features and a site plan as a minimum. Provide a description of receiving, screening, and sampling practices necessary to assure Solid Waste and/or septage received is acceptable. Scale facilities, as required, shall be shown on site plan and details provided for scales and scalehouse.

Solid Waste Receiving, if provided

Pit or floor storage, storage depth (below and above tipping floor level as appropriate), width, length, height to charging floor, storage capacity (tons), and density (lb/CY) used for storage calculation; ventilation approach; lighting; and fire protection measures (sprinklers, water cannons, foam, hoses, etc.).

Waste managed with loaders or cranes.

If cranes, provide manufacturer; number; and capacity (tons); hoist, trolley, and bridge speeds (Ft/min); CMAA class; controls; grapple manufacturer, type and capacity (CY); describe laydown and maintenance area. Provide GA drawing and cross section.

If loaders, manufacturer, number, and capacity. Provide GA showing floor management.

Septage Systems Receiving, if provided

Describe receiving area, number of trucks that can unload, length, width, storage capacity, gallons, vessel description, pumps, odor control and lighting. As a minimum provide a site plan and GA drawing. Detail applicable leaching field features; monitoring wells; pump stations; settling basins; clarifiers; solids storage, handling, and loadout out areas; gas containment and control; composting operations, support facilities; etc. Provide a description of receiving, screening, and sampling practices to assure septage received is acceptable.

Recycling Systems, if provided

Provide a process description, from inlet through the entire process listing all equipment with capacities (tons/hr), speeds (FPM), angles of incline, purpose, sizes, dimensions, manufacturers, recovery projections and quality by commodity, storage capacity, residue projections and assumptions, etc. Provide an overall floor plan with dimensions, cross sections along all conveyors and equipment, bale and commodity storage, and loading docks, office, locker and maintenance areas and a detailed description how the Facility will function. Identify any potential partnership opportunities with VCRS that would be possible for the Company Project to foster based on materials that will or will not be processed at the proposed waste Facility.

Incinerator, Gasification, Pyrolysis and Similar Systems, if provided

Provide a process description, from inlet through the entire process listing all equipment with capacities, purpose, sizes, dimensions, grate material and expected life, furnace volume, manufacturers, commodity recovery projections, etc. Include any preprocessing system shredding, sizing, pelletizing, sorting or other equipment required. Provide an overall floor plan with dimensions, cross sections, office, locker and maintenance areas. Provide ash and residue management and handling systems, including any material recovery systems and capabilities, storage and loadout facilities. Describe grate and stoker system including but not limited to manufacturer, grate area, material, life, and cooling system. Indicate and describe if ash and residues (bottom and fly ash) are managed dry or wet. Ash and residue, including bottom and fly ash, supplier system description, type, and capacity. Describe backup systems, dust control, vector control, lighting, and fire protection. Provide needs for compressed air, oxygen, water, auxiliary fuel type with guaranteed consumptions rates. Provide facility, equipment, and system drawings and schematics clearly defining the systems. For throughput guarantees, the design basis shall be 5,500 Btu/lb and if required for energy guarantees, the design basis shall be 5,000 Btu/lb. It is the Company's responsibility to demonstrate the actual annual average HHV is different from the design basis HHV.

Energy Recovery Systems, if provided

Provide steam or hot water boiler expected supplier; guaranteed production rates (lb/hr); temperatures (F); pressures (psig); maximum continuous turndown ratio; boiler description including tube spacing wall construction, diameter, fin spacing (if proposed), tube wall thickness, effective surface areas and materials, including overlays; temperature profile; blowdown rate; gas velocities at furnace, superheater inlet, boiler inlet, economizer inlet and outlet, baghouse inlet and outlet, and stack; furnace volume and exit temperature; volumetric and area heat release rate; superheater, boiler inlet, and economizer exit gas temperature (F); and energy uses, including identified consumers. For fuel production indicate, gaseous, liquid, or solid, guaranteed properties, quantities, and identified consumers. For all cases design point performance with 5,000 Btu/lb higher heating value (HHV) Solid Waste on an annual average basis. It is the Company's responsibility to demonstrate the actual annual average HHV is different from the design basis HHV.

If a steam turbine is provided, expected equipment supplier, design conditions including but not limited to heat rate (Btu/kWh), nameplate capacity (kW), throttle flow (lb/hr), throttle and maximum steam pressure (psig), steam temperature (F), and turbine speed (RPM).

If an air-cooled condenser is provided, expected manufacturer, design conditions including but not limited to pressure (in HgA), steam flow (lb/hr), heat duty (MMBtu/hr), design ambient temperature (F), design range and approach (F), number of cells, ductwork diameter and length, fan motor rating, and dump condensing capacity.

If a cooling tower is provided, expected manufacturer, design conditions including but not limited to heat duty (MMBtu/hr), design ambient temperature (F), cycles of concentration, design range and approach (F), number of cells, circulating water piping diameter and length, fan motor rating, and dump condensing capacity. Provide hotwell tank storage volume, material for tubes and shell, with thickness.

Provide boiler feed pump, expected supplier, number and capacity, type, design conditions, flow (gpm), head (Ft), net pump suction head (Ft), horsepower (hp), speed (rpm) and motor supplier, horsepower (hp) and/or steam driver inlet and outlet pressure.

Provide condensate, auxiliary cooling water and other pumps expected supplier, number, capacity, type, design conditions, flow (gpm), head (Ft), net pump suction head (Ft), speed (RPM) and motor horsepower (hp).

Provide information on any feedwater heaters including but not limited to expected supplier, tube and shell material, diameter (In), gage (BWG), tube velocity, design conditions duty (Btu/hr) terminal temperature difference and drain cooler approach (F), and cleanliness factor. Provide deaerator tank capacity.

Provide combustion air (overfire and underfire), induced draft and other major fan design information including expected manufacturer; wheel diameter; capacity; design conditions including gas temperature, static pressure, and efficiency; and motor horsepower.

Provide water treatment equipment design information and description for filter types, reverse osmosis systems, deionization systems, and other treatment systems including but not limited to sizes and flow rates, membrane type and expected manufacturer,

Provide wastewater treatment system description.

For all types of energy recovery systems, provide ash, slag, metals and residue burnout information including Performance Guarantee for unburned carbon content of process residue. Provide storage capacities, design density, quantities, material type for all residue streams, including but not limited to bottom ash, fly ash, slag, inerts, metals, and combined ash,

General

Provide information on any required auxiliary fuel systems including Performance Guarantee maximum annual consumption.

Provide description and performance information related to any oxygen generation, storage and supply systems.

Provide heat balance diagram and summary information including but not limited to excess air assumptions, dry gas loss, loss due to moisture in fuel with overall performance data. Provide quantities and energy requirements for energy recovery analysis addressing all processes, equipment, systems fuels, wastes, reagents, ash and residue entering and exiting the Project.

Provide information on air pollution control equipment including a detailed system description, pollutants monitored with continuous emission monitors, all pollutants measured for emissions performance. At a minimum provide removal efficiencies and design inlet concentration for sulfur dioxide (SO2) and hydrochloric acid (HCl). All emissions control information shall be provided in emission concentrations corrected to 7% O2 with stack dry flue gas flow. Provide Performance Guarantees for quantity of all reagents used for emissions control. As required provide description and drawings, expected manufacturer, equipment type, design conditions, flue gas flow rate, inlet and outlet temperature, pressure drop, reagent type, reagent consumption, type of catalyst, addressing selective non-catalytic reduction (SNCR), selective catalytic reduction (SCR), spray dryer absorber (SDA) wet scrubber, and baghouses. Provide expected supplier of the stack with flue diameter, flue material, height exit velocity and insulation. For baghouses also provide air-to-cloth ratio and bag material proposed.

Provide a description and drawings for all major electrical equipment and systems for the Project including but not limited to generators, major transformers, switchgear, uninterruptable power supply, and other electrical systems.

Provide a description and drawings for any distributed control systems and fire protection systems for the Project.

Provided a summary description of all fugitive emission, odor, and vector control systems

Provide expected equipment life and replacement schedule for all systems and equipment provided. Provide all equipment, controls, and systems necessary for a complete Project and provide a complete description and sizing for all ancillary equipment required for the complete Project.

Provide a summary description of spare parts and tools required.

Provide a summary list of all rolling stock, containers, and mobile equipment required.

Provide staffing by position and skill for all Project required personnel including operations, maintenance, supervisory, office, temporary, contract, and other staff.

Provide a summary description of any other equipment or systems proposed for the Project not listed above.

PROPOSAL FORM 11
PROCESS RESIDUE, PRODUCT MATERIALS, AND LIQUID DISCHARGE DATA

Provide breakdown of the characteristics, quantity, percentage of the Solid Waste processed and destination of all applicable process residue, ash, slag, inerts, Septage residuals, recyclable commodities, rejects, fuels produced and other discharges from the Project. Destination is the intended outlet from the Project such as Central Landfill, commodity market, wastewater treatment plant, etc. Example materials are provided below. Adapt as required, adding additional sheets as needed to address all Project discharges below:

PROCESS RESIDUE

Metals Recovery Guarantee	**TPY**	**%**	**Destination**
Annual tons (TPY); Ton of recovered ferrous/ton of processible solid waste processed, expressed as %; destination			
Other Material Recovery Guarantees (Specify material; annual tons (TPY); ton of material/ton of solid waste processed, expressed as %); destination			**Destination**
Material 1: Non-Ferrous Metal			
Material 2:			
Material 3:			
Material 4:			
Material 5:			
Material 6:			
Material 7:			
Combined Residue Guarantees (Includes bottom ash, fly ash, siftings, slag, inerts, scrubber residue and all other process residue) from combustion, gasification, or processing of processible waste and/or septage. Example table is set up for combined ash, assuming this is the only Residue stream produced from Solid Waste. Provide a separate breakdown for each Residue stream produced from Solid Waste and/or septage. For instance, if slag is handled			**Destination**

separately from fly ash, two separate tables are required.			
Total Residue annual tons (TPY), (weight % of processible waste), destination:			
Moisture Content (weight % of residue):			
Unburned Combustible Matter (% dry weight)			

LIQUID DISCHARGES

Process Wastewater	
Quantity (gpd):	
Quantity (gpm):	
BOD:	
TSS:	
Physical/Chemical Characteristics:	
Sanitary Wastewater	
Quantity (gpd):	
Quantity (gpm):	
BOD:	
TSS:	
Physical/Chemical Characteristics:	

SEPTAGE DISCHARGES

Process Residuals Guarantee	
Annual tons (TPY):	
Destination:	
Physical/Chemical Characteristics:	
Septage Wastewater Guarantee	
Quantity (gpd):	

Quantity (gpm):	
BOD:	
TSS:	
Physical/Chemical Characteristics:	

PROPOSAL FORM 12
AIR POLLUTANT EMISSIONS

Stack Description

1. Construction Materials
   Flue: _____
   _____
   Stack: _____
   _____
2. Insulation Materials: _____
   _____
   _____
3. Grade Elevation (feet above MSL): _____
4. Height above Grade (ft): _____
5. Inside Diameter of Flue (ft): _____
6. Outside Diameter of Stack (ft): _____
7. Exist Gas Volume Flow : _____
   - ACFM: _____
   - DSCFM: _____
8. Exit Gas Temperature (CF): _____
9. Sampling Port _____
   Locations: _____
   _____
   _____
10. Continuous Emission Monitors: _____ _____ _____
    Manufacturers: _____ _____ _____
    Model Nos.: _____ _____ _____
    Parameter(s) _____ _____ _____
    Location: _____ _____ _____
11. Stack Emissions _____ _____ _____

	Acceptable Value See note at the end of the Form*	Test Method	Controlled	Averaging Period	Total Annual Emissions tons/yr
CRITERIA POLLUTANTS (All concentrations corrected to 7% O2 at standard conditions (68F))					
Particulates*:					
PM10 mg/dscm*	32				
PM2.5, mg/dscm*	30				
Total, mg/dscm (filterable only)*	12				
SO2, ppmdv*					
Annual, arithmetic average, ppmdv*	26 or 80% Red.				
24-hour geometric average, ppmdv*	26 or 80% Red.				
3-hour block, arithmetic average, ppmdv*	44 or 80% Red.				
NOx (as NO2 ppmdv*					
Annual. arith. ppmdv*	90				
24-hour, arith ppmdv*	110				
CO, ppmdv*					
4-hour block arith. ppmdv*	100				
30-day rolling, ppmdv*	80				
Non-methane Hydrocarbons (as CH4), ppmdv*	10				
Lead mg/dscm*	0.14				
NON-CRITERIA POLLUTANTS (All concentrations corrected to 7% O2 at standard conditions (68F))					
Asbestos, mg/dscm					

	Acceptable Value See note at the end of the Form*	Test Method	Controlled	Averaging Period	Total Annual Emissions tons/yr
Beryllium, mg/dscm					
Mercury, mg/dscm*	0.028 or 85% red.				
Vinyl Chloride, mg/dscm					
Fluorides (as HF), ppmdv*	3.5				
Ammonia Slip, ppmdv*	15				
Sulfuric Acid Mist (H2SO4), ppmdv*	5				
Hydrogen Sulfide (H2S), ppmdv					
Total Reduced Sulfur including H2S (as H2S), ppmdv					
Reduced Sulfur Compounds including H2S (as H2S), ppmdv					
HCI, ppmdv*	25 or 95% red.				
OTHER POLLUTANTS (All concentrations corrected to 7% O2 at standard conditions (68F))					
Trace Metals:					
Antimony, mg/dscm					
Arsenic, mg/dscm					
Beryllium, mg/dscm					
Cadmium, mg/dscm*	0.010				
Chromium, mg/dscm					
Hexavalent Chromium, mg/dscm					
Cobalt, mg/dscm					

	Acceptable Value See note at the end of the Form*	Test Method	Controlled	Averaging Period	Total Annual Emissions tons/yr
Copper, mg/dscm					
Manganese, mg/dscm					
Molybdenum, mg/dscm					
Nickel, mg/dscm					
Selenium, mg/dscm					
Vanadium, mg/dscm					
Zinc, mg/dscm					
TRACE ORGANICS (All concentrations corrected to 7% O2 at standard conditions (68F):					
Total PCDD/PCDF, ng/dscm*	13				
PCB, ng/dscm					
Chlorinated Phenols, ng/dscm					
Chlorinated Benzenes, ng/dscm					
	TOTAL PCDD[1]				
-2378 TCDD					
-Other TCDD					
-Penta COD					
-Hexa COD					
-Hepta COD					
-Octa COD					
Total PCDD					
Total ITEQ Toxic Equivalent PCDD					
	TOTAL PCDF[1]				
-2378 TCDF					
-Other TCDF					

	Acceptable Value See note at the end of the Form*	Test Method	Controlled	Averaging Period	Total Annual Emissions tons/yr
-Penta TCDF					
-Hexa TCDF					
-Hepta TCDF					
-Octa TCDF					
-Total PCDF					
Total ITEQ Toxic Equivalent PCDF					
	POLYNUCLEAR AROMATIC HYDROCARBONS[1]				
-Benzo-a-pyrene					
-Chrysene					
-Anthracene					
-Phenathrene					
-Coronene					
-Pyrene					
-Fiuoroanthene					
-Other:					
Total					
Aldehydes (as formaldehyde)					
Organic acids (as acetic acid)					
	START-UP PERIOD 3 hours duration maximum (Maximum Emission Limit total period, lbs)*:				
SO2*	26				
CO*	108				
NOx*	150				

	Acceptable Value See note at the end of the Form*	Test Method	Controlled	Averaging Period	Total Annual Emissions tons/yr
SHUT-DOWN PERIOD 3 hours duration maximum (Maximum Emission Limit total period, lbs)*:					
SO2*	26				
CO*	108				
NOx*	150				
OTHER LIMITS *:					
Opacity, 6 minute maximum, %*	10%				
Fugitive Ash Emissions, visible emissions maximum duration in 3 hour period, %*	5% (no more than 9 minutes)				

**** All items marked with an asterisk shall be guaranteed and shall not be less stringent than the Acceptable Value***

1 RECORDED AS NANOGRAMS PER DRY STANDARD CUBIC METER @ 7% O2. Standard conditions are 68F

FUGITIVE EMISSIONS

1. Estimated Emissions:

	Emissions (ton/yr)
-Cooling Tower Drift	
-Waste and/or Septage Handling and Storage	
-Ash Handling, Storage Treatment	
-On-site Fuel Storage	
-Sorbent Handling, Storage and Preparation	
-Ammonia Handling, Storage and Preparation (if applicable)	
-Other:	

2. Describe method used to estimate uncontrolled fugitive emissions and measures to be used to control these emissions:

ODORS

1. Describe measures to be used to control odors resulting from waste and /or septage handling and storage during normal operations:

2. Describe equipment and measures to be used to control odors resulting from waste and/or septage handling and storage during normal operations, upsets, and when one or more combustion units is down, including shutdown of all units or other Facility incapacity:

GHG

1. Describe measures to be used to control GHG resulting from waste and/or septage management during normal operations.

2. Provide on an attachment an estimated GHG emission comparison between the current management of waste and/or septage and the proposed management under the Project. Provide estimate of tons of carbon equivalent reductions.

LANDFILL GAS COLLECTION

1. Describe impacts of the Project on the potential to generate landfill gas at the Central Landfill including an estimated comparison of the landfill gas generation, including quantities of gas generated, between the current management of Waste at the Central Landfill and the proposed management of waste and/or septage under the Project.

