Recommendations

Staff recommends that Council:

1. Approve the issuance of the Request for Proposals (RFP) for the development of an Energy/Compost Facility or Export Option;

2. Direct staff to seek regulatory approval for the partial capping of approximately 34 acres of landfill and postponing the capping of approximately 17 acres;

3. Direct Staff to procure a construction contractor to construct landfill cap over the approximate 34 acres in Summer/Fall 2013 with an add alternate to cap the balance of the site; and

4. If regulatory agencies deny the request for postponement of the 17 acres, then direct Staff to proceed with the capping of the entire 51 acres.

Executive Summary
This staff report proposes issuance of the attached Request for Proposals (RFP) for an Energy/Compost Facility in Palo Alto or an Export Option and recommends capping most, but not all, of the remaining uncapped portion of the now closed Palo Alto Landfill. The two are related because Palo Alto’s voter-approved Measure E specified a specific 10-acre portion of the former Landfill for consideration of an Energy/Compost Facility. This RFP would continue to implement the Action Plan and Timeline accepted by Council on July 2, 2012 (Staff Report ID # 2557) for consideration of an Energy Compost facility in Palo Alto. The timeline also includes coordination with the Regional Water Quality Control Plant’s (RWQCP) preparation of a Biosolids Facility Plan (Staff Report ID # 3383).

Background
On April 5, 2010, Council directed staff to initiate a feasibility study for an Energy/Compost Facility in Palo Alto. Council approved a contract with Alternative Resources, Inc. (ARI) to conduct the study (Staff Report ID # 333:10) in August 2010. In September 2011, a Final Feasibility Report was presented to Council (Staff Report ID # 2557). The Feasibility Report recommended that if the site at Byxbee Park becomes available through the passage of Ballot Measure E, then the City should take further actions to consider anaerobic digestion and other technologies for managing the City’s food scraps, yard trimmings, and biosolids at the site.

In November 2011, Palo Alto voters passed Measure E, which removes a 10-acre parcel of land adjacent to the wastewater treatment plant from dedication as parkland for a 10-year term, only for the limited use as an Energy/Compost Facility. Approximately 8-acres of this 10-acre parcel are on the uncapped portion of the Palo Alto Landfill. On February 6, 2012, Council approved Amendment No. 1 to ARI’s contract to allow ARI to assist the City in developing an Action Plan and Timeline (Attachment A) for consideration of an Energy/Compost Facility on the 10-acre parcel or a portion thereof (Staff Report ID # 2557). Also, staff was directed to work with regulatory agencies to obtain approval for postponing the final capping of the landfill for one construction season and to cease the existing composting operation at the landfill as soon as possible. A public meeting to review the Action Plan and Timeline and to obtain community feedback was held on April 25, 2012.
The Action Plan and Timeline for Consideration of an Energy/Compost Facility were developed with the assistance of ARI and were approved by Council on July 2, 2012 (Staff Report ID # 2557). Council also approved Amendment No. 2 with ARI to develop an RFP that will allow the City to obtain firm pricing from vendors interested in providing technologies to manage the City’s food scraps, yard trimmings, and biosolids. This RFP (Attachments D and E) also includes soliciting pricing for export options to allow comparison with the City’s current export pricing for food scraps and yard trimmings. A public meeting was held on October 17, 2012, to discuss the performance specifications for the RFP. Staff addressed community concerns related to odors, greenhouse gas analysis, and financing.

On August 6, 2012, staff entered into a Stipulated Notice and Order No. LEA–2012-01 with the Santa Clara County Department of Environmental Health (i.e., the landfill’s Local Enforcement Agency), which allowed the postponement of the landfill capping until the 2013 construction season. The California Regional Water Quality Control Board (RWQCB) and the California Department of Resources Recycling and Recovery (CalRecycle) also approved this postponement.

Discussion

Landfill Capping

As mentioned above, the City has received regulatory approval for a one year postponement in capping of the final 51-acre Phase IIC of the Palo Alto Landfill. The Landfill is part of Byxbee Park, and the remaining uncapped area can be opened to the public once the capping process is completed.

Staff is seeking Council approval on a staff recommended approach to address the current uncapped area as it relates to the Energy/Compost Facility. Staff has identified three options:

Option 1 – Seek Approval to Postpone Any Further Capping

Staff would contact the regulatory agencies and request another postponment of
the cap construction for all of Phase IIC (see Attachment B for map) until a
decision has been made by Council on a Energy/Compost Facility (in early 2014).
In terms of site planning, this option provides the greatest flexibility. However,
staff has discussed this option with the regulatory agencies and is uncertain that
another postponement of the entire uncapped area (51 acres) will be granted
without an approved project.

Option 2 – Cap Entire Remainder of the Landfill

Staff would hire a contractor to cap the entire remainder of the landfill during
2013. This option would place a cap over the full 51 acres currently uncapped and
ultimately open up 43 acres as parkland. The 8-acre Measure E area would be
capped but not available as parkland until the Energy/Compost Facility has been
considered. With this option, if an Energy/Compost Facility is approved by
Council, there would be additional project costs to remove the cap, re-grade the
landfill to build a pad and construct another cap. The additional cost estimates to
remove and reconstruct the cap (after regrading) range from no cost (3.8 acre or
smaller option) to $3 million (largest 10 acre option). (These costs do not include
site development costs, that depend on the size of the Energy/Compost Facility,
only “re-capping” costs ). A 3.8-acre or smaller facility would not require any
disturbance of the landfill cap.