PROPOSAL FORM 13
MAJOR EQUIPMENT REPLACEMENT SCHEDULE

(Expand and format this form as necessary to express major maintenance, repair and replacement activities over a 30-year operating period)

Year	Activity/Equipment[1]	Costs[2,3]
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		

Year	Activity/Equipment[1]	Costs[2,3]
16.		
17.		
18.		
19.		
20.		
21.		
22.		
23.		
24.		
25		
26		
27		
28		
29		
30		
	Total for 30 years	$

(1) List individual activities or groups of activities, along with specific mention of equipment, systems and other components. Activities should be limited to equipment replacement and maintenance in excess of $25,000.

(2) Corresponding itemized costs for unused portions may be carried over into the next year in accordance with the Draft Agreement.

(3) Only equipment and parts costs included.

PROPOSAL FORM 14
KEY PERSONNEL COMMITMENTS OF TIME

(Percentage of time estimates are based on 100 percent of the hours available over the entire phase, assuming 40 hours per week, minus time for vacations, sick leave, training, and professional societies and conferences as a basis.)

Name	Title/Role in Project[1]	Development Period[2] (percent)	Construction Period (percent))	Startup and Acceptance Testing (percent)	Term
	Project Director				
	Design Manager				
	Permitting Manager				
	Construction Manager				
	Quality Manager				
	Project Engineer				
	Construction Superintendent				
	Operations Manager				

[1] Some variation in positions may occur due to differences in Proposers' organization and position titles.

[2] Including design work conducted during this period.

	Lead Operator				

(2)

PROPOSAL FORM 15
GUARANTEED MAXIMUM PRICE BREAKDOWN

SUMMARY OFGUARANTEED MAXIMUM PRICE[1]	**COST**

Project Development and Design

Permitting Activities	$_____
Engineering and Design	$_____
Project Management (During Project Development and Design Only)	$_____
Other (Specify) _____	$_____
Subtotal	$_____

Construction

Facility Site Work:

Clear and Grub, Roads, Parking, Lighting, Utilities, Site Drainage, Fencing, Gates, Mass Grading & Excavation, Fill, etc.	$_____
Dewatering	$_____
Landscaping and Irrigation	$_____
Site Drainage and Storm Drainage Treatment	$_____
Rock Removal	$_____
Roadways	$_____

[1] Pricing as of DATE, 20XX. Prices to be escalated in accordance with Agreement Appendix 3, which shall be based upon Proposal Form 19.

Scales	$_____	
Scalehouse	$_____	
Other (Specify) _____	$_____	
Other (Specify) _____	$_____	
Other (Specify) _____	$_____	
Other (Specify) _____	$_____	
Other (Specify) _____	$_____	
Subtotal		$_____

Facility:

Roof Drainage	$_____
Stairways	$_____
Tipping Floor/Ash Floor	$_____
Platforms/Handrails	$_____
Lighting	$_____
Building Mechanical/HVAC	$_____
Administration/Offices	$_____
Control Room	$_____
Locker Rooms	$_____
Fire-fighting Equipment	$_____
Enclosures and Buildings	$_____
Concrete	$_____
Other Structural Items (Specify) _____	$_____
Other (Specify) _____	$_____

Other (Specify) _____ $_____

Other (Specify) _____ $_____

Other (Specify) _____ $_____

Subtotal $_____

Solid Waste Receiving/Handling:

Crane $_____

Crane Bucket $_____

Crane Feed Hoppers/Chutes $_____

Refuse Pit $_____

Other (Specify) _____ $_____

Other (Specify) _____ $_____

Subtotal $_____

Materials Recovery/Fuel Production Facility

Conveyors $_____

Metering Device $_____

Screens $_____

Optical Sorters $_____

Robotic Sorters $_____

Ferrous Magnets $_____

Eddy Current Separators $_____

Bins/Containers	$_____	
Shredders/Crushers	$_____	
Balers	$_____	
Platforms and Stairs	$_____	
Heaters	$_____	
Dryers	$_____	
Pelletizers	$_____	
Other (Specify)	$_____	
Other (Specify)	$_____	
Other (Specify)	$_____	
Other (Specify)	$_____	
Other (Specify)	$_____	
Subtotal		$_____

Furnace/Boiler/Gasifier Systems:

Hopper Chute	$_____
Ram Feeder (Incl. Hydraulics)	$_____
Grate System	$_____
Under-Grate Hoppers	$_____
Refractory	$_____
Underfire/Overfire Air System (Incl. Fans, Ductwork and Air Preheater)	$_____
Boiler	$_____
Steam Drum	
Waterwall System	

Superheater	$_____
Economizer	$_____
Generating Bank	$_____
Forward & Rear Convection Bank (Incl. Hoppers)	$_____
Internal Flyash Hoppers and Insulation/Cladding	$_____
Hopper Chute/Discharge Valves	$_____
Boiler Flue Ash Collection System	$_____
Metals Recovery Systems	$_____
Ash Discharger	$_____
Boiler Feedwater Piping and Pumps	$_____
All Valves	$_____
Electrical and I&C	$_____
Other (Specify) _____	$_____
Other (Specify) _____	$_____
Other (Specify) _____	$_____
Other (Specify) _____	$_____
Subtotal	$_____

Air Pollution Control and Ash Handling Systems:

NOx Control System	$_____
Lime Slurry Injection System	$_____
Scrubber System	$_____
Activated Carbon System	$_____
Baghouse	$_____

Continuous Emission Monitoring System	$_____	
Ductwork	$_____	
Baghouse Fly Ash Discharge Valves	$_____	
Baghouse Fly Ash Conveyor System	$_____	
Bottom Ash Conveyors and Equipment	$_____	
Metal Recovery Systems	$_____	
Residue Storage Building	$_____	
Other (Specify) _____	$_____	
Other (Specify) _____	$_____	
Other (Specify) _____	$_____	
Subtotal		$_____

Stack System:

Fan System	$_____	
Main Stack	$_____	
Subtotal		$_____

High Pressure Steam/Turbine Generator System:

High Pressure System Headers from Boilers to Turbines and Valves	$_____	
Steam Turbine(s)	$_____	
Switchgear, Power Electrical Systems, Interconnection, and Transmission	$_____	
Lubrication System	$_____	

Condenser (incl. Associated Pumps and Lines)	$_____	
Heater	$_____	
Feedpumps	$_____	
Water Treatment Systems	$_____	
Chemical Treatment Systems	$_____	
Tanks	$_____	
Air Cooled Condenser and Steam Dumping Capability	$_____	
Other (Specify) _____	$_____	
Other (Specify) _____	$_____	
Other (Specify) _____	$_____	
Subtotal		$_____

Septage System

Receiving Systems	$_____	
Filtration Systems	$_____	
Clarifiers	$_____	
Pump Systems	$_____	
Leach Fields	$_____	
Monitoring Well Systems	$_____	
Subtotal		$_____

Other Items:

Maintenance Facilities	$_____	
Fire Protection Systems	$_____	

Compressed Air Systems	$_____	
Water Supply System and Tanks	$_____	
Wastewater treatment and Associated Piping	$_____	
Maintenance Equipment	$_____	
Spare Parts and Tools	$_____	
Mobile Equipment	$_____	
On-Site Supplies	$_____	
Loading Docks	$_____	
Freight	$_____	
Subtotal		$_____

Start-up & Acceptance Testing

Start-up and Equipment Testing Activities	$_____	
Personnel Training	$_____	
Acceptance Testing Activities	$_____	
Subtotal		$_____

Other Direct & Indirect Costs

O&M Scope of Work	$_____	
Mobilization	$_____	
Demobilization	$_____	
Material Testing		
Concrete	$_____	

Soils	$_____	
Other	$_____	
Administrative		
Shop Drawings	$_____	
Record Documents	$_____	
Other	$_____	
Factory Testing		
Instrumentation and Controls	$_____	
Major Equipment	$_____	
Insurance (During Construction)	$_____	
Permitting Activities (During Development and Construction)	$_____	
Engineering (During Development and Construction)	$_____	
Program Management (During Construction)	$_____	
Letter of Credit from Contract Date to Construction Commencement Date	$_____	
Letter of Credit from Construction Commencement Date to Commencement of Operations Date	$_____	
Other (Specify) _____	$_____	
Other (Specify) _____	$_____	
Other (Specify) _____	$_____	
Other (Specify) _____	$_____	
Subtotal		$_____

GUARNATEED MAXIMUM PRICE [2] [3] **$_____**

[2] The sum of the subtotals must equal the proposed Guaranteed Maximum Price set forth above. The Fixed Design-Build Price is binding and will be used to establish the Capital Reserve Component of the Service Fee as discussed

in Section 6.9.2.C. (subject to change as a result of negotiations). The breakdown of the Guaranteed Maximum Price provided above is for informational purposes only.

[3]The Guaranteed Maximum Price shall include all costs, in U.S. Dollars, including all taxes and applicable operating and maintenance costs prior to Acceptance

PROPOSAL FORM 16
OPERATION AND MAINTENANCE PRICE BREAKDOWN[1]

(A) Annual Base Operation Fee Solid Waste (Per Ton) and/or septage (Per 1000 Gallons)

Solid Waste

1.	Labor		Number	Annual Cost	
	a.	Gasifier/Boiler Operators	____	$_____	
	b.	Waste/Material Handlers/Crane Operators	____	$_____	
	c.	Maintenance Personnel	____	$_____	
	d.	Supervisor/Management	____	$_____	
	e.	Residue Handlers	____	$_____	
	f	Managers	____	$_____	
	g.	Office/Clerical Personnel	____	$_____	
	h.	Clean-up Personnel	____	$_____	
	i.	Scale Operators	____	$_____	
	j.	Other (itemize these workers on a separate sheet and insert total here)	____	$_____	
		Subtotal			**$_____**
2.	Maintenance - Materials				
	a.	Supplies		$_____	
	b.	Spare Parts		$_____	
	c.	Equipment Maintenance and Repair		$_____	
	d.	Rolling Stock Maintenance and Repair		$_____	
	e.	Building Maintenance and Repair		$_____	
	f.	Consumables (e.g., chemicals, reagents)		$_____	

[1] Pricing as of DATE, 20XX. Prices to be escalated in accordance with Agreement Appendix XX, which shall be based upon Proposal Form 19.

Scrubber Lime _____tons/yr at $___/ton

Ammonia or urea _____tons/yr at $___/ton

Activated carbon _____tons/yr at $___/ton

Gasifier/Boiler chemicals _____tons/yr at $___/ton

g. Other (itemize these costs on a separate sheet and insert total here) $_____

Subtotal **$_____**

3. Contracted Services (itemize these costs on a separate sheet and insert total here) **$_____**

4. Auxiliary Fuel Costs

a. Fuel oil/Natural Gas (_____ gallons/yr at $____/gallon $_____

b Natural Gas (_____ 1000CF/yr at $____/1000CF $_____

c. Other (specify quantity and cost for each on a separate sheet)

Subtotal **$_____**

5. Purchased Utilities

a. Electricity _____MWh at $_____/MWh $_____

b. Water _____1000gal/yr at $_____1000gal $_____

c. Sewer $_____

d. Other (specify quantity and cost for each on a separate sheet)

Subtotal $_____

6. Guaranty Agreement **$_____**

7. Letter of Credit **$_____**

8. Insurance

a. Worker's Compensation $_____

b. Employer's Liability $_____

c. Comprehensive General Liability $_____

d. Comprehensive Auto Liability $_____

	e.	"All Risk" Property Damage	$_____	
	f.	Business Interruption	$_____	
	g.	Boiler and Machinery	$_____	
	h.	Excess Umbrella Liability	$_____	
	i.	Professional Liability	$_____	
	j.	Environmental Impairment	$_____	
	k.	Other (if proposed)	$_____	
		Subtotal		**$_____**
9.	Administrative			
	a.	Continuous/Periodic Monitoring/Testing	$_____	
	b.	Administration of Project Agreements and Bond Documents	$_____	
	c.	Overhead	$_____	
	d.	Other (itemize these costs on a separate sheet and insert total here)	$_____	
		Subtotal		**$_____**
10.	Taxes			**$_____**
11.	Other (itemize these costs on a separate sheet and insert total here)			**$_____**

SOLID WASTE TOTAL ANNUAL BASE OPERATION FEE

(PER TON) $_____

Septage (Per 1000 Gallon)

1.	Labor		Number	Annual Cost
	a.	Operators	____	$_____
	b.	Equipment Operators	____	$_____
	c.	Maintenance Personnel	____	$_____

d.	Supervisor/Management	____	$_____		
e.	Residue Handlers	____	$_____		
f	Managers	____	$_____		
g.	Office/Clerical Personnel	____	$_____		
h.	Clean-up Personnel	____	$_____		
i.	Scale Operators	____	$_____		
j.	Other (itemize these workers on a separate sheet and insert total here)	____	$_____		
	Subtotal				**$_____**

2. Maintenance - Materials

a.	Supplies		$_____		
b.	Spare Parts		$_____		
c.	Equipment Maintenance and Repair		$_____		
d.	Rolling Stock Maintenance and Repair		$_____		
e.	Building Maintenance and Repair		$_____		
f.	Consumables (e.g., chemicals, reagents)		$_____		
	Lime	_____tons/yr at $___/ton			
	Flocculent	_____tons/yr at $___/ton			
	Activated carbon	_____tons/yr at $___/ton			
	Chemicals/Odorants	_____tons/yr at $___/ton			
g.	Other (itemize these costs on a separate sheet and insert total here)		$_____		
	Subtotal				**$_____**

3. Contracted Services (itemize these costs on a separate sheet and insert total here) **$_____**

4. Fuel Costs

a. Fuel oil (_____ gallons/yr at $____/gallon $_____

b Natural Gas (_____ 1000CF/yr at $____/1000CF $_____

c. Other (specify quantity and cost for each on a separate sheet)

Subtotal **$_____**

5. Purchased Utilities

a. Electricity _____MWh at $_____/MWh $_____

b. Water _____1000gal/yr at $_____1000gal $_____

c. Sewer $_____

d. Other (specify quantity and cost for each on a separate sheet)

Subtotal $_____

6. Guaranty Agreement **$_____**

7. Letter of Credit **$_____**

8. Insurance

a. Worker's Compensation $_____

b. Employer's Liability $_____

c. Comprehensive General Liability $_____

d. Comprehensive Auto Liability $_____

e. "All Risk" Property Damage $_____

f. Business Interruption $_____

g. Boiler and Machinery $_____

h. Excess Umbrella Liability $_____

i. Professional Liability $_____

j. Environmental Impairment $_____

k. Other (if proposed) $_____

Subtotal **$_____**

9. <u>Administrative</u>

a. Continuous/Periodic Monitoring/Testing $_____

	b.	Administration of Project Agreements and Bond Documents	$_____	
	c.	Overhead	$_____	
	d.	Other (itemize these costs on a separate sheet and insert total here)	$_____	
		Subtotal		**$_____**
10.	Taxes			**$_____**
11.	Other (itemize these costs on a separate sheet and insert total here)			**$_____**

SEPTAGE TOTAL ANNUAL OPERATION FEE $_____

SEPTAGE PROPSED DISPOSAL FEE

(PER 1000 GALLONS) $_____

(B) Incremental Solid Waste (Per Ton)) Cost Associated with Excess Operation Fee

Solid Waste (Per Ton)

			Incremental Per Ton Cost [2]	
1.	Labor			
	a.	Gasifier/Boiler Operators	$_____	
	b.	Waste Handlers/Crane Operators	$_____	
	c.	Maintenance Personnel	$_____	
	d.	Supervisor/Management	$_____	
	e.	Ash Handlers	$_____	
	f.	Office/Clerical Personnel	$_____	
	g.	Clean-up Personnel	$_____	
	h.	Scale Operators	$_____	
	i.	Other (itemize these workers on a separate sheet and insert total here)	$_____	
		Subtotal		**$_____**

2.	Maintenance - Materials			
	a.	Supplies	$_____	
	b.	Spare Parts	$_____	
	c.	Equipment Maintenance and Repair	$_____	
	d.	Rolling Stock Maintenance and Repair	$_____	
	e.	Building Maintenance and Repair	$_____	
	f.	Consumables (e.g., chemicals, reagents)	$_____	
	g.	Other (itemize these costs on a separate sheet and insert total here)	$_____	
		Subtotal		**$_____**
3.	Contracted Services (itemize these costs on a separate sheet and insert total here)			**$_____**
4.	Auxiliary Fuel Costs			**$**_____
5.	Purchased Utilities			$_____
6.	Guaranty Agreement			**$_____**
7.	Letter of Credit			**$_____**
8.	Insurance			
	a.	Worker's Compensation	$_____	
	b.	Employer's Liability	$_____	
	c.	Comprehensive General Liability	$_____	
	d.	Comprehensive Auto Liability	$_____	
	e.	"All Risk" Property Damage	$_____	
	f.	Business Interruption	$_____	
	g.	Boiler and Machinery	$_____	
	h.	Excess Umbrella Liability	$_____	
	c.	Other (if proposed)	$_____	
		Subtotal		**$_____**

9. Administrative

a.	Continuous/Periodic Monitoring/Testing	$_____	
b.	Administration of Project Agreements and Bond Documents	$_____	
c.	Other (itemize these costs on a separate sheet and insert total here)	$_____	
	Subtotal		**$_____**

10. Taxes **$_____**

11. Other (itemize these costs on a separate sheet and insert total here) **$_____**

TOTAL SOLID WASTE EXCESS OPERATION FEE

(PER TON) $_____

(C) Project Pro forma

Attach a pro forma for the project addressing all revenue streams and expenditures.

PROPOSAL FORM 17
COST OF CAPITAL BY SOURCE

SOURCE	COST OF CAPITAL
1) _____	$ _____
2) _____	$ _____
3) _____	$ _____

(Note to Proposers: Expand as necessary.)

PROPOSAL FORM 18
SOLID WASTE SERVICE FEE BREAKDOWN

SUMMARY OF YEAR 1 SOLID WASTE SERVICE FEE

Item	**Cost**	
Base Operation Fee[1]	$ _____	/yr
Excess Operation Fee[2]	$ _____	/ton
Capital Reserve[3]	$ _____	/yr

[1] The Base Operation Fee shall be based upon Year 1 Operation. Thereafter, the Base Operation Fee shall escalate in accordance with Appendix 3 of the Agreement.

[2] The Excess Operation Fee shall be based upon Year 1 Operation. Thereafter, the Excess Operation Fee shall escalate in accordance with Appendix 3 of the Agreement.

[3] The Capital Reserve Component is the Company's only vehicle to recover their equity contribution and the cost of internal/external financing.

PROPOSAL FORM 19
ESCALATION INDICES

The Proposer shall provide the following proposed escalation indices and modifiers, which shall be included as Appendix 3 in the Agreement:

1. Proposed Guaranteed Maximum Price Escalation Index:

   _____

2. Proposed Guaranteed Maximum Price Escalation Index Modifier[1]

   _____ %

3. Proposed Operation Fee(s) Escalation Index

   _____

4. Proposed Operation Fee(s) Escalation Index Modifier[2]

   _____ %

[1] The modifier shall be a percentage of the change in the index or indices, not to exceed 100%.

[2] The modifier shall be a percentage of the change in the index or indices, not to exceed 100%.

PROPOSAL FORM 20
MAXIMUM ELECTRICITY UTILIZATION/DEMAND

.The Company shall propose a Maximum Annual Electricity Utilization, and a Maximum Peak Electricity Capacity. If the Project produces electricity, it is the MSB's expectation that the Company will operate the Facility(ies) using electricity that it produces. The values below shall consider periods when electricity will be required during scheduled or unscheduled Project downtime and/or when the Project is producing inadequate electricity to operate.

(A) Maximum Annual Electricity Utilization for Waste Management Project:

_____ kilowatt-hours per year

(B) Maximum Peak Electricity Capacity for Waste Management Project:

_____ kilowatt-hours per year

Notes:

The MSB will not reimburse the Company for electricity costs.

PROPOSAL FORM 21
NON-DEBARMENT CERTIFICATE OF COMPLIANCE

RFP No: _____

_____affirms it is in

(Company Name)

compliance with all laws, as applicable, governing state and federal debarment, and that:

1. The company/individual named above was not debarred at the time of bid submittal;

2. The company/individual named above shall immediately notify the MSB should debarment status change anytime during this agreement.

Moreover _____

(Company Name)

acknowledges that making a false statement shall cause its suspension and may cause its debarment from future contract awards.

_____

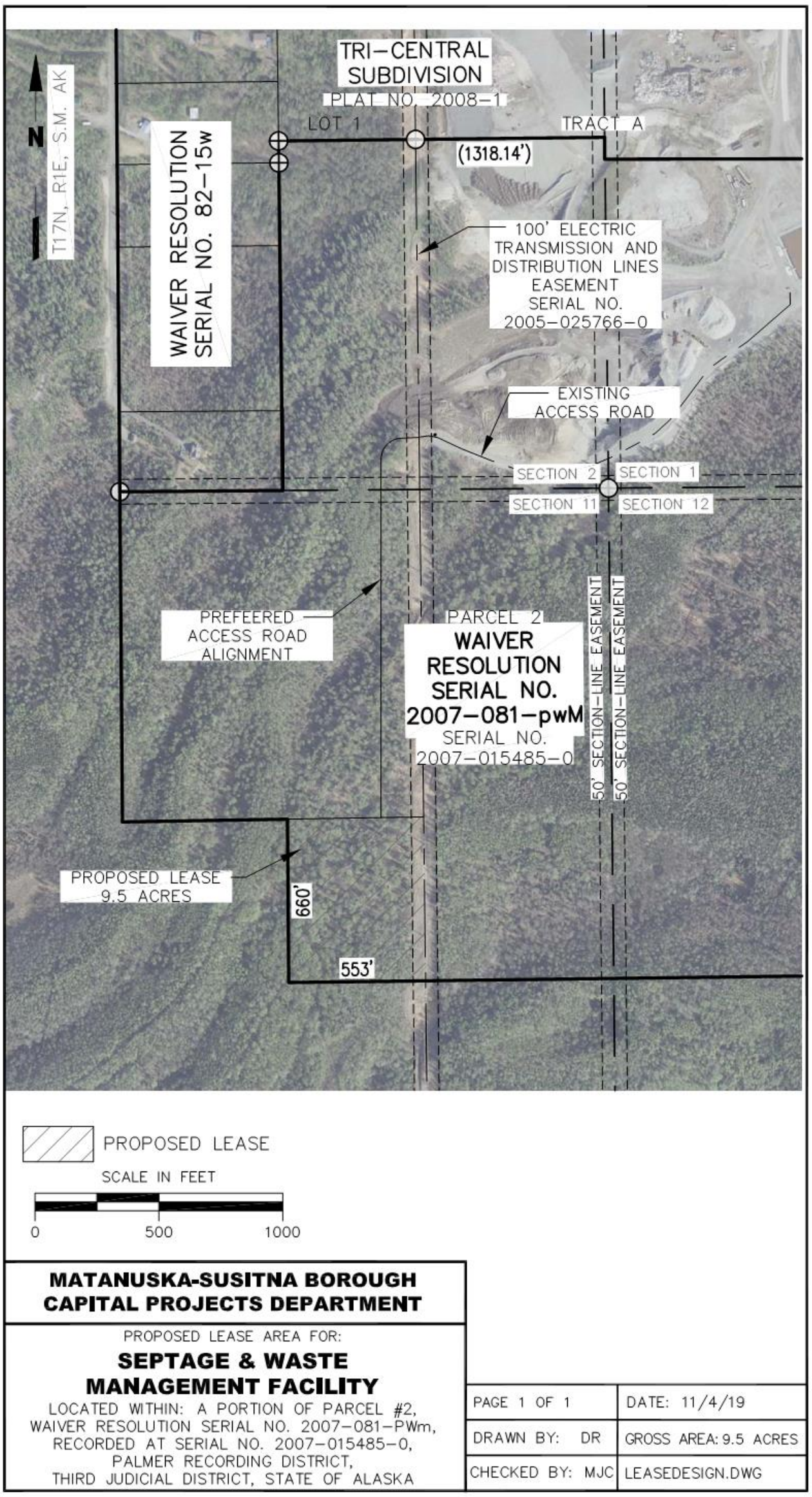
Name of Proposer

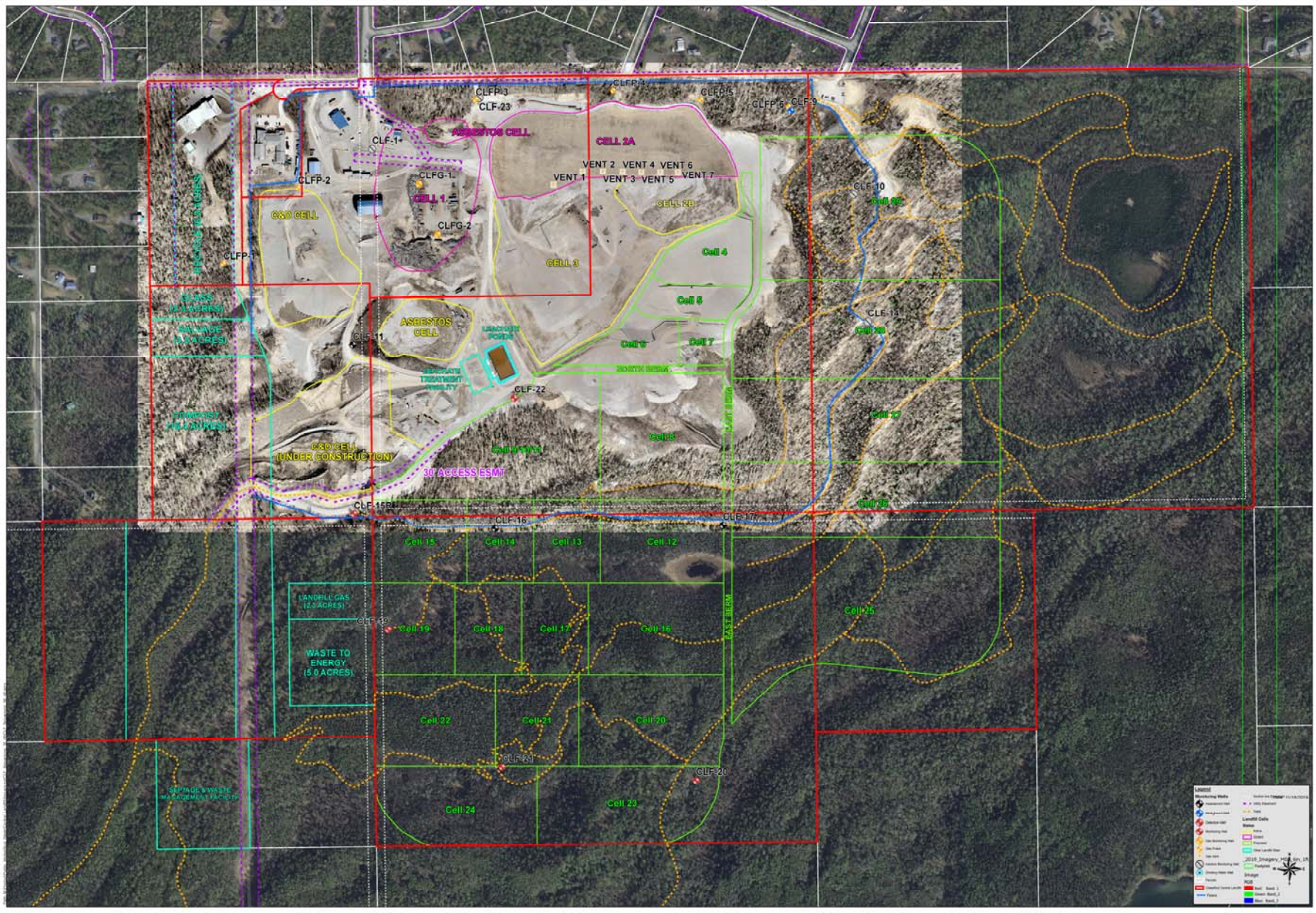
Name of Designated Signatory

Signature

Title

ATTACHMENT A
FIGURES AND SITE PHOTOGRAPH


TRI-CENTRAL
SUBDIVISION
PLAT NO. 2008-1
LOT 1
TRACT A
(1318.14')
N
T17N, R1E, S.M. AK
WAIVER RESOLUTION
SERIAL NO. 82-15w
100' ELECTRIC
TRANSMISSION AND
DISTRIBUTION LINES
EASEMENT
SERIAL NO.
2005-025766-0
EXISTING
ACCESS ROAD
SECTION 2
SECTION 1
SECTION 11
SECTION 12
PREFEERED
ACCESS ROAD
ALIGNMENT
PARCEL 2
WAIVER
RESOLUTION
SERIAL NO.
2007-081-pwM
SERIAL NO.
2007-015485-0
50' SECTION-LINE EASEMENT
50' SECTION-LINE EASEMENT
PROPOSED LEASE
9.5 ACRES
660'
553'
PROPOSED LEASE
SCALE IN FEET
0
500
1000
MATANUSKA-SUSITNA BOROUGH
CAPITAL PROJECTS DEPARTMENT
PROPOSED LEASE AREA FOR:
SEPTAGE & WASTE
MANAGEMENT FACILITY
LOCATED WITHIN: A PORTION OF PARCEL #2,
WAIVER RESOLUTION SERIAL NO. 2007-081-PWm,
RECORDED AT SERIAL NO. 2007-015485-0,
PALMER RECORDING DISTRICT,
THIRD JUDICIAL DISTRICT, STATE OF ALASKA
PAGE 1 OF 1
DATE: 11/4/19
DRAWN BY: DR
GROSS AREA: 9.5 ACRES
CHECKED BY: MJC
LEASEDESIGN.DWG



0 200 400 800 Feet

Solid Waste Division
Central Landfill
2019 Half Foot Aerial Imagery
2019 Quarter Foot Drone Imagery

This map is solely for informational purposes only. The Borough makes no express or implied warranties with respect to the character, function, or capabilities of the map or the suitability of the map for any particular purpose beyond those originally intended by the Borough. For information regarding the full disclaimer and policies related to acceptable uses of this map, please contact the Matanuska Susitna Borough GIS Division at 907-861-7858

View of the proposed facility site, looking south, September 2019.

ATTACHMENT B
COMMUNICATION PROTOCOL

Project Communication Objectives

The MSB is proposing to develop a Waste Management Project. The MSB anticipates interest from multiple U.S. and international firms, and intends to take all reasonable measures to assure that accurate and consistent information is distributed regarding all aspects of the Project. Furthermore, the MSB is committed to use a fair and open procurement process for the Project.

Specifically, the MSB is committed to:

- Achieving the fair and accurate distribution of relevant information to interested parties;
- Avoiding "insider" information and the appearance thereof;
- Providing regular informational updates about the Project; and
- Providing prompt, thorough and accurate responses to parties with questions or concerns.

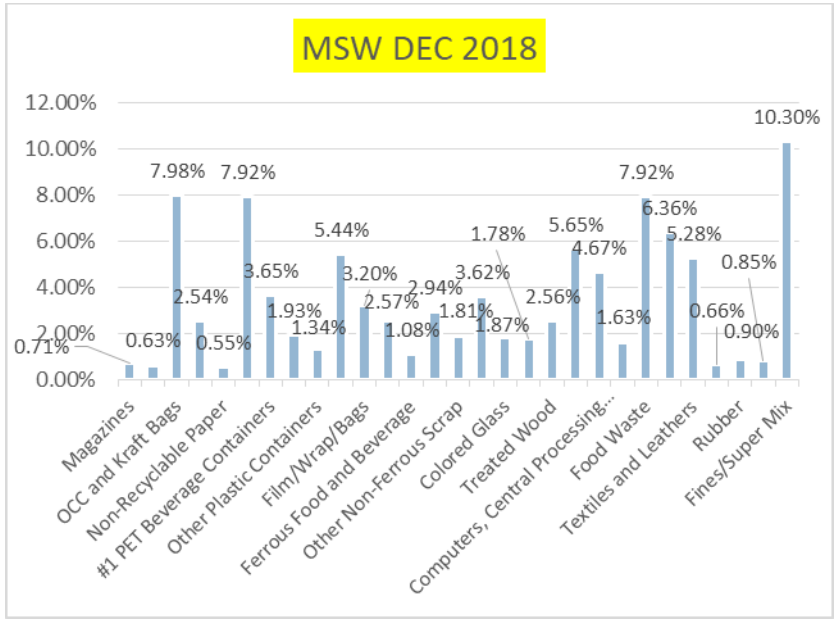
ATTACHMENT C
CREVASSE MORAINE NEIGHBORS UNITED

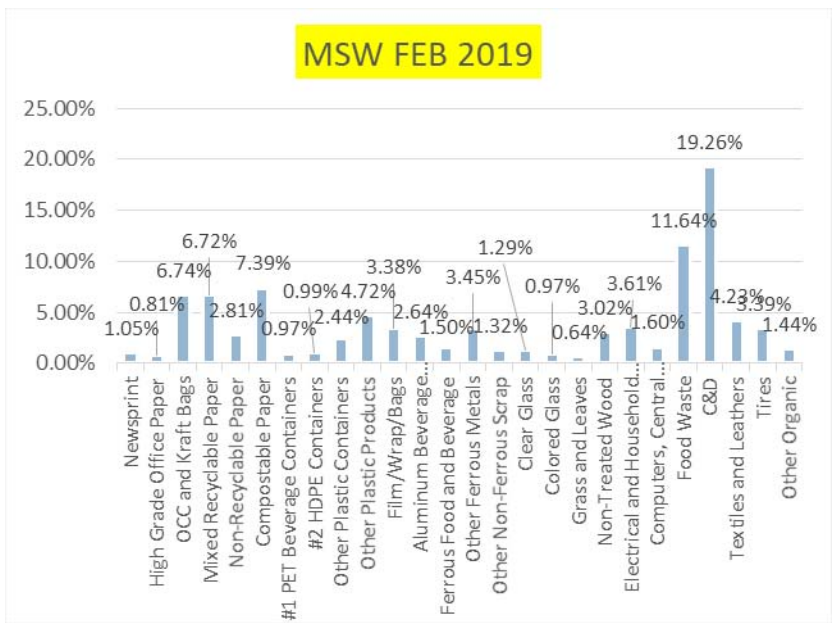
The attached letter dated July 6, 2019 has been received regarding this Project. The Proposers shall be aware of the issues and concerns and shall address how the concerns expressed will be addressed in their Proposal.