Option 3 – Capping 34 acres and Seeking Approval to Postpone Capping on
Remaining 17 acres

Staff would hire a contractor to cap most of the remaining landfill and leave an
area open for an Energy/Compost Facility (see Attachment C for map). Staff also
would propose to the regulatory agencies that 34 acres would be capped and
opened up to the public. The remaining 17-acre area would be available for the
development of an Energy/Compost Facility and allow enough uncapped area
available to receive garbage spoils from a 5-acre Energy/Compost facility. Should
a 10-acre site ultimately by required, removal and reconstruction of the cap for
this option is estimated to be approximately $2 million depending on the
regrading configuration. No such re-capping costs would occur if the area needed
was 5 acres or less.
The selection of any of these landfill capping options will not limit the potential size or functionality of an Energy/Compost Facility because some cap can be removed if a larger facility is selected. However, options that result in the removal and subsequent reconstruction of cap acreage would increase the overall development costs for the Energy/Compost facility. Staff is recommending Option 3 because it allows for an optimal 5-acre Energy/Compost Facility that is the most feasible from an engineering perspective, it eliminates the need for any “recapping” costs for a 5-acre site without drastically changing the character of the landfill’s grading plan, and it opens up an additional 34 acres of parkland.

If regulatory agencies deny the request for postponement of the 17 acres, the City will need to comply with the current regulatory requirements and be required to proceed with the capping of the remaining 51 acres.

**Project Concept and RFP Process to Obtain Pricing for Energy/Compost and Export Options**

The Energy/Compost Facility or Export Option RFP (Attachments D and E) includes the project concepts, goals, and performance specifications. The performance specifications, which include factors such as size limits, acceptable technologies, business arrangements, and preferences for energy production and compost quality, will be used in the RFP to define the scope of a potential project. Proposals received from vendors will be evaluated and evaluations presented to Council for a decision on whether to: 1) move forward with an Energy/Compost Facility; 2) utilize a vendor-provided export option; 3) continue with current programs for food scrap and yard trimmings management; 4) address biosolids separately on the RWQCP site; or 5) select a combination of two or more strategies.

The RFP requires a proposal for all three feedstocks: biosolids, yard trimmings, and food scraps. The RFP also requires a proposal for just yard trimmings and food scraps. This alternative proposal is designed to provide an option for the City to pursue a publicly financed and operated biosolids facility outside of the RFP process. The Biosolids Facility Plan consultant team (see Staff Report ID # 3383) will analyze the Energy/Compost Facility or Export Option proposals and provide a recommendation as to whether the biosolids should be included as a feedstock or
addressed through a RWQCP-funded capital improvement project. The proposals may also provide alternative projects that address one or some other combination of the feedstocks (e.g., a possible alternative may include wet anaerobic digestion for biosolids and food scraps). The RFP asks proposers to provide onsite solutions using anaerobic digestion (wet and/or dry) or gasification technologies. Only technologies proven at full scale will be considered.

In order to compare costs, the RFP is requesting that proposers provide solutions that include the design, build (construction), financing, ownership, and operations of an Energy/Compost Facility. If such a facility is approved by Council, the City will enter into a long-term contract (20-30 years) guaranteeing a minimum amount of the feedstock at a set tipping fee. This type of agreement is similar to the agreements the City already has with the Sunnyvale Materials and Recovery Transfer (SMaRT) Station and Kirby Canyon Landfill. The RFP process allows for a selection of a proposal that best meets the needs of the City. The City also will retain the right to reject all proposals.

An initial environmental review process is expected to be run concurrently with the RFP process. A preliminary California Environmental Quality Act (CEQA) Checklist is included for review (Attachment F). Much of the foundational work for the environmental review process can be completed before the proposals are received, but to ensure that all possible environmental impacts (and benefits) are fully evaluated, the environmental process will be finalized after a proposal and contract has been accepted by Council. See the Timeline (Attachment A) for details.

The Project Concept and RFP process includes multiple points for Council and public input as well as Council approval. Public meetings are included in the Action Plan and Timeline for review of project concepts, project goals, and performance specifications, and for review of the draft RFP. The public will also have the opportunity to comment on the environmental impacts, which will include a full environmental analysis of the proposals.

Implementation of Selected Strategy
Following Council’s decision, the City will implement either an Energy/Compost Facility option or an export option. Export options may be those provided by vendors through the RFP process or continuing current practice. The Biosolids Facility Plan will help determine whether the biosolids will be managed as part of an Energy/Compost Facility, through an export option, or through an onsite management option at the RWQCP.

Timeline

Upon Council approval, the proposed RFP timeline is:

- Issue RFP Early February 2013
- Mandatory Pre-Proposal Meeting March 12, 2013
- Last Date for Submittal of Written Questions July 12, 2013
- Proposal Submission Due Date July 31, 2013
- Proposal Evaluation August 2013 to January 2014
- City Council Review of Options February 2014
- CEQA Approval Prior to award of contract
- Selection of Preferred Approach/Proposer February 2014
- Company Contract Negotiation Mid 2015
- Operations no later than July 1, 2017 for Export of Biosolids, Food Scraps and Yard Trimmings; No later than January 1, 2019 for E/C Facility

Resource Impact

The funds required to evaluate the Energy/Compost Facility or Export Option proposals were included in the $290,224 for ARI contract Amendment No. 2 and were funded by the Refuse Fund, Wastewater Treatment Fund, and Electric Fund as well as the Biosolids Facility Plan consultant contract under consideration (See Staff Report ID # 3383). No additional appropriation from the Wastewater Treatment Fund or Electric Fund is needed.
The funding for the actual capping of the landfill will be addressed when Staff returns to Council with a construction contract. The funds to prepare the design and construction documents have already been approved by Council.

**Policy Implications**

Recommendations of this staff report are consistent with existing City policies including the Zero Waste Plan, Baylands Master Plan, and Comprehensive Plan as amended by Ballot Measure E on November 8, 2011.

**Environmental Review**

The RFP process itself does not constitute a project under CEQA. A preliminary CEQA checklist (Attachment F) for the purpose of providing information to proposers about potential environmental measures to address is included with the attached RFP. CEQA compliance for the cap construction impacts for the next phase of the landfill is currently being completed.

**Attachments:**

- Attachment A - Energy/Compost Facility or Export Option & Biosolids Facility Plan Timeline (PDF)
- Attachment B - Existing Conditions Map (PDF)
- Attachment C - Partial Landfill Closure Map (PDF)
- Attachment D - Final RFP (DOC)
- Attachment E - Final RFP Appendices (DOC)
- Attachment F - Preliminary CEQA Checklist (DOC)
PARTIAL CAPPING OPTION FOR 2013
REVISED FINAL COVER GRADING PLAN
PALO ALTO LANDFILL

FIGURE 1

Legend:
- --- --- LIMIT OF LANDFILL
- - - - LIMIT OF PROPOSED BUILDING PAD
- - - - - - FINAL COVER GRADING

Notes:
1. APPROXIMATELY 15,000 CY OF SOIL AND REFUSE TO BE EXCAVATED.
2. TOTAL UNCAPPED AREA IS 16.8 ACRES. UNCAPPED AREA OUTSIDE OF MEASURE "E" FOOTPRINT IS 8.9 ACRES.

面积列表：
- 105.3 亩
  - 29 亩 (1991 年开建)
  - 29 亩 (1991 年开建)
  - 45 亩 (2011 年开建)
  - 34.4 亩 (近期封闭顶盖)
  - 5.3 亩
  - 16.8 亩未覆盖

约 1 亩临时植被土壤堆料

区域描述：
- 10.5 英尺高的保留墙
- 用于覆盖垃圾桶的平台
- 5.0 亩总面积（注 1）
Request for Proposals
to Establish
an Energy/Compost Facility or Export
Food Scraps, Yard Trimings and
Biosolids

Issued by:
City of Palo Alto, California

February 2013
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**DEFINITIONS**

“**Acceptable Feedstock**” means source separated food scraps, yard trimmings and biosolids from municipal wastewater treatment that are available for delivery to the E/C Facility for processing or for Export, and is not Unprocessibles, pathological or toxic material, liquid wastes, or any material listed by the State or a Federal agency as hazardous waste. Acceptable Feedstock includes residential, commercial and industrial waste that meets the criteria defined above, clean wood waste that is not painted or pressure treated, and agricultural waste suitable for anaerobic digestion or gasification.

“**Acceptable Feedstock Tipping Fee**” or “**AFTF**” or “**Tip Fee**” means the amount paid by the City for each ton of City Acceptable Feedstock delivered to the E/C Facility or for Export, as set forth in Section 5 of this RFP.

“**Acceptance**” means approval by the City that the Contractor has successfully performed the Acceptance Tests and successfully met the Acceptance Standards for the E/C Facility or Export.

“**Acceptance Date**” means the date on which Acceptance of the E/C Facility or Export occurs or is deemed to have occurred.

“**Acceptance Standards**” or “**Acceptance Criteria**” means the performance standards for the E/C Facility or Export based on this RFP, the Contractor's response to this RFP and any subsequent Contract, which the Contractor will meet in order to achieve Acceptance.

“**Acceptance Tests**” means the tests for Acceptance, which will be developed between the parties and incorporated into the Contract.

“**Adjustment Factor**” means the change in the Consumer Price Index (as such shall be applied to a coming Contract Year) for the preceding 12 months, calculated as of May 1 of every Contract Year, and applied to costs, fees and prices as described in Section 5 of this RFP.

“**Anaerobic Digestion**” means for purposes of this RFP, a biological process that converts the biodegradable portion of Acceptable Feedstock to biogas and digestate in an environment absent oxygen. The biogas is typically used to generate electricity and heat, or to manufacture a fuel. The digestate may be further composted and cured.

“**Annual True-Up/Settlement Process**” means the annual reconciliation performed for each Contract Year between the payments made during the Contract Year by the City to the Contractor and by the Contractor to the City and the actual amount(s) calculated to be payable by each to the other, such calculation being made after the end of the respective Contract Year. The Annual True-Up/Settlement Process is described in Section 5.

“**Annual Feedstock Throughput Guarantee**” means the amount of Acceptable Feedstock that the Contractor and Guarantor shall guarantee to be processed annually at the E/C Facility or accepted for Export.
“Appendix” means an appendix to this RFP.

“Applicable Law” means any law, rule, code, standard, regulation, requirement, consent decree, consent order, consent agreement, permit, guideline, action, determination or order of, or legal entitlement issued or deemed to be issued by, any Governmental Body having jurisdiction, applicable from time to time to any activities associated with the siting, design, construction, equipping, financing, ownership, start-up testing, Acceptance, operation, maintenance, repair and replacement of any part of the E/C Facility or Export, the transfer, handling, transportation, marketing, disposal or processing of products and Residuals, and any other obligations of the parties under the Contract.