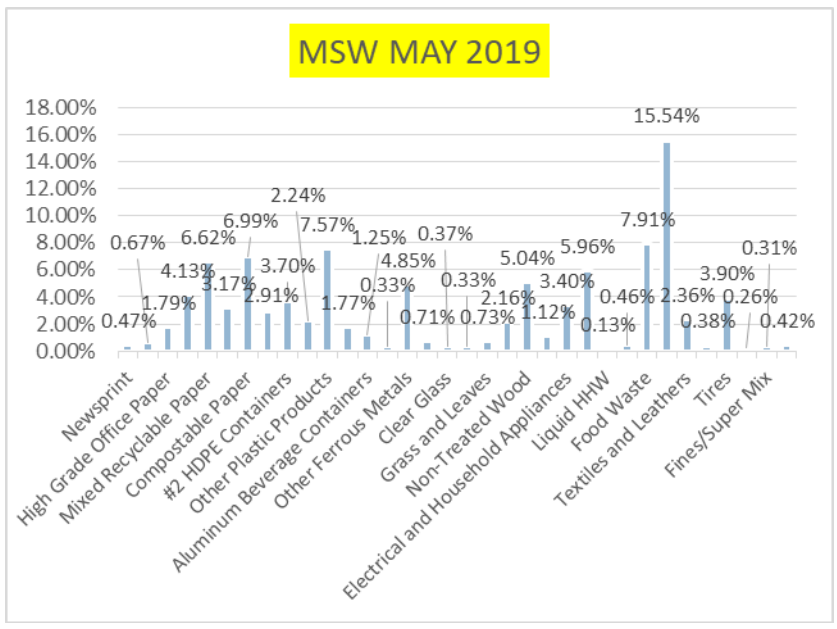
ATTACH July 6, 2019 letter

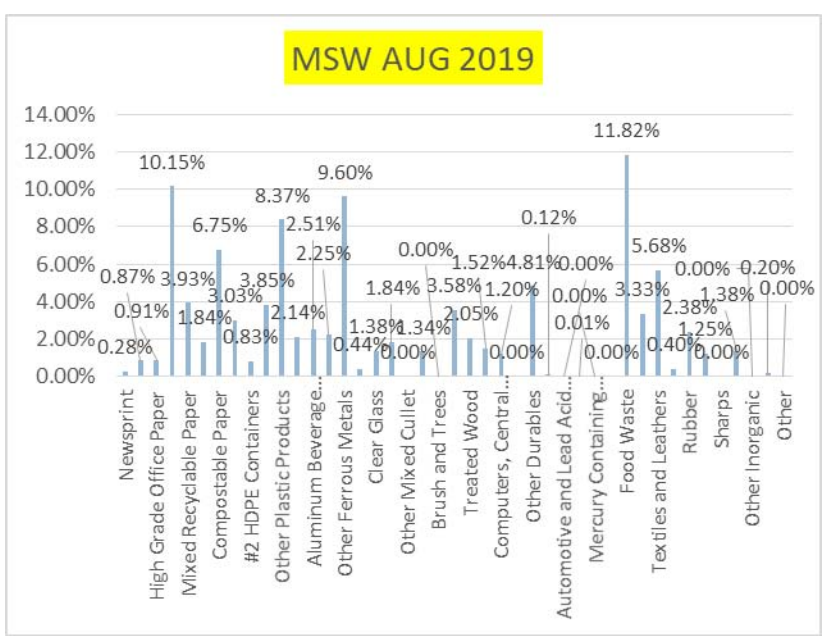
ATTACHMENT D
WASTE CHARACTERIZATION DATA

The following pages provides detailed information obtained from quarterly waste sampling.

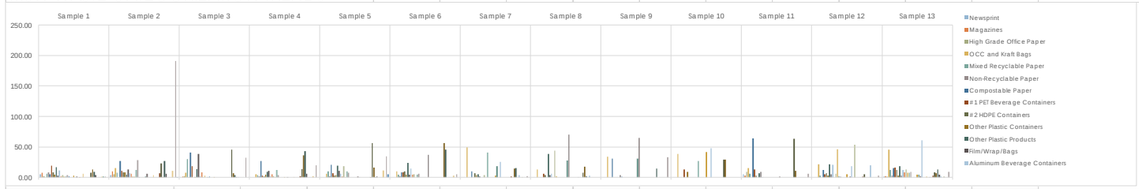

MSW DEC 2018
12.00%
10.00%
8.00%
6.00%
4.00%
2.00%
0.00%
0.71%
0.63%
7.98%
2.54%
0.55%
7.92%
3.65%
1.93%
1.34%
5.44%
3.20%
2.57%
1.08%
2.94%
1.81%
3.62%
1.78%
1.87%
2.56%
5.65%
4.67%
1.63%
7.92%
6.36%
5.28%
0.66%
0.85%
0.90%
10.30%
Magazines
OCC and Kraft Bags
Non-Recyclable Paper
#1 PET Beverage Containers
Other Plastic Containers
Film/Wrap/Bags
Ferrous Food and Beverage
Other Non-Ferrous Scrap
Colored Glass
Treated Wood
Computers, Central Processing...
Food Waste
Textiles and Leathers
Rubber
Fines/Super Mix


MSW FEB 2019
25.00%
20.00%
15.00%
10.00%
5.00%
0.00%
1.05%
0.81%
6.74%
6.72%
2.81%
7.39%
0.97%
0.99%
2.44%
4.72%
3.38%
2.64%
1.50%
3.45%
1.32%
1.29%
0.97%
0.64%
3.02%
3.61%
1.60%
19.26%
11.64%
4.23%
3.39%
1.44%
Newsprint
High Grade Office Paper
OCC and Kraft Bags
Mixed Recyclable Paper
Non-Recyclable Paper
Compostable Paper
#1 PET Beverage Containers
#2 HDPE Containers
Other Plastic Containers
Other Plastic Products
Film/Wrap/Bags
Aluminum Beverage...
Ferrous Food and Beverage
Other Ferrous Metals
Other Non-Ferrous Scrap
Clear Glass
Colored Glass
Grass and Leaves
Non-Treated Wood
Electrical and Household...
Computers, Central...
Food Waste
C&D
Textiles and Leathers
Tires
Other Organic


MSW MAY 2019
18.00%
16.00%
14.00%
12.00%
10.00%
8.00%
6.00%
4.00%
2.00%
0.00%
0.47%
0.67%
1.79%
4.13%
6.62%
3.17%
6.99%
2.91%
3.70%
2.24%
7.57%
1.77%
1.25%
0.33%
4.85%
0.71%
0.37%
0.33%
0.73%
2.16%
5.04%
1.12%
3.40%
5.96%
0.13%
0.46%
15.54%
7.91%
2.36%
0.38%
3.90%
0.26%
0.31%
0.42%
Newsprint
High Grade Office Paper
Mixed Recyclable Paper
Compostable Paper
#2 HDPE Containers
Other Plastic Products
Aluminum Beverage Containers
Other Ferrous Metals
Clear Glass
Grass and Leaves
Non-Treated Wood
Electrical and Household Appliances
Liquid HHW
Food Waste
Textiles and Leathers
Tires
Fines/Super Mix


MSW AUG 2019
14.00%
12.00%
10.00%
8.00%
6.00%
4.00%
2.00%
0.00%
0.28%
0.87%
0.91%
10.15%
3.93%
1.84%
6.75%
3.03%
0.83%
3.85%
2.14%
8.37%
2.51%
2.25%
9.60%
0.44%
1.38%
1.84%
0.00%
1.34%
0.00%
3.58%
2.05%
1.52%
0.00%
1.20%
0.00%
4.81%
0.12%
0.00%
0.01%
0.00%
11.82%
3.33%
0.40%
5.68%
2.38%
1.25%
0.00%
0.00%
1.38%
0.00%
0.20%
0.00%
Newsprint
High Grade Office Paper
Mixed Recyclable Paper
Compostable Paper
#2 HDPE Containers
Other Plastic Products
Aluminum Beverage...
Other Ferrous Metals
Clear Glass
Other Mixed Cullet
Brush and Trees
Treated Wood
Computers, Central...
Other Durables
Automotive and Lead Acid...
Mercury Containing...
Food Waste
Textiles and Leathers
Rubber
Sharps
Other Inorganic
Other

MSW WASTE CATEGORIZATION TRENDS

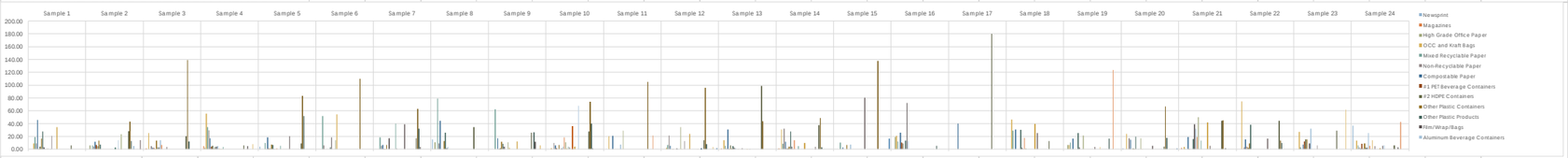


	12/7/2018	12/11/2018	12/11/2018	12/13/2018	12/13/2018	12/13/2018	12/14/2018	12/14/2018	11/14/2018	10/14/2018	12/15/2018	1/15/2019	12/15/2018
Generator Type	Residential	Commercial	Institutional	Residential	Residential	Residential	Commercial	Residential	Residential	Residential	Institutional	Residential	Residential
Type Of Vehicle	Rear-load	Rear-load	Roll-off	Rear-load	Roll-Off	Rear-load		Rear-load	Walking Floor	Walking Floor			Rear-load
Hauler	MSB	Alaska Waste	Denali Refuse	Raven Valley	TEWS	MSB	Alaska Waste	Tews	MSB	MSB	Denali Refuse	MSB	MSB
Truck #	#120	#207580	#302	#211	#193, 190	64 can #02	#207580	#1199	#64	#63 Can 7	#607	#64 can 14	#63 can 7
Visual Load Observation	Mainly household food trash	Mainly household waste / food trash	School District	Mainly household / mix of food trash & toys	Mostly household trash from Willow community			Can from Big Lake			School District - Palmer Junior High School - all black bags	Mainly household with C&D, furniture and TV's	Mainly household with C&D
Weather Information	40 degrees F / raining / wind 10mph	26 degrees F / wind 0mph / dark	30 degrees F / sunny / wind 5mph	19 degrees F / snowing / wind 0mph		22 degrees F / sunny / wind 0mph	13 degrees F / partially cloudy / wind 0mph	13 degrees F / cloudy / wind 0mph	16 degrees F	16 degrees F / snowing	14 degrees F / cloudy	13 degrees F / cloudy	10 degrees F / cloudy / wind 0mph
Pre-Sort Weight of Entire Sample	160 pounds	380 pounds	200 pounds	200 pounds	240 pounds	240 pounds	200 pounds	240 pounds	208 pounds	233 pounds	200 pounds	220 pounds	300 pounds

CATEGORY	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Sample 7	Sample 8	Sample 9	Sample 10	Sample 11	Sample 12	Sample 13	Trend
Newsprint	5.00	3.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00	0.00	1.31	
Magazines	7.20	9.44	1.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.13	0.00	2.25	
High Grade Office Paper	2.40	5.50	1.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.38	0.00	1.38	
OCC and Kraft Bags	0.00	15.13	7.75	5.50	5.94	9.44	49.44	12.56	34.06	38.50	15.31	21.44	45.19	
Mixed Recyclable Paper	6.00	7.75	30.25	3.69	9.69	4.38	0.00	0.00	0.00	0.00	6.25	2.81	12.06	
Non-Recyclable Paper	8.00	0.63	0.19	2.44	2.31	1.88	0.00	0.00	0.00	0.00	0.00	0.00	2.56	
Compostable Paper	5.40	26.69	40.50	26.69	20.44	7.88	10.00	0.00	30.31	0.00	63.56	11.75	15.06	
#1 PET Beverage Containers	19.30	10.63	18.56	2.88	6.94	8.13	0.00	5.94	0.00	13.00	12.69	5.38	15.69	
#2 HDPE Containers	8.50	8.31	0.00	1.50	2.50	9.75	7.06	3.56	0.00	0.00	2.50	6.69	12.44	
Other Plastic Containers	4.20	8.31	0.13	4.31	3.50	4.38	3.50	0.00	0.00	9.06	0.00	3.06	3.19	
Other Plastic Products	16.40	4.50	13.88	9.38	19.06	23.56	5.06	38.75	0.00	0.00	6.88	21.31	18.50	
Film/Wrap/Bags	3.20	13.13	38.25	10.75	10.19	4.38	1.25	3.56	3.44	0.00	8.75	4.81	2.63	
Aluminum Beverage Containers	11.70	7.00	1.81	2.25	6.06	14.63	0.00	5.69	1.44	0.00	0.63	20.88	11.88	
Ferrous Food and Beverage	2.20	5.88	8.13	5.06	1.25	4.56	0.00	0.00	0.00	0.00	0.00	0.00	8.19	
Other Ferrous Metals	3.30	1.06	0.25	2.31	17.94	5.00	3.31	43.63	0.00	0.00	0.00	6.31	12.81	
Other Non-Ferrous Scrap	1.10	1.19	2.50	0.25	0.06	0.00	0.00	2.25	0.00	0.00	0.00	46.00	7.63	
Clear Glass	2.30	11.88	0.00	12.06	10.06	4.38	40.94	0.00	0.00	26.88	0.00	2.00	7.56	
Colored Glass	3.50	28.50	0.50	3.56	7.69	5.63	0.00	0.00	0.00	0.00	0.00	0.94	8.75	
Other Mixed Cullet	2.10	0.50	0.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Grass and Leaves	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Brush and Trees	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Non-Treated Wood	3.00	0.00	0.25	0.81	0.00	0.00	2.56	0.00	0.00	41.81	0.00	5.00	4.63	
Treated Wood	0.00	1.56	0.00	0.00	0.00	0.00	18.13	27.81	30.75	0.00	0.00	0.00	4.13	
Electrical and Household Appliances	1.40	5.63	0.00	0.13	1.06	36.75	0.00	70.19	64.44	0.00	1.38	1.44	2.00	
Computers, Central Processing Units/Peripherals, TV's	0.00	0.00	0.00	0.00	0.13	0.00	25.19	0.00	0.00	47.75	0.00	18.50	60.63	
Cell Phones and Chargers	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Other Durables	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	53.13	0.00	
Liquid HHW	5.70	3.56	0.00	0.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.94	
Automotive and Lead Acid Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Other Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.88	
Mercury Containing Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Other HHW	0.00	6.38	0.00	1.69	0.88	0.00	1.31	0.00	0.00	0.00	0.00	1.44	2.63	
Food Waste	7.30	22.63	45.56	13.69	56.38	0.00	0.00	7.75	0.00	28.75	63.38	5.00	7.94	
C&D	12.70	0.88	7.06	35.88	16.25	56.44	14.19	17.56	0.00	29.38	10.50	0.00	6.56	
Textiles and Leathers	9.20	26.56	3.25	43.13	0.50	45.56	15.19	1.88	14.19	0.00	0.00	0.00	12.88	
Diapers	3.70	6.31	0.19	5.56	1.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.44	
Rubber	0.00	0.00	0.50	0.00	0.00	0.00	3.75	2.94	0.00	0.00	0.00	20.00	2.31	
Tires	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Sharps	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	1.38	
Other Organic	1.30	10.88	0.00	1.75	11.25	2.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Other Inorganic	2.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Fines/Super Mix	1.00	190.81	32.56	19.63	34.69	5.00	2.38	0.00	33.13	0.00	5.63	2.63	8.88	
Other	0.00	0.44	0.00	0.00	4.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Sum of all Individual Weights	159.90	445.50	256.19	215.69	250.75	254.56	203.31	244.25	211.75	235.13	214.94	260.50	309.25	
Initial Pre-Sort Sample Weight	160.00	380.00	200.00	200.00	240.00	240.00	200.00	240.00	208.00	233.00	200.00	220.00	300.00	
Difference (should be 0 or very close)	0.10	-65.50	-56.19	-15.69	-10.75	-14.56	-3.31	-4.25	-3.75	-2.13	-14.94	-40.50	-9.25	
		Snow melting mixed with load and on deck of truck	Snow melting mixed in with load											

SUMMARY	MSW DEC 2018
Newsprint	0.47%
Magazines	0.71%
High Grade Office Paper	0.63%
OCC and Kraft Bags	7.98%
Mixed Recyclable Paper	2.54%
Non-Recyclable Paper	0.55%
Compostable Paper	7.92%
#1 PET Beverage Containers	3.65%
#2 HDPE Containers	1.93%
Other Plastic Containers	1.34%
Other Plastic Products	5.44%
Film/Wrap/Bags	3.20%
Aluminum Beverage Containers	2.57%
Ferrous Food and Beverage	1.08%
Other Ferrous Metals	2.94%
Other Non-Ferrous Scrap	1.87%
Clear Glass	3.62%
Colored Glass	1.81%
Other Mixed Cullet	0.11%
Grass and Leaves	0.00%
Brush and Trees	0.00%
Non-Treated Wood	1.78%
Treated Wood	2.56%
Electrical and Household Appliances	5.65%
Computers, Central Processing Units/Peripherals, TV's	4.67%
Cell Phones and Chargers	0.01%
Other Durables	1.63%
Liquid HHW	0.34%
Automotive and Lead Acid Batteries	0.00%
Other Batteries	0.03%
Mercury Containing Products	0.00%
Other HHW	0.44%
Food Waste	7.92%
C&D	6.36%
Textiles and Leathers	5.28%
Diapers	0.66%
Rubber	0.90%
Tires	0.00%
Sharps	0.04%
Other Organic	0.85%
Other Inorganic	0.07%
Fines/Super Mix	10.30%
Other	0.15%
	100.00%