“Availability Guarantee” means the percentage of Rated Capacity of the E/C Facility that shall be available for processing Acceptable Feedstock on average during any Contract Year as guaranteed by the Contractor and Guarantor.

“Biosolids” means the wastewater residuals generated at the Regional Water Quality Control Plant. Biosolids include: solids separated during the wastewater treatment process; scum which is skimmed from the surface of the wastewater treatment tanks. Biosolids may be dewatered biosolids (at approximately 26% solids) or undewatered biosolids (at approximately 3.3% solids). Biosolids also includes Fats, Oils & Grease (FOG) which is delivered to the RWQCP for further treatment.

“Business Day” means any day when City governmental offices are open to serve the public and which is not a Saturday, Sunday or legal holiday under Applicable Law.

“Bypassed Feedstock” means Acceptable Feedstock delivered to the E/C Facility which could not be processed at the E/C Facility and must be directed to another management or disposal facility. Bypassed Feedstock includes both Acceptable Feedstock diverted from the E/C Facility before unloading and Acceptable Feedstock accepted, unloaded but not processed at the E/C Facility, and reloaded and diverted.

“Change-in-Law” means any of the following acts, events, or circumstances to the extent that compliance therewith materially increases or decreases the cost of performing or materially increases or decreases the scope of a party's obligations under the Contract:

1. the adoption, amendment, promulgation, issuance, modification, repeal or written change in administrative or judicial interpretation of any Applicable Law on or after the Contract Date, unless such Applicable Law was on or prior to the Contract Date duly adopted, promulgated, issued or otherwise officially modified or changed in interpretation, in each case in final form to become effective without any further action by any Governmental Body;

2. the order or judgment of any Governmental Body issued on or after the Contract Date (unless such order or judgment is issued to enforce compliance with Applicable Law which was effective as of the Contract Date) to the extent such order or judgment is not the result of willful or negligent action, error or omission or lack of reasonable diligence of the Contractor or of any of the
City, whichever is asserting the occurrence of a Change in Law; provided, however, that the contesting in good faith or failure in good faith to contest any such order or judgment shall not constitute or be construed as such a willful or negligent action, error or omission or lack of reasonable diligence; or

(3) except with respect to any Governmental Approval required for the Facility as provided in item (b) below pertaining to exclusions from "Change in Law", the denial of an application for, a delay in the review, issuance or renewal of, or the suspension, termination, or interruption of any Governmental Approval, or the imposition of a term, condition or requirement which is more stringent or burdensome than the Contract Standards in connection with the issuance, renewal or failure of issuance or renewal of any Governmental Approval, to the extent that such occurrence is not the result of willful or negligent action, error or omission or a lack of reasonable diligence of the Contractor or the City, whichever is asserting the occurrence of a Change in Law; provided, however, that the contesting in good faith or the failure in good faith to contest any such occurrence shall not be construed as such a willful or negligent action or lack of reasonable diligence.

It is specifically understood, however, that none of the following shall constitute a "Change in Law";

(1) a change in the nature or severity of the actions typically taken by a Governmental Body to enforce compliance with Applicable Law which was effective as of the Contract Date;

(2) all matters relating to the Contractor's assumption of the permitting risk for the E/C Facility or Export in connection with obtaining and maintaining Federal, State or Local Governmental Approvals of the design, construction and operation of the Facility; and

(3) any event that affects generally applicable working conditions or standards that is not specific to the solid waste and wastewater management industry.

"Change Order" means any approved request or written authorization that is agreed to by the parties in writing that authorizes or requires additional or extra services or work or deletes or omits services or work. A Change Order may also modify a schedule of performance or otherwise alter the services or work to be performed.

"City" means the City of Palo Alto, California.

"Commencement Date" means the date on which (1) all Conditions Precedent have been satisfied for a particular project activity, including but not limited to the issuance of a Notice to Proceed for that activity, and (2) the Contractor commences services for that activity as described in the Contract.

"Commercial Operation Date" means that date on which commercial operations commence; i.e., the Acceptance Date.
“Conditions Precedent” means all conditions that must be satisfied by the Contractor and by the City prior to the issuance of a Notice to Proceed to the Contractor to commence service.

"Construction" or “Construction Work” means all work and materials for permitting, financing (if required), design, construction, start-up and acceptance testing of the E/C Facility or Export, and all work required for Acceptance of the E/C Facility or Export, under the terms of the Contract.

“Consumer Price Index” or “CPI” means the Consumer Price Index, as defined by the Department of Labor, U.S. Bureau of Labor Statistics, All Items, Not Seasonally Adjusted, for San Francisco-Oakland-San Jose (Series No. CUURA422SA0LE), or its successor.

“Contract” means the agreement between the City and the Contractor for satisfying the obligations of the parties as specified by this RFP and as further negotiated and made part of the agreement.

“Contract Date” means the date of delivery of the Contract as executed by the parties thereto.

“Contract Principles” means the Contract Principles set forth in Section 5 of this RFP, upon which the Contract will be based.

“Contract Services” means all services necessary to be provided by the Contractor to satisfy the obligations of the Contract.

"Contract Standards" means the terms, conditions, methods, techniques, practices and standards imposed or required by: (1) Applicable Law; (2) the Design Requirements; (3) the Performance Guarantees; (4) Good Engineering and Construction Practice; (5) Good Industry Practice; (6) the Operation and Maintenance Manual; (7) applicable equipment manufacturers’ specifications; (8) applicable Insurance Requirements; and (9) any other standard, term, condition or requirement specifically provided in this Contract to be observed by the Contractor. The Contractor shall be obligated to comply only with those Contract Standards which are applicable in any particular case. Where more than one Contract Standard applies to any particular performance obligation of the Company hereunder, each such applicable Contract Standard shall be complied with. In the event there are different levels of stringency among such applicable Contract Standards, the most stringent of the applicable Contract Standards shall govern.

“Contract Year” means a 365/366-day period commencing on July 1 of each calendar year and ending on June 30 of each succeeding calendar year, except that the first Contract Year shall begin upon the Commencement Date and shall end upon the succeeding June 30, and the final Contract Year shall terminate upon the conclusion of twenty (20) years of operation, plus any renewals or extensions.

“Contractor” means the entity executing the Contract with the City.
“Corrective Maintenance” means non-routine and unscheduled repair activities required for operational continuity, safety, and performance generally due to failure or to avert failure of the equipment, vehicles or facilities or some component thereof.

“Day” means a calendar day of twenty-four hours measured from midnight to the next midnight.

“Design Criteria” means the requirements as set forth in Section 4 and Appendix F of this RFP.

“Design Requirements” means the Design Standard of Care, the Design Criteria and all regulatory requirements relating to the design of any such particular work as to which this term may be applied.

“Design Standard of Care” means those methods, techniques, standards and practices which, at the time they are to be employed and in light of the circumstances known or reasonably believed to exist at such time, are generally accepted as Good Industry Practice in the municipal solid waste and wastewater industries as practiced in the United States and the State, and are consistent with the same degree of skill and care ordinarily exercised by the members of this profession.

“Design Work” means engineering and architectural design services provided with respect to any portion of the Facility which are by the terms of the Contract required to be undertaken in compliance with the Design Requirements.

“E/C Facility” or “Facility” is the anaerobic digestion facility and/or gasification facility to be developed by the Contractor, as defined in Section 4 and Appendix F of this RFP.

“Effluent” means wastewater discharged to the City’s sanitary sewer system from the E/C Facility.

“Effluent Requirements” means any wastewater effluent limitations required by Applicable Law.

“Environmental Performance Guarantee” shall mean the Contractor’s guarantee of environmental performance as described in Section 4 of this RFP. It shall include noise, odor and other environmental performance guarantees.

“Evaluation Committee” means the committee formed by the City to evaluate Proposals as set forth in Section 7 of this RFP.

“Event of Default” has the meaning set forth in the Contract Principles.

“Excess Tonnage Fee” means fee paid by the City to the Contractor for Acceptable Feedstock delivered (or caused to be delivered) above the Maximum Annual Delivery Threshold, as set forth in Section 5 of this RFP.
“Exit Transition Plan” means the transition services, including plans for temporary, short-term, operational procedures and activities relating to and after contract termination, to be undertaken by the Contractor as more fully specified in Section 4 and Appendix F of this RFP.

“Export” means the transport and processing/management of Acceptable Feedstock outside of the RWQCP Site or 10-acre Landfill Site in Palo Alto in accordance with the requirements of this RFP.

“Feedstock Throughput Guarantee” or “Acceptable Feedstock Throughput Guarantee” means the tons of Acceptable Feedstock that the Contractor and Guarantor shall guarantee the E/C Facility or Export shall be capable of processing daily, in accordance with the Rated Capacity.

“Fiscal Year” means a year commencing on July 1st and ending on June 30th.

“Food Scraps” means material resulting from the production, processing or purchase of food for consumption, but is no longer intended for such consumption, and food-soiled paper. Food scraps includes residential and commercial food waste from residential food scrap collection, as well as from commercial food facilities, food processing establishments, grocery stores, institutional cafeterias (e.g., schools and hospitals), restaurants, concessions (e.g., from sporting and entertainment venues), and related sources.

“Gasification” means for purposes of this RFP, a thermal process operated as sub-stoichiometric conditions theoretically necessary for complete combustion that changes the composition of the organic portion of Acceptable Feedstock to produce a synthesis gas, typically for conversion to electricity, heat, and/or fuel. It includes pyrolysis, high and low temperature gasification and plasma gasification. It does not include incineration or combustion of feedstock at stociometric conditions necessary for complete combustion of carbon and hydrogen for conversion to CO2 and water, or with use of excess air above stoichiometric conditions to achieve complete combustion.

“Good Industry Practice” means those methods, techniques, standards and practices which, at the time they are to be employed and in light of the circumstances known or reasonably believed to exist at such time, are generally accepted as prudent in the municipal solid waste and municipal wastewater industries as practiced in California and in the United States.

“Good and Accepted Construction Practice” means the methods, techniques, standards and practices which, at the time they are to be employed and in light of the circumstances known or reasonably believed to exist at such time, are generally recognized and accepted as a good workman-like manner in the construction industry as practiced in California and the United States, including that for municipal solid waste management and municipal wastewater treatment.

"Good and Accepted Operating Practice" means the methods, techniques, standards and practices which, at the time they are to be employed and in light of the circumstances
known or reasonably believed to exist at such time, are generally recognized and accepted as good industry practices in the solid waste management industry and municipal wastewater treatment industry as practiced in California and the United States.

"Governmental Approval" means any approval by a Governmental Body necessary for the provision of services to be performed by the parties under the Contract.