MSW WASTE CATEGORIZATION TRENDS

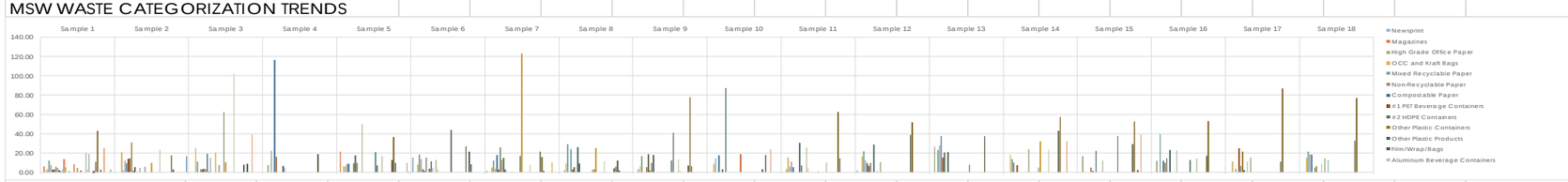


	2/12/2019	2/12/2019	2/12/2019	2/13/2019	2/13/2019	2/13/2019	2/13/2019	2/13/2019	2/13/2019	2/13/2019	2/14/2019	2/14/2019	2/14/2019	2/14/2019	2/14/2019	2/14/2019	2/15/2019	2/15/2019	2/15/2019	2/15/2019	2/15/2019	2/15/2019	2/15/2019	2/14/2019	2/14/2019	2/14/2019
Generator Type	Institutional	Residential	Residential	Commercial	Residential	Commercial	Residential	Commercial	Residential	Residential	Residential	Residential	Commercial	Residential	Institutional	Residential	Institutional	Institutional	Industial	Residential	Residential	Residential	Residential	Residential	Residential	Residential
Type of Vehicle	Roll-off	Rear-load	Rear-load	Roll-off	Rear-load	Roll-off	Rear-load	Roll-off	Rear-load	Rear-load	Rear-load	Rear-load	Roll-off	Rear-load	Rear-load	Rear-load	Roll-off	Roll-off	Rear-load	Rear-load	Rear-load	Rear-load	Rear-load	Rear-load	Rear-load	Rear-load
Hauler	TK Refuse	Alaska Waste	MSB Landfill	Alaska Waste	TEWS	Denali Refuse	TEWS	Denali Refuse	Mat-Su Borough	TEWS	Alaska Waste	Alaska Waste	Mat-Su Borough	Alaska Waste	Denali Refuse	Alaska Waste	Alaska Waste	Alaska Waste	City of Palmer	Mat-Su Borough	TEWS	Mat-Su Borough	Alaska Waste	Mat-Su Borough		
Truck #	#408 (can #32)	#362281	#64 (can #03)	#31	#07 (can #20)	#607	#7 (can #15)	#302 (can #53)	#120 (can #18)	#193	#262073	#420450	#64 (can #7)	#420450	#2372659	#262	#420450	#207583	#8607	Peterbilt #64	#193 (can #149)	#120 (can #08)	#2620730	#120		
Visual Load Observation	Mainly black bags	Compacted household trash	Loose mixed solid waste	Houston Three Beans	Varied loose houshold solid waste	Loose mixed commercial solid waste				From Willow Transfer Station	A lot of C&D	Loose C&D mixed household solid waste				Regional Hospital	State of AK Dept. of Corrections - mostly compacted food trash	Wasilla Restaurants	Food trash mixed with boxes, etc.		Household				
Weather Information	32 degrees F / sunny	25 degrees F	36 degrees F		13 degrees F	14 degrees F	14 degrees F	14 degrees F		20 degrees F / sunny	20 degrees F / sunny	18 degrees / 20 mph winds	22 degrees F			2 degrees F / sunny	2 degrees F / sunny	4 degrees F / sunny	5 degrees F / sunny	7 degrees F / sunny	7 degrees F / sunny	13 degrees F / cloudy	13 degrees F / cloudy	14 degrees F / sunny	
Pre-Sort Weight of Entire Sample	220 pounds	220 pounds	220 pounds	200 pounds	220 pounds	220 pounds	260 pounds	220 pounds	200 pounds	300 pounds	220 pounds	200 pounds	220 pounds	220 pounds	260 pounds	200 pounds	220 pounds	240 pounds	240 pounds	200 pounds	300 pounds	220 pounds	220 pounds	200 pounds		
CATEGORY	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Sample 7	Sample 8	Sample 9	Sample 10	Sample 11	Sample 12	Sample 13	Sample 14	Sample 15	Sample 16	Sample 17	Sample 18	Sample 19	Sample 20	Sample 21	Sample 22	Sample 23	Sample 24	Trend	
Newsprint	0.00	0.00	0.00	0.00	4.38	0.00	0.00	15.31	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.00	1.25	0.00	0.00	0.00	36.94		
Magazines	0.00	0.00	0.94	4.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.81	0.00	0.00	0.00	0.00	0.00	0.00	2.56	0.00	0.00	0.00		
High Grade Office Paper	0.00	6.06	0.00	2.31	0.00	0.00	0.00	10.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.25	0.00	0.00	6.50	0.00	0.00	0.00	0.00		
OCC and Kraft Bags	9.13	0.00	25.00	55.50	0.00	0.00	0.00	0.00	0.00	1.69	19.94	2.13	13.94	30.44	0.00	20.81	0.00	46.50	6.75	24.13	3.31	74.38	26.75	13.50		
Mixed Recyclable Paper	18.81	6.13	0.00	34.44	10.00	51.88	18.31	79.19	62.00	0.00	0.00	6.38	5.63	8.56	10.06	12.44	0.00	29.06	10.31	0.00	0.25	0.00	3.06	6.25		
Non-Recyclable Paper	9.38	4.06	4.69	29.69	0.38	6.19	5.19	9.25	0.00	9.44	0.00	0.00	21.44	1.25	31.88	0.00	0.00	0.00	0.00	16.94	0.00	2.94	0.00	3.13		
Compostable Paper	45.56	11.38	2.25	16.81	18.13	0.00	6.75	44.38	17.00	5.75	20.56	5.63	30.94	11.31	2.88	25.81	40.00	30.44	16.75	14.75	19.06	15.44	7.06	1.25		
#1 PET Beverage Containers	0.19	6.75	2.44	4.19	0.88	0.00	0.06	0.00	0.50	1.44	0.00	0.00	0.56	0.94	0.00	10.31	0.00	0.00	0.00	0.00	0.31	4.38	12.25	8.75		
#2 HDPE Containers	4.06	4.63	0.63	5.50	1.25	0.00	0.13	0.00	1.63	0.00	0.00	0.38	6.25	0.94	0.00	9.38	0.00	0.00	0.00	1.25	0.00	2.56	15.31	1.19		
Other Plastic Containers	16.38	13.50	13.63	1.00	7.44	0.00	6.56	12.50	11.38	6.63	0.00	0.00	1.06	4.06	6.44	0.00	0.00	0.00	0.00	0.56	0.00	9.38	15.38	9.38		
Other Plastic Products	27.44	7.38	2.69	3.81	6.31	2.94	0.00	25.50	8.56	0.00	0.00	0.00	4.75	27.69	0.00	13.38	0.00	30.13	25.25	19.81	15.88	37.94	0.00	2.44		
Film/Wrap/Bags	3.00	0.00	2.75	4.13	0.63	18.44	16.81	1.56	3.88	1.00	0.00	0.75	2.19	4.38	0.00	72.06	0.00	2.56	2.81	0.00	39.00	0.00	8.94	2.50		
Aluminum Beverage Containers	0.31	0.00	14.00	4.75	0.19	0.00	0.00	3.75	0.00	3.94	7.50	0.38	1.94	0.13	7.00	12.50	0.00	0.56	0.00	0.50	32.06	0.00	31.94	25.19		
Ferrous Food and Beverage	0.06	0.00	6.75	0.81	0.88	0.00	0.00	0.00	0.00	18.19	0.00	0.00	0.00	14.25	0.00	0.00	0.00	17.50	0.00	0.00	19.25	0.00	0.00	5.50		
Other Ferrous Metals	0.94	0.00	0.00	0.31	0.00	14.00	0.00	0.00	10.75	11.19	29.06	34.25	0.69	0.00	0.00	0.00	0.00	1.25	21.69	17.06	49.94	0.00	0.00	0.00		
Other Non-Ferrous Scrap	0.00	0.00	0.00	0.31	0.00	54.38	0.00	0.00	2.38	0.88	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.00	0.00	0.00	14.31		
Clear Glass	0.56	0.00	0.00	3.25	5.63	0.00	40.13	0.00	0.00	4.00	0.00	0.00	0.00	4.75	0.00	0.00	0.00	0.00	0.00	0.00	13.13	0.00	0.00	0.00		
Colored Glass	21.06	0.00	3.81	0.00	0.00	0.00	1.31	0.00	0.00	3.13	0.00	12.75	1.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.94	4.50		
Other Mixed Cullet	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grass and Leaves	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Brush and Trees	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Non-Treated Wood	34.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.19	4.19	0.00	23.69	0.69	9.81	0.00	0.00	0.00	39.31	0.00	0.00	41.88	0.00	0.00	1.75		
Treated Wood	0.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Electrical and Household Appliances	0.00	0.00	0.00	0.00	20.13	0.00	38.75	0.00	0.00	0.00	0.00	0.00	0.69	0.00	80.00	0.00	0.00	25.25	3.38	5.06	5.19	16.25	0.00	5.50		
Computers, Central Processing Units/Peripherals, TV's	0.00	14.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	68.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.25		
Cell Phones and Chargers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Other Durables	0.00	23.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Liquid HHW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.81	0.00	0.00	0.00	0.00		
Automotive and Lead Acid Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Other Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Mercury Containing Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Other HHW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Food Waste	6.13	28.25	20.38	6.06	9.38	0.00	17.19	34.63	25.63	27.38	0.00	14.06	98.56	37.31	0.00	0.00	180.00	12.75	0.00	3.94	44.56	44.56	28.63	6.25		
C&D	0.00	42.88	139.13	0.00	83.38	110.00	62.94	0.00	0.00	74.06	105.06	95.81	43.63	48.38	137.69	0.00	0.00	0.00	0.00	66.44	45.19	13.56	0.00	0.00		
Textiles and Leathers	0.00	12.56	12.19	0.00	51.50	0.00	31.88	0.00	26.19	40.25	0.00	7.56	0.00	3.19	0.00	5.31	0.00	0.00	16.31	17.81	0.00	9.81	0.00	0.00		
Diapers	0.00	0.00	0.00	4.50	0.00	0.00	3.75	0.00	11.69	1.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.69	0.00	0.00	3.13		
Rubber	0.00	4.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Tires	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	123.63	0.00	0.00	0.00	0.00	42.56		
Sharps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Other Organic	0.00	0.00	0.00	7.81	0.00	0.00	0.00	0.00	6.06	0.00	0.00	3.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	61.94	0.00		
Other Inorganic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Fines/Super Mix	0.00	13.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.88	0.00	0.00	16.75	0.00	0.00	0.00	0.00	1.19	0.00	0.00	0.00	0.00		
Sum of all Individual Weights	197.19	202.75	251.25	190.00	220.44	257.81	249.75	236.94	199.81	318.00	203.75	232.75	214.88	243.31	260.81	201.25	220.00	235.31	237.19	191.06	333.25	231.19	217.19	200.25		
Initial Pre-Sort Sample Weight	220.00	220.00	220.00	200.00	220.00	220.00	260.00	220.00	200.00	300.00	220.00	200.00	220.00	220.00	260.00	200.00	220.00	240.00	240.00	200.00	300.00	220.00	220.00	200.00		
Difference (should be 0 or very close)	22.81	17.25	-31.25	10.00	-0.44	-37.81	10.25	-16.94	0.19	-18.00	16.25	-32.75	5.13	-23.31	-0.81	-1.25	0.00	4.69	2.81	8.94	-33.25	-11.19	2.81	-0.25		
	Snow on truck (scale flashing between 200 & 220 pounds																									

SUMMARY	MSW FEB 2019
Newsprint	1.05%
Magazines	0.18%
High Grade Office Paper	0.81%
OCC and Kraft Bags	6.74%
Mixed Recyclable Paper	6.72%
Non-Recyclable Paper	2.81%
Compostable Paper	7.39%
#1 PET Beverage Containers	0.97%
#2 HDPE Containers	0.99%
Other Plastic Containers	2.44%
Other Plastic Products	4.72%
Film/Wrap/Bags	3.38%
Aluminum Beverage Containers	2.64%
Ferrous Food and Beverage	1.50%
Other Ferrous Metals	3.45%
Other Non-Ferrous Scrap	1.32%
Clear Glass	1.29%
Colored Glass	0.97%
Other Mixed Cullet	0.00%
Grass and Leaves	0.64%
Brush and Trees	0.00%
Non-Treated Wood	3.02%
Treated Wood	0.05%
Electrical and Household Appliances	3.61%
Computers, Central Processing Units/Peripherals, TV's	1.60%
Cell Phones and Chargers	0.00%
Other Durables	0.43%
Liquid HHW	0.08%
Automotive and Lead Acid Batteries	0.00%
Other Batteries	0.07%
Mercury Containing Products	0.02%
Other HHW	0.00%
Food Waste	11.64%
C&D	19.26%
Textiles and Leathers	4.23%
Diapers	0.47%
Rubber	0.08%
Tires	3.39%
Sharps	0.00%
Other Organic	1.44%
Other Inorganic	0.00%
Fines/Super Mix	0.25%
Other	0.36%
	100.00%

Total of line item is what percentage of Line 55?

MSW WASTE CATEGORIZATION TRENDS



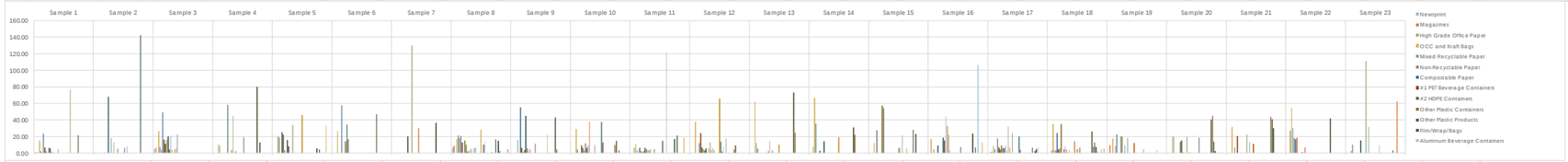
	5/13/2019	5/13/2019	5/14/2019	5/14/2019	5/14/2019	5/14/2019	5/15/2019	5/15/2019	5/15/2019	5/15/2019	5/15/2019	5/16/2019	5/16/2019	5/16/2019	5/16/2019	5/17/2019	5/17/2019	5/17/2019
Generator Type	Commercial	Residential	Commercial	Institutional	Residential	Residential	Institutional	Residential	Residential	Residential	Residential	Residential	Institutional	Residential	Commercial	Residential	Residential	Residential
Type of Vehicle	Rear-load	Rear-load	Front-load	Roll-off	Rear-load	Rear-load	Roll-off	Rear-load	Front-load	Front-load	Front-load	Rear-load	Roll-off	Rear-load	Rear-load	Front-load	Front-load	Front-load
Hauler	Alaska Waste	MSB	Denali Refuse	Denali Refuse	TEWS	MSB	Denali Refuse	MSB	Alaska Waste	Alaska Waste	Denali Refuse	Denali Refuse	Alaska Waste	City of Palmer	Alaska Waste	Alaska Waste	Alaska Waste	Denali Refuse
Truck #	#262055	#120 (can #18)	#603	#607	Can #19	#120 (can #18)	#302	#120	#207580	#362273	#203	#2372659	#420450	#8607	#262055	#262055	#20758	#201
Visual Load Observation	M ainly household trash with some commercial	M ainly household	Mostly household trash	All school trash, mostly lunch containers	M oustly household	Household	Black bags lots of C&D (wood, sheetrock, etc.)	Mostly household trash			M ostly household	Crushed household solid waste	Mixed school waste	Household trash	Mixed solid waste	Crushed household trash	Household	Household
Weather Information	56 degrees F / cloudy	56 degrees F / cloudy	54 degrees F / partially cloudy	55 degrees F / partially cloudy	55 degrees F / partially cloudy	56 degrees F / sunny	54 degrees F / hazy	50 degrees F / cloudy	52 degrees F / hazy, cloudy and overcast	52 degrees F / overcast	52 degrees F / overcast	60 degrees F / sunny	60 degrees F / sunny	60 degrees F / sunny	60 degrees F / sunny	60 degrees F / sunny	60 degrees F / sunny	60 degrees F / sunny
Pre-Sort Weight of Entire Sample	220 pounds	200 pounds	320 pounds	200 pounds	240 pounds	200 pounds	280 pounds	200 pounds	240 pounds	200 pounds	220 pounds	207 pounds	200 pounds	239 pounds	210 pounds	212 pounds	200 pounds	234 pounds