“Governmental Body” means any government entity with jurisdiction in whole or in part regarding services to be performed by the parties under the Contract. Governmental bodies include, but are not limited to, City, County, State and Federal agencies and all successors thereto.

“Guarantor” means the entity that will execute the Guaranty.

“Guaranty” means the Guaranty Agreement between the Contractor and the Guarantor guarantying the performance by the Contractor of its obligations to the City under the Contract.

“Hazardous Waste” has the meaning given such term under the Resource Conservation and Recovery Act, 42 USC § 690 et seq., and any similar Applicable Law, including regulations of any State agencies with jurisdiction over the project and/or the Facility.

“Landfill” means the City Landfill.

“Landfill Site” means the parcel of land at the City Landfill as described in Section 2 of this RFP that is to be leased by the City to the Contractor for purposes of developing and operating the E/C Facility. Such parcel shall be limited to restrictions as included in Measure E, limiting such parcel to 10 acres.

“Legal Entitlement” means all permits, licenses, approvals, authorizations, consents and entitlements of whatever kind and however described which are required under Applicable Law (of the United States, the State of California, Santa Clara County, the City or other jurisdictions) to be obtained or maintained by any person with respect to the construction of the E/C Facility, operation of the E/C Facility, or providing Export services, or the performance of any other obligation of the Contractor under the Contract.

“LEED” means Leadership in Energy and Environmental Design as defined by the U.S. Green Building Council.

“Maintenance” means those routine and/or repetitive activities required or recommended by the equipment manufacturers or by the Contractor to maximize the service life of the E/C Facility, consistent with Good Industry Practice, and Corrective Maintenance, Preventive Maintenance and Predictive Maintenance.

“Maximum Annual Delivery Threshold” means the amount of Acceptable Feedstock the City shall be allowed to deliver (or cause to be delivered) each Contract Year before incurring Excess Tonnage Fees, as set forth in Section 5 of this RFP.
“Minimum Annual Delivery Requirement” means the amount of Acceptable Feedstock the City shall be required to deliver (or cause to be delivered) each Contract Year, as set forth in Section 5 of this RFP.

“Noise Guarantee” means the guarantee, as included in the Environmental Performance Guarantee and guaranteed by the Contractor and Guarantor based on the Noise Control Plan proposed.

“Notice to Proceed” means the written authorization issued to the Contractor by the City, requiring the Contractor to commence the design and construction of the E/C Facility, the operation of the E/C Facility, Export, or some other activity as applicable.

“NPDES” means National Pollution Discharge Elimination System.

“Odor Guarantee” means the guarantee, as included in the Environmental Performance Guarantee and guaranteed by the Contractor and Guarantor based on the Odor Control Plan proposed.

“O&M” means Operation, Maintenance and Management of the E/C Facility or Export in accordance with Good Industry Practice, Good and Accepted Operating Practice, and the terms of the Contract.

“Participating Firm” means all firms that will be significant participants in providing the services required by the Contract as set forth in Proposal Form 7.

“Performance Guarantees” has the meaning as set forth in Section 4 and Section 5 of this RFP.

“Periodic Delivery Reset” means the periodic reset of the Minimum Annual Delivery Requirement and the Maximum Annual Delivery Threshold as set forth in Section 5 of this RFP.

“Plant Manager” means the manager employed by the Contractor to manage the operation and maintenance of the E/C Facility or Export.

“Predictive Maintenance” means those non-repetitive and non-routine maintenance activities that are identified as necessary during annual testing and inspections conducted in accordance with the O&M manual that are outside of Preventive Maintenance and Corrective Maintenance.

“Preferred Proposer” means the Proposer(s) selected by the City with which it intends to enter into Contract negotiations.

“Preventive Maintenance” means those maintenance activities that are routine or repetitive in nature required by the equipment or facility manufacturer or the Contractor to maximize the service life and operational efficiency of the equipment, vehicles and facility, listed in the O&M manual, required by warranties or otherwise identified as necessary or desirable in accordance with Good Industry Practice.
“Processing Service Fee” or “PSF” means the monthly amount paid to the Contractor by the City, consisting of the sum of various fees and costs as set forth in Section 5 of this RFP.

“Project Schedule” means the Contractor’s schedule for completing construction; i.e., the scope of work during permitting, financing, design, construction, start-up and acceptance testing for the E/C Facility or commencing Export.

“Proposal” means a document(s) submitted for consideration in response to this RFP.

“Proposal Form” means any one of the proposal forms attached to this RFP in Appendices A and B and which must be included by Proposers in their Proposals.

“Proposer” means the entity submitting a Proposal in response to this RFP, including the Guarantor and all entities sponsoring the Proposal or proposing to act as a Participating Firm.

“Rated Capacity” means the rate (tons per day) at which tons of Acceptable Feedstock can be processed on a continuous basis over a sustained period of time assuming no allowances for scheduled or forced outage.

“Required Insurance” means the insurance coverage set forth in Section 5 of this RFP.

“Residue” or “Residuals” means waste materials or products that result from processing Acceptable Feedstock at the E/C Facility or Export, which the Contractor cannot beneficially use and market and which must be disposed of. Residue does not include Unprocessable Feedstock or Bypassed Feedstock.

“RFP” or “Request for Proposals” means this Request for Proposals as originally issued and as amended and supplemented.

“RWQCP” or "Regional Water Quality Control Plant" means the City wastewater treatment plant.

“RWQCP Site” means the parcel of land at the RWQCP as described in Section 2 of this RFP that is to be leased by the City to the Contractor for purposes of developing and operating the E/C Facility.