CATEGORY	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Sample 7	Sample 8	Sample 9	Sample 10	Sample 11	Sample 12	Sample 13	Sample 14	Sample 15	Sample 16	Sample 17	Sample 18	Trend
Newsprint	0.00	0.00	0.00	0.00	0.00	15.50	1.75	0.00	0.00	0.00	0.00	1.88	0.00	0.00	0.00	0.00	0.00	0.00	
Magazines	6.25	0.00	0.00	0.00	21.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
High Grade Office Paper	1.88	0.00	0.00	7.44	0.00	0.00	0.44	2.50	3.13	0.00	3.13	0.00	26.56	0.00	16.63	11.88	0.00	0.00	
OCC and Kraft Bags	3.13	20.94	25.13	0.00	6.38	7.88	5.00	9.44	6.38	9.13	15.25	16.38	0.00	18.19	0.00	0.00	11.63	14.88	
Mixed Recyclable Paper	12.50	2.06	11.13	22.44	6.25	18.31	12.50	29.13	16.88	14.63	6.06	21.88	23.44	13.63	0.00	39.75	0.00	21.44	
Non-Recyclable Paper	7.50	12.50	0.00	0.00	8.75	13.56	3.94	0.00	0.00	0.00	11.13	12.25	28.13	10.25	0.00	0.00	3.69	18.56	
Compostable Paper	2.94	9.38	3.44	116.38	9.00	3.50	18.00	23.94	0.00	17.69	5.63	9.19	37.50	0.00	0.00	12.13	0.00	18.69	
#1 PET Beverage Containers	2.81	14.25	3.44	16.38	0.00	1.50	2.69	2.94	5.50	0.00	0.00	6.94	15.63	7.69	5.25	9.69	24.94	0.00	
#2 HDPE Containers	6.13	14.56	3.75	0.00	0.00	15.63	25.69	5.44	18.88	3.44	0.00	10.00	20.44	0.00	1.69	14.38	6.88	5.00	
Other Plastic Containers	4.56	31.13	3.25	0.00	9.44	0.00	12.69	0.81	1.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.50	6.63	
Other Plastic Products	2.25	1.69	19.19	0.00	17.56	3.88	14.81	26.06	9.88	87.25	30.56	29.06	21.06	0.00	22.19	23.19	2.38	0.00	
Film/Wrap/Bags	1.06	5.69	0.63	6.94	9.69	11.44	2.94	9.38	17.88	0.00	7.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Aluminum Beverage Containers	3.25	1.00	15.19	4.50	0.00	4.50	0.75	0.00	0.00	0.00	0.00	1.50	0.00	0.00	0.00	0.00	11.63	8.94	
Ferrous Food and Beverage	13.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Other Ferrous Metals	5.56	4.75	0.00	0.00	50.25	12.88	0.00	0.00	0.00	0.00	25.63	10.75	0.00	24.25	12.44	22.94	15.31	14.69	
Other Non-Ferrous Scrap	0.00	0.00	20.50	0.00	0.00	3.13	0.69	0.00	0.00	0.00	4.19	0.75	0.00	0.00	0.00	0.00	0.00	0.00	
Clear Glass	1.69	0.00	0.00	0.00	0.00	0.00	0.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.75	
Colored Glass	0.00	5.75	7.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Other Mixed Cullet	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Grass and Leaves	8.44	0.00	0.00	0.00	0.00	0.00	0.00	2.88	0.00	18.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Brush and Trees	0.00	0.00	62.50	0.00	0.00	0.00	17.38	3.44	0.00	0.00	0.00	0.00	0.00	5.25	0.00	0.00	0.00	0.00	
Non-Treated Wood	4.69	10.00	10.63	0.00	0.00	0.00	122.75	25.56	0.00	0.00	1.25	0.00	0.00	32.31	0.00	0.00	0.00	0.00	
Treated Wood	0.00	0.00	0.00	0.00	21.00	0.00	0.00	0.00	12.25	0.00	0.00	0.00	0.00	0.00	0.00	12.94	0.00	0.00	
Electrical and Household Appliances	2.19	0.00	0.00	0.00	7.19	44.00	0.00	0.00	40.81	0.00	0.00	0.00	7.94	0.00	37.50	0.00	0.00	0.00	
Computers, Central Processing Units/Peripherals, TV's	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Cell Phones and Chargers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Other Durables	20.63	23.63	102.44	0.00	16.69	0.00	8.25	11.69	13.19	0.00	10.44	0.00	0.00	23.06	0.00	14.75	0.00	0.00	
Liquid HHW	2.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Automotive and Lead Acid Batteries	19.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Other Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Mercury Containing Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Other HHW	1.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Food Waste	11.25	0.00	8.00	18.81	12.75	27.31	21.69	4.38	7.25	3.31	0.00	38.81	37.50	43.13	29.50	17.25	11.13	32.81	
C&D	43.00	17.56	0.00	0.00	36.75	0.00	16.00	6.00	77.69	0.00	62.56	51.75	0.00	57.50	52.50	53.00	87.00	77.00	
Textiles and Leathers	0.00	3.00	8.94	0.00	9.75	21.69	1.75	12.63	6.44	18.19	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Diapers	2.69	0.00	0.00	0.00	0.00	8.50	0.00	1.88	0.25	0.00	0.00	0.00	0.00	0.00	2.50	0.00	0.00	0.00	
Rubber	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Tires	25.00	0.00	39.06	0.00	0.00	0.00	0.00	0.00	0.00	24.31	0.00	0.00	0.00	32.31	39.38	0.00	0.00	0.00	
Sharps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Other Organic	0.00	0.00	0.00	0.00	0.00	0.00	10.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Other Inorganic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Fines/Super Mix	2.88	0.00	0.00	0.00	9.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Other	0.00	16.63	0.00	0.00	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Sum of all Individual Weights	219.38	194.50	345.00	192.88	253.25	213.19	301.44	178.06	240.69	196.75	197.50	211.13	218.19	267.56	219.56	231.88	196.06	231.38	
Initial Pre-Sort Sample Weight	220.00	200.00	320.00	200.00	240.00	200.00	280.00	200.00	240.00	200.00	220.00	207.00	200.00	239.00	210.00	212.00	200.00	234.00	
Difference (should be 0 or very close)	0.63	5.50	-25.00	7.13	-13.25	-13.19	-21.44	21.94	-0.69	3.25	22.50	-4.13	-18.19	-37.56	-9.56	-19.88	3.94	2.63	

SUMMARY	MSW MAY 2019
Newsprint	0.47%
Magazines	0.67%
High Grade Office Paper	1.79%
OCC and Kraft Bags	4.13%
Mixed Recyclable Paper	6.62%
Non-Recyclable Paper	3.17%
Compostable Paper	6.99%
#1 PET Beverage Containers	2.91%
#2 HDPE Containers	3.70%
Other Plastic Containers	2.24%
Other Plastic Products	7.57%
Film/Wrap/Bags	1.77%
Aluminum Beverage Containers	1.25%
Ferrous Food and Beverage	0.33%
Other Ferrous Metals	4.85%
Other Non-Ferrous Scrap	0.71%
Clear Glass	0.37%
Colored Glass	0.33%
Other Mixed Cullet	0.00%
Grass and Leaves	0.73%
Brush and Trees	2.16%
Non-Treated Wood	5.04%
Treated Wood	1.12%
Electrical and Household Appliances	3.40%
Computers, Central Processing Units/Peripherals, TV's	0.00%
Cell Phones and Chargers	0.00%
Other Durables	5.96%
Liquid HHW	0.13%
Automotive and Lead Acid Batteries	0.46%
Other Batteries	0.00%
Mercury Containing Products	0.00%
Other HHW	0.04%
Food Waste	7.91%
C&D	15.54%
Textiles and Leathers	2.36%
Diapers	0.38%
Rubber	0.00%
Tires	3.90%
Sharps	0.00%
Other Organic	0.26%
Other Inorganic	0.00%
Fines/Super Mix	0.31%
Other	0.42%
	100.00%

Total of line item is what percentage of Line 55?

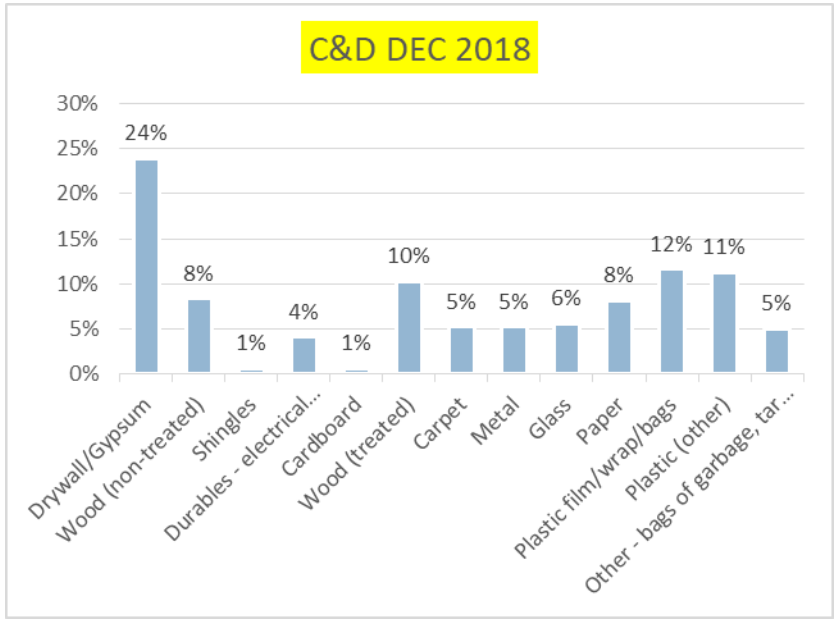
MSW WASTE CATEGORIZATION TRENDS

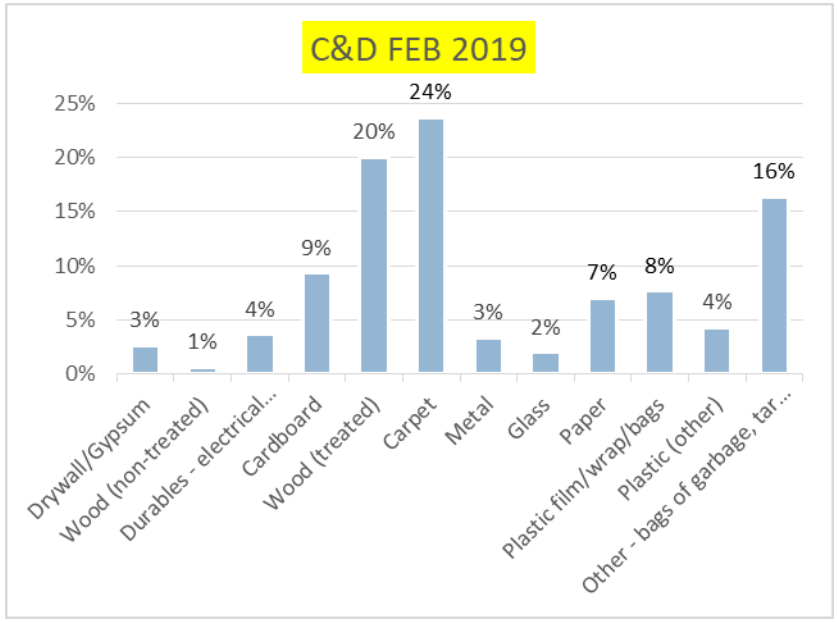


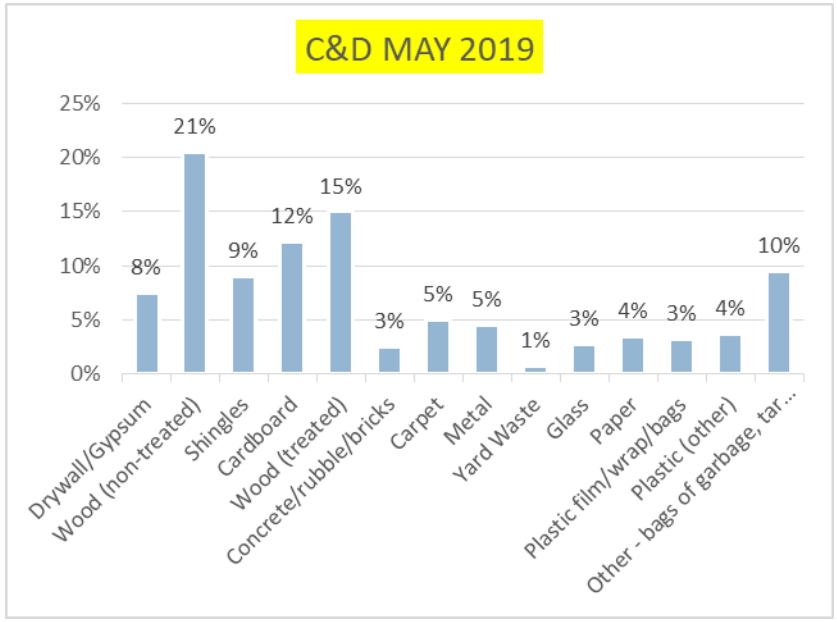
	7/29/2019	7/29/2019	7/29/2019	7/29/2019	7/29/2019	7/30/2019	7/30/2019	7/30/2019	7/30/2019	7/30/2019	7/30/2019	7/30/2019	7/31/2019	7/31/2019	7/31/2019	7/31/2019	7/31/2019	7/31/2019	8/1/2019	8/1/2019	8/1/2019	8/1/2019	8/1/2019
Generator Type	Commercial	Residential	Commercial	Residential	Residential	Institutional	Commercial	Commercial	Commercial	Residential	Commercial		Commercial	Commercial	Residential	Commercial	Residential	Residential	Residential	Residential	Institutional	Commercial
Type of Vehicle	Rear-load	Front-load	Roll-off	Rear-load	Rear-load	Rear-load	Rear-load	Roll-off	Rear-load	Roll-off	Rear-load		Rear-load	Rear-load	Rear-load	Roll-off	Rear-load	Rear-load	Front-load	Front-load	Rear-load	Rear-load
Hauler	KG Enterprises	City of Palmer	Denali Refuse	Tews	MSB	Alaska Waste	Alaska Waste	Tews	Alaska Waste	Tews	MSB	Tews	Alaska Waste	Alaska Waste	MSB	Tews	MSB	Denali Refuse	MSB	Alaska Waste	Denali Refuse	Alaska Waste	Alaska Waste
Truck #	#1904864	XZA 392/8607		#172	#64	#420450	#207585	#1619607	#36228	#195	#120 / can#6	#195	#420 466	#420 450	#120	#195	#122	#201	#120	#362 273	#601	#420 450	#420 450
Visual Load Observation		Residential	Some food trash & lots of boxes	Residential trash from Big Lake Transfer Station	Mixed residential refuse	State of AK / Dept of Corrections / Goose Creek	Mostly food trash, some pressure tans and food trash	Tews	Some food trash, mostly packaging and wrappers	Roll-offs from Willow	Mostly household mixed w/ lots of C&D	Tews roll-off from Talkeetna	Mixed commercial refuse -primarily cardboard & food waste	Mixed commercial refuse - majority cardboard	Mixed residential refuse	Tews double 40-yard roll-offs		Mostly household food trash mixed w/ lots of packaging	Mixed residential refuse	Mixed household refuse	Mixed residential refuse	Mixed school refuse, primarily paper products & cardboard	Mixed commercial refuse, primarily automotive parts & tires
Weather Information	50 degrees F / overcast	59 degrees F / overcast	59 degrees F / sunny	59 degrees F / sunny	63 degrees F / sunny	63 degrees F / sunny	65 degrees F / sunny	65 degrees F / sunny	67 degrees F	68 degrees F / sunny	70 degrees F / sunny	72 degrees F / sunny	58 degrees F / overcast	58 degrees F / overcast	59 degrees F / overcast	63 degrees F / sunny, hazy	67 degrees F / cloudy	67 degrees F / cloudy	63 degrees F / overcast	63 degrees F / overcast	58 degrees F / overcast	57 degrees F / overcast	56 degrees F / overcast
Pre-Sort Weight of Entire Sample	200 pounds	260 pounds	220 pounds	240 pounds	220 pounds	200 pounds	220 pounds	260 pounds	220 pounds	200 pounds	200 pounds	200 pounds	220 pounds	200 pounds	220 pounds	340 pounds	200 pounds	220 pounds	120 pounds	200 pounds	220 pounds	220 pounds	240 pounds