“Scheduled Acceptance Date” means the date by which the Contractor and the Guarantor guarantee completion of the acceptance phase of Construction and on which Acceptance (as defined by this RFP) occurs for the E/C Facility or Export.

“Services” means all of the duties, obligations and services to be provided by the Contractor.

“Shortfall Charge” means charges incurred by the City for failure to meet the Minimum Annual Delivery Requirements as set forth in Section 5 of this RFP.
“Site” means the Landfill Site and/or the RWQCP Site.

"Site Lease" means the agreement between the City and the Contractor leasing the Site to the Contractor for the Term of the Contract.

“Spot Market Feedstock” means Acceptable Feedstock delivered to the E/C Facility or Export by or on behalf of parties other than the City as set forth in Section 5 of this RFP.

“Start-up Test” means all the testing required, to the extent practical, of all or any component of the E/C Facility or Export after construction for the purpose of demonstrating that the E/C Facility or Export or the component being tested operates properly over the full range for which it was designed and in accordance with the design specifications.

“State” means the State of California.

“Subcontractor” means any third party engaged by the Contractor in performance of services for this Contract.

“Term” has the meaning set forth in the Contract Principles, and includes the time from the Contract Date through Construction and Acceptance of the E/C Facility or Export, plus operation of the E/C Facility or Export after Acceptance, plus any renewals of the Contract.

“Tons” means short tons, 2000 pounds.

“TPD” means tons per day.

“TPY” means tons per year.

“Unacceptable Feedstock” means feedstock that is not Acceptable Feedstock.

“Uncontrollable Circumstance” means any act, event or condition that is beyond the reasonable control of the party relying thereon as justification for not performing an obligation or complying with any condition required of such party under the Contract, and that materially interferes with or materially increases the cost of performing its obligations hereunder (other than payment obligations), to the extent that such act, event or condition is not the result of the willful or negligent act, error or omission, failure to exercise reasonable diligence, or breach of the Contract on the part of such party. Such acts or events may include, but shall not be limited to, the following:

(A) naturally occurring events (except weather conditions normal for the Palo Alto area) such as landslides, underground movement, earthquakes, fires, tornadoes, floods, epidemics, and other acts of God;

(B) explosion, sabotage or similar occurrence, acts of a declared public enemy, extortion, war, blockade or insurrection, riot or civil disturbance;
 labor disputes, except labor disputes involving employees of the Contractor, its affiliates, or Subcontractors which affect the performance of the Contract services;

(D) the failure of any Subcontractor or supplier, other than the Contractor, the Guarantor or any affiliate of either, to furnish services, materials, chemicals or equipment on the dates agreed to, but only if such failure is the result of an event which would constitute an Uncontrollable Circumstance if it affected the Contractor directly, and the Contractor is not able after exercising all reasonable efforts to timely obtain substitutes;

(E) the failure of any appropriate Governmental Body or private utility having operational jurisdiction in the area in which the E/C Facility or Export is located to provide and maintain utilities to the E/C Facility or Export which are required for the performance of the Contract;

(F) any failure of title to the Site or Export processing/management location or any enforcement of any encumbrance on the Site or Export processing/management location not consented to in writing by, or arising out of any action or agreement entered into by, the party adversely affected thereby;

(G) the preemption of materials or services by a Governmental Body in connection with a public emergency or any condemnation or other taking by eminent domain of any material portion of the E/C Facility or Export; and

(H) a Change-in-Law.

It is specifically understood that, without limitation, none of the following acts, events or circumstances shall constitute Uncontrollable Circumstances:

(1) any act, event or circumstance with respect to which the Contractor has assumed the "as-is" risk under the Contract;

(2) any act, event or circumstance that would not have occurred if the affected party had complied with its obligations under the Contract;

(3) changes in interest rates, inflation rates (other than those provided for in the Contract), labor costs, insurance costs, commodity prices, currency values, exchange rates or other general economic conditions;

(4) changes in the financial condition of the City, the Contractor, the Guarantor, or their affiliates or Subcontractors affecting the ability to perform their respective obligations;

(5) the consequences of error, neglect or omissions by the Contractor, the Guarantor, any Subcontractor, any of their affiliates or any other person in the performance of the Contract Services;
(6) union or labor work rules, requirements or demands which have the effect of increasing the number of employees employed at the E/C Facility or Export or otherwise increasing the cost to the Contractor for performing the Contract Services, provided that such are not the result of a Change-in-Law;

(7) mechanical failure of equipment;

(8) power outages not caused by third party utilities;

(9) any impact of prevailing wage or similar laws, customs or practices on the Contractor's costs;

(10) reasonably anticipated weather conditions for the geographic region of Palo Alto or for Export, the transport to or processing/management facility for Acceptable Feedstock;

(11) any act, event, circumstance or Change-in-Law occurring outside the United States of America;

(12) failure of the Contractor to secure applicable patents, provided that such failure is due to the acts, omissions or negligence of the Contractor;

(13) a Change-in-Law pertaining to taxes; or

(14) any Change-in-Law (including the issuance of any Governmental Approval, the enactment of any statute, or the promulgation of any regulation) the terms and conditions of which do not impose more stringent or burdensome requirements on the Contractor than are imposed by the Contract Standards.

“Unprocessibles” or “Unprocessible Feedstock” means any material arriving at the E/C Facility or Export that cannot be processed because of its size or its characteristics; e.g., oversized, bulky items, and is diverted from the E/C Facility or Export for disposal.