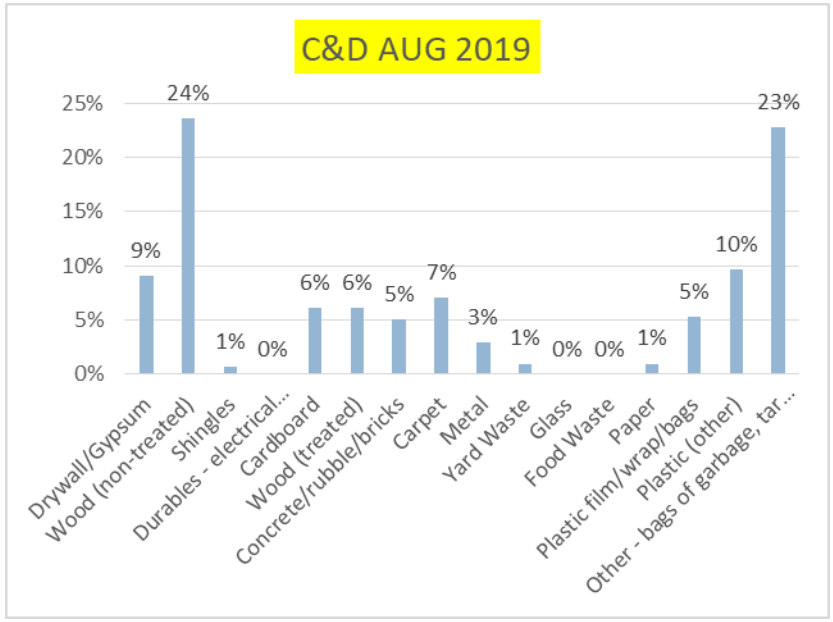
CATEGORY	Simple 1	Simple 2	Simple 3	Simple 4	Simple 5	Simple 6	Simple 7	Simple 8	Simple 9	Simple 10	Simple 11	Simple 12	Simple 13	Simple 14	Simple 15	Simple 16	Simple 17	Simple 18	Simple 19	Simple 20	Simple 21	Simple 22	Simple 23	Trend
Newsprint	0.75	1.00	5.25	0.00	0.00	0.00	0.00	6.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Magazines	0.63	0.00	6.25	0.00	0.00	0.00	0.00	8.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.25	1.25	0.00	9.56	0.00	0.00	0.00	0.00	
High Grade Office Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	7.25	0.00	0.00	1.88	3.44	0.00	0.00	0.00	26.88	0.00	
OCC and Kraft Bags	15.31	0.00	26.38	10.94	20.69	26.56	0.00	17.25	0.00	29.13	10.81	37.75	62.31	66.63	12.44	4.69	8.69	34.81	17.81	20.00	31.63	55.00	2.75	
Mixed Recyclable Paper	2.50	0.00	7.50	9.00	18.75	0.00	0.00	21.25	15.63	4.25	3.13	0.00	12.19	35.38	0.00	0.00	5.00	3.88	0.00	19.56	0.00	30.00	10.31	
Non-Recyclable Paper	0.63	0.00	3.75	0.00	0.00	0.00	0.00	18.13	0.00	0.00	0.00	0.00	5.38	0.00	27.75	0.00	0.00	3.38	8.69	0.00	6.81	18.31	0.00	
Compostable Paper	23.50	0.00	49.38	0.00	25.00	57.81	0.00	20.63	55.44	0.00	6.25	12.19	0.00	0.00	0.00	9.38	17.50	24.19	22.50	0.00	0.00	16.50	0.00	
#1 PET Beverage Containers	6.56	0.06	15.94	0.00	21.88	0.00	0.00	12.50	6.44	9.38	2.50	24.06	0.00	2.81	0.00	0.00	6.88	4.38	0.00	0.00	20.81	18.75	0.00	
#2 HDPE Containers	1.88	0.00	11.25	0.00	3.13	0.00	0.00	0.00	1.38	6.25	1.06	6.88	0.00	0.00	0.00	0.00	4.38	5.69	0.00	0.00	0.00	0.00	0.00	
Other Plastic Containers	0.00	0.00	16.25	0.00	0.00	14.19	0.00	15.00	3.88	3.13	2.19	4.69	0.00	0.00	57.13	0.00	9.38	34.88	20.06	13.50	0.00	0.00	0.00	
Other Plastic Products	6.31	68.06	20.00	58.31	15.44	34.38	0.00	10.25	44.69	11.56	6.25	3.38	0.00	14.06	54.38	18.81	6.31	0.00	19.69	15.00	0.00	0.00	15.19	
Film/Wrap/Bags	5.56	0.00	4.38	0.00	8.38	16.88	20.00	1.75	5.88	6.25	4.69	5.88	0.00	0.00	0.00	15.25	6.00	4.63	0.00	1.00	0.00	1.31	0.00	
Aluminum Beverage Containers	1.31	18.13	21.25	0.00	0.00	0.00	0.00	2.31	1.69	9.06	3.13	0.00	0.00	0.00	0.00	43.88	8.56	8.31	9.06	0.00	0.00	0.00	0.00	
Ferrous Food and Beverage	1.50	0.00	3.88	3.88	0.00	0.00	0.00	4.50	4.69	38.13	3.13	5.94	2.38	0.00	0.00	32.63	2.19	4.19	0.00	0.00	0.00	6.63	0.00	
Other Ferrous Metals	0.00	13.38	0.00	45.00	34.13	0.00	130.00	5.06	0.00	0.00	4.69	12.50	14.06	0.00	0.00	21.88	31.81	0.00	17.94	19.75	22.56	0.00	111.31	
Other Non-Ferrous Scrap	0.00	0.00	4.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.81	0.00	0.00	0.00	3.44	6.56	3.44	0.00	0.00	0.00	0.00	0.00	
Clear Glass	0.00	0.00	5.63	2.44	0.00	0.00	0.00	6.00	0.00	0.00	0.00	5.63	3.50	0.00	0.00	0.00	0.31	0.00	0.00	1.00	13.13	0.00	31.69	
Colored Glass	4.88	5.25	22.50	0.00	0.00	0.00	0.00	6.81	11.31	9.69	4.81	3.44	0.00	0.00	0.00	0.00	23.94	0.00	0.00	0.00	0.00	0.00	0.00	
Other Mixed Cullet	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Grass and Leaves	0.00	0.00	0.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.06	12.31	0.00	11.38	0.00	0.00	
Brush and Trees	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Non-Treated Wood	0.00	0.00	0.00	0.00	45.69	0.00	0.00	28.69	0.00	0.00	0.00	65.44	10.44	19.38	6.00	0.00	0.00	4.69	0.00	0.00	0.00	0.00	0.00	
Treated Wood	0.00	6.31	0.00	18.94	0.00	0.00	0.00	0.00	0.00	37.69	0.00	13.75	0.00	0.00	6.63	0.00	20.00	0.00	0.00	0.00	0.00	0.00	0.00	
Electrical and Household Appliances	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.44	0.00	12.69	14.75	1.69	0.00	0.00	0.00	7.44	3.88	6.88	0.00	18.75	0.00	0.00	0.00	
Computers, Central Processing Units/Peripherals, TV's	0.00	7.94	0.00	0.00	0.00	0.00	0.00	14.44	0.00	0.00	0.00	7.50	0.00	0.00	21.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.38	
Cell Phones and Chargers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Other Durables	76.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.50	0.00	121.44	17.56	0.00	0.00	0.00	0.00	0.00	0.00	4.63	0.00	0.00	0.00	0.00	
Liquid HHW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Automotive and Lead Acid Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Other Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Mercury Containing Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Other HHW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Food Waste	21.50	0.00	0.00	80.06	6.00	46.88	36.25	16.75	42.81	9.50	17.06	4.06	73.31	31.19	27.94	23.69	6.31	26.06	0.00	40.19	44.00	42.13	0.00	
C&D	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.06	14.56	0.00	9.00	24.44	22.19	0.00	0.00	0.00	7.81	0.00	45.06	40.81	0.00	0.00	
Textiles and Leathers	0.00	142.25	0.00	12.63	4.44	0.00	0.00	14.81	0.00	0.00	20.94	0.00	0.00	0.00	23.13	6.56	2.13	12.50	0.00	13.50	30.06	0.00	3.25	
Diapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.38	0.00	3.13	0.00	0.00	0.00	0.00	0.00	0.00	4.81	7.50	0.00	2.13	0.00	0.00	0.00	
Rubber	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	106.38	7.25	2.31	3.81	0.00	0.00	0.00	0.00	
Tires	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.88	
Sharps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Other Organic	0.00	0.00	0.00	0.00	33.38	0.00	0.00	0.00	0.00	0.00	18.75	0.00	0.00	0.00	0.00	12.50	0.00	4.75	0.00	0.00	0.00	0.00	0.00	
Other Inorganic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Fines/Super Mix	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.44	0.00	0.00	0.00	0.00	0.00	
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Sum of all Individual Weights	169.25	262.38	224.25	241.19	236.88	196.69	216.25	250.13	220.38	204.38	252.06	245.13	208.00	198.88	242.44	323.75	185.00	227.19	146.06	209.44	221.19	215.50	246.75	
Initial Pre-Sort Sample Weight	200.00	260.00	220.00	240.00	220.00	200.00	220.00	260.00	220.00	200.00	200.00	200.00	220.00	200.00	220.00	340.00	200.00	220.00	120.00	200.00	220.00	220.00	240.00	
Difference (should be 0 or very close)	30.75	-2.38	-4.25	-1.19	-16.88	3.31	3.75	9.88	-0.38	-4.38	-52.06	-45.13	12.00	1.13	-22.44	16.25	15.00	-7.19	-26.06	-9.44	-1.19	4.50	-6.75	

SUMMARY	MSW AUG 2019
Newsprint	0.28%
Magazines	0.87%
High Grade Office Paper	0.91%
OCC and Kraft Bags	10.15%
Mixed Recyclable Paper	3.93%
Non-Recyclable Paper	1.84%
Compostable Paper	6.75%
#1 PET Beverage Containers	3.03%
#2 HDPE Containers	0.83%
Other Plastic Containers	3.85%
Other Plastic Products	8.37%
Film/Wrap/Bags	2.14%
Aluminum Beverage Containers	2.51%
Ferrous Food and Beverage	2.25%
Other Ferrous Metals	9.60%
Other Non-Ferrous Scrap	0.44%
Clear Glass	1.38%
Colored Glass	1.84%
Other Mixed Cullet	0.00%
Grass and Leaves	1.34%
Brush and Trees	0.00%
Non-Treated Wood	3.58%
Treated Wood	2.05%
Electrical and Household Appliances	1.52%
Computers, Central Processing Units/Peripherals, TV's	1.20%
Cell Phones and Chargers	0.00%
Other Durables	4.81%
Liquid HHW	0.12%
Automotive and Lead Acid Batteries	0.00%
Other Batteries	0.01%
Mercury Containing Products	0.00%
Other HHW	0.00%
Food Waste	11.82%
C&D	3.33%
Textiles and Leathers	5.68%
Diapers	0.40%
Rubber	2.38%
Tires	1.25%
Sharps	0.00%
Other Organic	1.38%
Other Inorganic	0.00%
Fines/Super Mix	0.20%
Other	0.00%
	102.05%
Total of line item is what percentage of Line 55?	

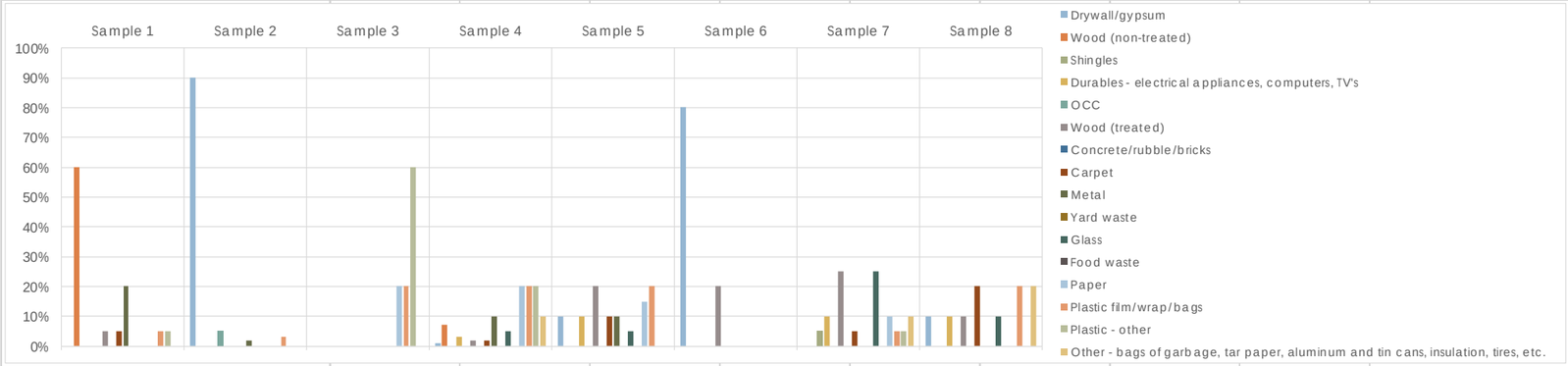

C&D DEC 2018
30%
25%
20%
15%
10%
5%
0%
24%
8%
1%
4%
1%
10%
5%
5%
6%
8%
12%
11%
5%
Drywall/Gypsum
Wood (non-treated)
Shingles
Durables - electrical...
Cardboard
Wood (treated)
Carpet
Metal
Glass
Paper
Plastic film/wrap/bags
Plastic (other)
Other - bags of garbage, tar ...


C&D FEB 2019
25%
20%
15%
10%
5%
0%
3%
1%
4%
9%
20%
24%
3%
2%
7%
8%
4%
16%
Drywall/Gypsum
Wood (non-treated)
Durables - electrical...
Cardboard
Wood (treated)
Carpet
Metal
Glass
Paper
Plastic film/wrap/bags
Plastic (other)
Other - bags of garbage, tar...


C&D MAY 2019
25%
20%
15%
10%
5%
0%
8%
21%
9%
12%
15%
3%
5%
5%
1%
3%
4%
3%
4%
10%
Drywall/Gypsum
Wood (non-treated)
Shingles
Cardboard
Wood (treated)
Concrete/rubble/bricks
Carpet
Metal
Yard Waste
Glass
Paper
Plastic film/wrap/bags
Plastic (other)
Other - bags of garbage, tar ...


C&D AUG 2019
25%
20%
15%
10%
5%
0%
9%
24%
1%
0%
6%
6%
5%
7%
3%
1%
0%
0%
1%
5%
10%
23%
Drywall/Gypsum
Wood (non-treated)
Shingles
Durables - electrical...
Cardboard
Wood (treated)
Concrete/rubble/bricks
Carpet
Metal
Yard Waste
Glass
Food Waste
Paper
Plastic film/wrap/bags
Plastic (other)
Other - bags of garbage, tar ...

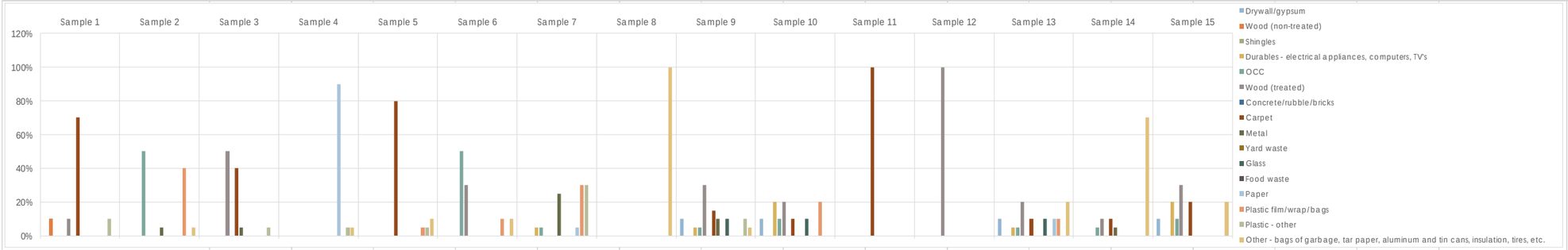
C&D WASTE CATEGORIZATION TRENDS



	12/11/2018	12/11/2018	12/11/2018	12/13/2018	12/14/2018	12/14/2018	12/15/2018	12/15/2018
Hauler	Alaska Waste	Alaska Waste	Alaska Waste	CLF 120	MSB 120-18	Private Hauler	MSB 120-7	Private Hauler
Vehicle Type	Roll off #420450	Roll off #420446	Roll off # 420450	Tractor Trailer	Semi/120-yd	Pickup/Trailer	Semi/120-yd	Pickup
Source of Waste	Taylor Restoratio	Construction	Commercial	Residential	Residential	Residential	Residential	Residential
Weather	Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear
CATEGORY	**Sample 1**	**Sample 2**	**Sample 3**	**Sample 4**	**Sample 5**	**Sample 6**	**Sample 7**	**Sample 8**	**Trend**
Drywall/gypsum	0%	90%	0%	1%	10%	80%	0%	10%	
Wood (non-treated)	60%	0%	0%	7%	0%	0%	0%	0%	
Shingles	0%	0%	0%	0%	0%	0%	5%	0%	
Durables - electrical appliances, computers, TV's	0%	0%	0%	3%	10%	0%	10%	10%	
OCC	0%	5%	0%	0%	0%	0%	0%	0%	
Wood (treated)	5%	0%	0%	2%	20%	20%	25%	10%	
Concrete/rubble/bricks	0%	0%	0%	0%	0%	0%	0%	0%	
Carpet	5%	0%	0%	2%	10%	0%	5%	20%	
Metal	20%	2%	0%	10%	10%	0%	0%	0%	
Yard waste	0%	0%	0%	0%	0%	0%	0%	0%	
Glass	0%	0%	0%	5%	5%	0%	25%	10%	
Food waste	0%	0%	0%	0%	0%	0%	0%	0%	
Paper	0%	0%	20%	20%	15%	0%	10%	0%	
Plastic film/wrap/bags	5%	3%	20%	20%	20%	0%	5%	20%	
Plastic - other	5%	0%	60%	20%	0%	0%	5%	0%	
Other - bags of garbage, tar paper, aluminum and tin cans, insulation, tires, etc.	0%	0%	0%	10%	0%	0%	10%	20%	
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	

SUMMARY	C&D DEC 2018
Drywall/Gypsum	24%
Wood (non-treated)	8%
Shingles	1%
Durables - electrical appliances, computers, TV's	4%
Cardboard	1%
Wood (treated)	10%
Concrete/rubble/bricks	0%
Carpet	5%
Metal	5%
Yard Waste	0%
Glass	6%
Food Waste	0%
Paper	8%
Plastic film/wrap/bags	12%
Plastic (other)	11%
Other - bags of garbage, tar paper, aluminum and tin cans, insulation, tires, etc.	5%
	100%

C&D WASTE CATEGORIZATION TRENDS

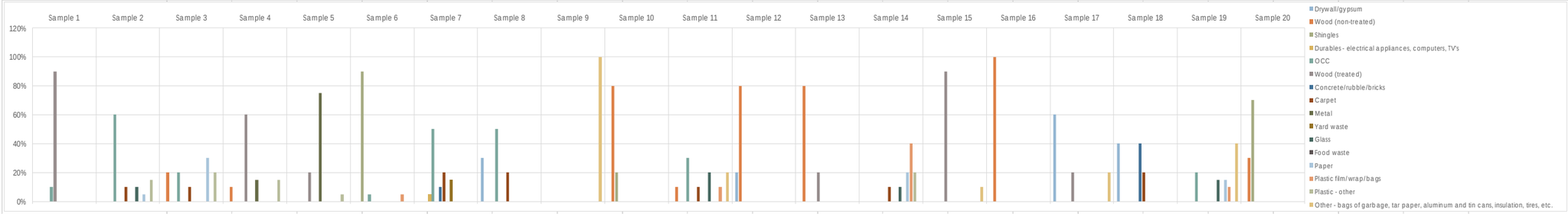


	2/12/2019	2/12/2019	2/12/2019	2/12/2019	2/12/2019	2/12/2019	2/12/2019	2/13/2019	2/13/2019	2/14/2019	2/14/2019	2/15/2019	2/15/2019	2/16/2019	2/16/2019
Hauler	Residential	Alaska Waste	Residential	Residential	Residential	Alaska Waste	Alaska Waste	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential
Vehicle Type	Ram 2500	Roll off #420446	Toyota Pickup	GMC Sierra	Chevy 1500	Roll off #420431	Roll off #420446	GMC Sierra	Chevy 1500	Dodge 1500	Toyota Tundra	Ford F350	Ram 3500	Chevy 1500	Toyota Tundra
Source of Waste	Residential	Palmer Hospital	Residential	Residential	Residential	Team CC	Industrial	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential
Weather	Clear						Clear								

CATEGORY	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Sample 7	Sample 8	Sample 9	Sample 10	Sample 11	Sample 12	Sample 13	Sample 14	Sample 15	Trend
Drywall/gypsum	0%	0%	0%	0%	0%	0%	0%	0%	10%	10%	0%	0%	10%	0%	10%	
Wood (non-treated)	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Shingles	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Durables - electrical appliances, computers, TV's	0%	0%	0%	0%	0%	0%	5%	0%	5%	20%	0%	0%	5%	0%	20%	
OCC	0%	50%	0%	0%	0%	50%	5%	0%	5%	10%	0%	0%	5%	5%	10%	
Wood (treated)	10%	0%	50%	0%	0%	30%	0%	0%	30%	20%	0%	100%	20%	10%	30%	
Concrete/rubble/bricks	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Carpet	70%	0%	40%	0%	80%	0%	0%	0%	15%	10%	100%	0%	10%	10%	20%	
Metal	0%	5%	5%	0%	0%	0%	25%	0%	10%	0%	0%	0%	0%	5%	0%	
Yard waste	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Glass	0%	0%	0%	0%	0%	0%	0%	0%	10%	10%	0%	0%	10%	0%	0%	
Food waste	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Paper	0%	0%	0%	90%	0%	0%	5%	0%	0%	0%	0%	0%	10%	0%	0%	
Plastic film/wrap/bags	0%	40%	0%	0%	5%	10%	30%	0%	0%	20%	0%	0%	10%	0%	0%	
Plastic - other	10%	0%	5%	5%	5%	0%	30%	0%	10%	0%	0%	0%	0%	0%	0%	
Other - bags of garbage, tar paper, aluminum and tin cans, insulation, tires, etc.	0%	5%	0%	5%	10%	10%	0%	100%	5%	0%	0%	0%	20%	70%	20%	
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**110%**	

SUMMARY	C&D FEB 2019
Drywall/Gypsum	3%
Wood (non-treated)	1%
Shingles	0%
Durables - electrical appliances, computers, TV's	4%
Cardboard	9%
Wood (treated)	20%
Concrete/rubble/bricks	0%
Carpet	24%
Metal	3%
Yard Waste	0%
Glass	2%
Food Waste	0%
Paper	7%
Plastic film/wrap/bags	8%
Plastic (other)	4%
Other - bags of garbage, tar paper, aluminum and tin cans, insulation, tires, etc.	16%
	101%

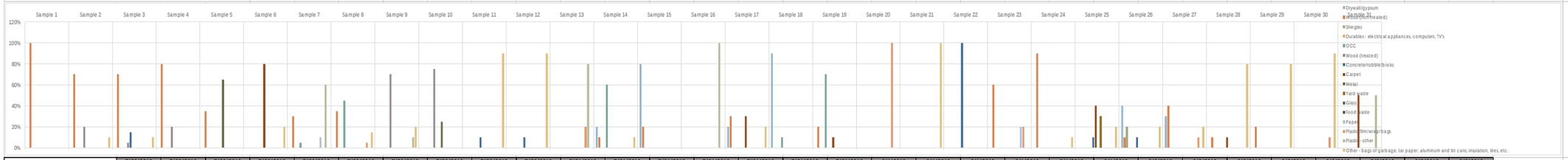
C&D WASTE CATEGORIZATION TRENDS



	5/13/2019	5/13/2019	5/13/2019	5/13/2019	5/14/2019	5/14/2019	5/15/2019	5/15/2019	5/15/2019	5/15/2019	5/15/2019	5/17/2019	5/17/2019	5/17/2019	5/17/2019	5/17/2019	5/17/2019	5/17/2019	5/17/2019	5/17/2019
Hauler	Valley Movers	Alaska Waste	Residential	Residential	Residential	Rain Proof Roof	Talkeetna Refuse	Residential	Mr. Lube	Hall Construct.	Residential	Builder's Bargain	Peak to Peak	Residential	Residential	Residential	Residential	Aviation	Castle Builders	Anc Roofing
Vehicle Type	Box Truck	Roll off truck	U-Haul	Truck w/ trailer	Truck w/ trailer		Roll-off truck	GMC Box Van	Blue GMC	Truck w/ 14' bed	8' pickup bed	Blue F-150	Grey F-250	Ford w/ trailer	Tan GMC	Silverado w/ trail	Chevy w/ trailer	F-150	Chevy	Blue F-650
Source of Waste	Residential	Salvation Army	Residential	Residential	Residential	Industrial	Residential	Residential	Commercial	Industrial	Residential	Industrial	Residential	Residential	Residential	Residential	Residential	Commercial	Residential	Commercial
Weather	56* and cloudy	56* and cloudy	56* and cloudy	56* and cloudy	55* part cloudy	55* part cloudy	Overcast	Overcast	Overcast	Overcast	Overcast	Clear	Clear	Clear/Sunny	Clear	Clear/Sunny	Clear/Sunny	Clear	Clear	Clear
CATEGORY	**Sample 1**	**Sample 2**	**Sample 3**	**Sample 4**	**Sample 5**	**Sample 6**	**Sample 7**	**Sample 8**	**Sample 9**	**Sample 10**	**Sample 11**	**Sample 12**	**Sample 13**	**Sample 14**	**Sample 15**	**Sample 16**	**Sample 17**	**Sample 18**	**Sample 19**	**Sample 20**	**Trend**
Drywall/gypsum	0%	0%	0%	0%	0%	0%	0%	30%	0%	0%	0%	20%	0%	0%	0%	0%	60%	40%	0%	0%	
Wood (non-treated)	0%	0%	20%	10%	0%	0%	0%	0%	0%	80%	10%	80%	80%	0%	0%	100%	0%	0%	0%	30%	
Shingles	0%	0%	0%	0%	0%	90%	0%	0%	0%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	70%	
Durables - electrical appliances, computers, TV's	0%	0%	0%	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
OCC	10%	60%	20%	0%	0%	5%	50%	50%	0%	0%	30%	0%	0%	0%	0%	0%	0%	0%	20%	0%	
Wood (treated)	90%	0%	0%	60%	20%	0%	0%	0%	0%	0%	0%	0%	20%	0%	90%	0%	20%	0%	0%	0%	
Concrete/rubble/bricks	0%	0%	0%	0%	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	40%	0%	0%	
Carpet	0%	10%	10%	0%	0%	0%	20%	20%	0%	0%	10%	0%	0%	10%	0%	0%	0%	20%	0%	0%	
Metal	0%	0%	0%	15%	75%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Yard waste	0%	0%	0%	0%	0%	0%	15%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Glass	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%	0%	10%	0%	0%	0%	0%	15%	0%	
Food waste	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Paper	0%	5%	30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%	0%	0%	0%	15%	0%	
Plastic film/wrap/bags	0%	0%	0%	0%	0%	5%	0%	0%	0%	0%	10%	0%	0%	40%	0%	0%	0%	0%	10%	0%	
Plastic - other	0%	15%	20%	15%	5%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%	0%	
Other - bags of garbage, tar paper, aluminum and tin cans, insulation, tires, etc.	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	20%	0%	0%	0%	10%	0%	20%	0%	40%	0%	
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	

SUMMARY	C&D MAY 2019
Drywall/Gypsum	8%
Wood (non-treated)	21%
Shingles	9%
Durables - electrical appliances, computers, TV's	0%
Cardboard	12%
Wood (treated)	15%
Concrete/rubble/bricks	3%
Carpet	5%
Metal	5%
Yard Waste	1%
Glass	3%
Food Waste	0%
Paper	4%
Plastic film/wrap/bags	3%
Plastic (other)	4%
Other - bags of garbage, tar paper, aluminum and tin cans, insulation, tires, etc.	10%
	100%

C&D WASTE CATEGORIZATION TRENDS



	7/29/2019	7/29/2019	7/29/2019	7/29/2019	7/30/2019	7/30/2019	7/30/2019	7/30/2019	7/30/2019	7/30/2019	7/31/2019	7/31/2019	7/31/2019	7/31/2019	7/31/2019	7/31/2019	7/31/2019	8/1/2019	8/1/2019	8/1/2019	8/1/2019	8/1/2019	8/1/2019	8/2/2019	8/2/2019	8/2/2019	8/2/2019	8/2/2019	8/2/2019	8/2/2019	8/2/2019
Hauler	Residential	Soloy Construction	Bin There Dump	Anc Roofing	Private	Private	Private	Alaska Waste	Hall Homes	Alaska Waste	DOT	DOT	Valley Auto Body	Residential	Residential	Lowe's	Hall Construction	Image Builders	Residential	DOT	Residential	Redbox	Hall Construction	Good's Hauling	Residential	Residential	Alaska Waste	Residential	Residential	Residential	Residential
Vehicle Type	F-350	Chevy w/ trailer	F-550	F-550	Dodge 3500	Dodge 2500	Dodge 2500	Commercial	Chevy 3500	Commercial	Dump Truck	Dump Truck	Chevy Box Van	GMC 2500	White Ford	F-550	Chevy 250	Dump Truck	F-250	Freightliner	Ram 2500	Freightliner	Chevy - 2500	Red Kenworth	F-150	F-250	Peterbilt	Chevy 150	F-450 Dump Truck	Blue Jeep	Black GMC
Source of Waste	Residential	Residential	Musk Ox Farm	Residential	Construction	Residential	Residential	Commercial	Construction	Commercial	Commercial	Commercial	Commercial	Residential	Residential	Commercial	Residential	Residential	Residential	Commercial	Residential	Commercial	Residential	Residential	Residential	Residential	Commercial	Residential	Residential	Residential	Residential
Weather	60 degrees F		60's	60's	61 degrees F	61 degrees F	61 degrees F	61 degrees F	61 degrees F	Partly cloudy	70 degrees F	70 degrees F	60-70 degrees	60 degrees F	60's	70 degrees F	60's	60's	60's	60's	60x	60's	60's	60's	60's	60's	60's	60's	60's	60's	60's
CATEGORY	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Sample 7	Sample 8	Sample 9	Sample 10	Sample 11	Sample 12	Sample 13	Sample 14	Sample 15	Sample 16	Sample 17	Sample 18	Sample 19	Sample 20	Sample 21	Sample 22	Sample 23	Sample 24	Sample 25	Sample 26	Sample 27	Sample 28	Sample 29	Sample 30	Sample 31	Trend
Drywall/gypsum	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	80%	0%	20%	90%	0%	0%	0%	0%	0%	0%	0%	40%	30%	0%	0%	0%	
Wood (non-treated)	100%	70%	70%	80%	35%	0%	30%	35%	0%	0%	0%	0%	0%	10%	20%	0%	30%	0%	20%	0%	0%	0%	60%	90%	0%	10%	40%	10%	20%	0%	0%	
Shingles	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%	
Durables - electrical appliances, computers, TV's	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
OCC	0%	0%	0%	0%	0%	0%	5%	45%	0%	0%	0%	0%	0%	60%	0%	0%	0%	10%	70%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Wood (treated)	0%	20%	5%	20%	0%	0%	0%	0%	70%	75%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Concrete/rubble/bricks	0%	0%	15%	0%	0%	0%	0%	0%	0%	0%	10%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	10%	10%	0%	0%	0%	0%	0%	
Carpet	0%	0%	0%	0%	0%	80%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	30%	0%	10%	0%	0%	0%	0%	0%	40%	0%	0%	10%	0%	0%	50%	
Metal	0%	0%	0%	0%	65%	0%	0%	0%	0%	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Yard waste	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	30%	0%	0%	0%	0%	0%	0%	
Glass	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Food waste	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Paper	0%	0%	0%	0%	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%	0%	0%	0%	
Plastic film/wrap/bags	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%	0%	100%	0%	0%	20%	0%	0%	0%	10%	0%	0%	10%	0%	
Plastic - other	0%	0%	0%	0%	0%	0%	60%	0%	10%	0%	0%	0%	80%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	10%	20%	20%	20%	80%	80%	90%	0%	
Other - bags of garbage, tar paper, aluminum and tin cans, insulation, tires, etc.	0%	10%	10%	0%	0%	20%	0%	15%	20%	0%	90%	90%	0%	10%	0%	0%	20%	0%	0%	0%	100%	0%	0%	10%	20%	20%	20%	20%	80%	80%	90%	0%	
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**105%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	

SUMMARY	C&D AUG 2019
Drywall/Gypsum	9%
Wood (non-treated)	24%
Shingles	1%
Durables - electrical appliances, computers, TV's	0%
Cardboard	6%
Wood (treated)	6%
Concrete/rubble/bricks	5%
Carpet	7%
Metal	3%
Yard Waste	1%
Glass	0%
Food Waste	0%
Paper	1%
Plastic film/wrap/bags	5%
Plastic (other)	10%
Other - bags of garbage, tar paper, aluminum and tin cans, insulation, tires, etc.	23%
	100%

SUMMARY	C&D DEC 2018	C&D FEB 2019	C&D MAY 2019	C&D AUG 2019	TOTAL DIVIDED BY 4
Drywall/Gypsum	24%	3%	8%	9%	11%
Wood (non-treated)	8%	1%	21%	24%	14%
Shingles	1%	0%	9%	1%	3%
Durables - electrical appliances, computers, TV's	4%	4%	0%	0%	2%
Cardboard	1%	9%	12%	6%	7%
Wood (treated)	10%	20%	15%	6%	13%
Concrete/rubble/bricks	0%	0%	3%	5%	2%
Carpet	5%	24%	5%	7%	10%
Metal	5%	3%	5%	3%	4%
Yard Waste	0%	0%	1%	1%	1%
Glass	6%	2%	3%	0%	3%
Food Waste	0%	0%	0%	0%	0%
Paper	8%	7%	4%	1%	5%
Plastic film/wrap/bags	12%	8%	3%	5%	7%
Plastic (other)	11%	4%	4%	10%	7%
Other - bags of garbage, tar paper, aluminum and tin cans, insulation, tires, etc.	5%	16%	10%	20%	13%
	100%	101%	103%	98%	101%

SUMMARY	MSW DEC 2018	MSW FEB 2019	MSW MAY 2019	MSW AUG 2019	TOTAL DIVIDED BY 4
Newsprint	0%	1%	0%	0.276587%	1%
Magazines	1%	0%	1%	0.866865%	1%
High Grade Office Paper	1%	1%	2%	0.911508%	1%
OCC and Kraft Bags	8%	7%	4%	10.150000%	7%
Mixed Recyclable Paper	3%	7%	7%	3.934722%	5%
Non-Recyclable Paper	1%	3%	3%	1.841468%	2%
Compostable Paper	8%	7%	7%	6.750992%	7%
#1 PET Beverage Containers	4%	1%	3%	3.034524%	3%
#2 HDPE Containers	2%	1%	4%	0.830952%	2%
Other Plastic Containers	1%	2%	2%	3.854167%	2%
Other Plastic Products	5%	5%	8%	8.374206%	7%
Film/Wrap/Bags	3%	3%	2%	2.139087%	3%
Aluminum Beverage Containers	3%	3%	1%	2.513690%	2%
Ferrous Food and Beverage	1%	2%	0%	2.254563%	1%
Other Ferrous Metals	3%	3%	5%	9.604365%	5%
Other Non-Ferrous Scrap	2%	1%	1%	0.435317%	1%
Clear Glass	4%	1%	0%	1.375198%	2%
Colored Glass	2%	1%	0%	1.837897%	1%
Other Mixed Cullet	0%	0%	0%	0.000000%	0%
Grass and Leaves	0%	1%	1%	1.344246%	1%
Brush and Trees	0%	0%	2%	0.000000%	1%
Non-Treated Wood	2%	3%	5%	3.577579%	3%
Treated Wood	3%	0%	1%	2.049802%	1%
Electrical and Household Appliances	6%	4%	3%	1.517857%	4%
Computers, Central Processing Units/Peripherals, TV's	5%	2%	0%	1.199206%	2%
Cell Phones and Chargers	0%	0%	0%	0.000000%	0%
Other Durables	2%	0%	6%	4.812698%	3%
Liquid HHW	0%	0%	0%	0.116667%	0%
Automotive and Lead Acid Batteries	0%	0%	0%	0.000000%	0%

ATTACHMENT E
VALLEY CENTER FOR RECYCLING SOLUTIONS

The attached documents provide the Management Agreement and four quarters of operating data related to the Valley Center for Recycling Solutions (VCRS).

ATTACHMENTS

VCRS Management Agreement with Exhibits

VCRS FY19 – Qtr 1 Invoice & Reports

VCRS FY19 – Qtr 2 Invoice & Reports

VCRS FY19 – Qtr 3 Invoice & Reports

VCRS FY19 – Qtr 4 Invoice & Reports