“USEPA” or “EPA” means the United States Environmental Protection Agency.

“Yard Trimmings” means material generated by residential and commercial sources associated with landscaping of gardens and lawns, pruning of trees and shrubs, and other related activities that generate woody/vegetative debris. Yard trimmings specifically include branches and stumps that are less than six-inches in diameter and shorter than four-feet in length; flowers, plants and shrubs; grass clippings and leaves; holiday trees (seasonal only; undecorated, unflocked, with stands removed and with tree sections not exceeding four-feet in length); and lumber, sawdust, wood chips and wood waste (untreated/unpainted). Yard trimmings does not include animal waste, bamboo, cactus, dirt, flax, ivy, painted or treated wood, palm, pampas grass, poison oak, sod, stable bedding and yucca.

“Year” means a calendar year commencing on January 1st and ending on December 31st.
1.0 INTRODUCTION

1.1 Background

In September 2011, the City of Palo Alto, California (City) completed a comprehensive feasibility study (Feasibility Study) assessing options to manage source separated organics (Food Scraps, Yard Trimmings and biosolids). The study found that constructing a facility in the City or exporting materials to an out of City facility may be equally competitive economically; in-City options, however, offered environmental benefits as related to a reduction in greenhouse gas emissions resulting from reduced truck transport. In November 2011, voters in the City approved Measure E, allowing a 10-acre parcel at the City Landfill to be considered for use for an Energy/Compost Facility (E/C Facility). Concurrent with the Feasibility Study, the City completed a Long Range Facilities Plan (LRFP) for the Regional Water Quality Control Plant (RWQCP), part of which recommended phasing out the existing, multiple hearth incinerators used for biosolids disposal and considering in-City and export options for biosolids management. City Council directed staff to prepare an Action Plan to consider integration of these efforts and through the ensuing process to determine if there were benefits that would result from integrating management of Food Scraps, Yard Trimmings and biosolids. On July 2, 2012, City Council approved the Action Plan, including preparation of a Request for Proposals (RFP), this document, to seek firm technical and price proposals from interested companies to design, build and operate an E/C Facility in the City or to export materials to a facility outside the Sites identified in this RFP (Export). Both Anaerobic Digestion and Gasification technologies were to be considered for the E/C Facility. Two Sites are available for an in-City facility, a site at the RWQCP (approximately 1 acre in size after the existing incinerators and related air pollution control equipment are removed) and the site approved by Measure E, a 10-acre parcel at the City Landfill adjacent to the RWQCP.

Although the E/C Facility is limited to anaerobic digestion and gasification, the choice of technology(ies) and Site will be left open in the RFP to allow companies to propose the system they feel is best to address the City’s needs. For Export, Proposers may use traditional composting, as well as anaerobic digestion and gasification as the means of processing Acceptable Feedstock. Proposers may propose an E/C Facility or Export, or a combination of these approaches. The City will evaluate the proposals received to determine the most beneficial means for the City to manage the aforementioned materials. Selection of an E/C Facility or Export will entail CEQA review and contract negotiations followed by implementation of the selected project.

Copies of the Feasibility Study (updated in April 2012), the LRFP, the Action Plan and related City Staff reports and documents can be found on the City’s web site.

*Energy/Compost Feasibility Study*  

*Energy/Compost Facility Consideration*  
1.2 Intent of Request for Proposals

Through this RFP, the City is seeking Proposals from interested companies to permit (except for CEQA review which will be performed by the City), design, finance, build, own and operate an E/C Facility to be located at the RWQCP Site and/or the City Landfill Site to manage Food Scraps, Yard Trimmings and biosolids, or to export these feedstocks for disposal or use outside of the RWQCP Site or 10-acre Landfill Site in Palo Alto. The E/C Facility can utilize either Anaerobic Digestion, Gasification, or a combination of these technologies. For Export, traditional composting, as well as Anaerobic Digestion and Gasification can be used. Proposers may propose on either an E/C Facility or Export, or may use a combination of these methods.

With Anaerobic Digestion, the E/C Facility may digest Food Scraps, Yard Trimmings and biosolids in separate digesters, or it may co-digest biosolids with Food Scraps and/or Yard Trimmings. The E/C Facility may generate electricity or produce fuels. Digestate may be composted on site or outside of the RWQCP Site or 10-acre Landfill Site. For compost, 1,000 tons per year will be made available to the City and its residents at no charge. Electricity will be purchased by the City as further explained in Section 4, or electricity may be wheeled to another utility. Fuels will not be purchased by the City. Any fuels produced must be transported from the Site and sold off Site. Gas from the City Landfill will be provided to the E/C Facility without charge to supplement the biogas produced from the E/C Facility that is used for electricity or fuels production. For either an E/C Facility or Export, Services are to be provided for a 20-year period following the commencement of full-scale operations. An option for a 30-year operating period can be proposed for either an E/C Facility or Export, and, in addition, for Export, a five-(5) year option can be proposed.

The City’s objectives are to contract with an experienced party with a reliable technology and the resources and financial capacity to:

- successfully develop an E/C Facility or Export the materials to provide a reliable, long-term solution for organics management;
- enhance the beneficial use of organic waste materials through materials recovery and/or conversion of feedstocks into marketable products (including production of renewable energy);
- reduce landfill disposal as a means of managing organic materials, thereby increasing diversion;
- operate in an environmentally acceptable manner (including consideration for reduction of greenhouse gas emissions);
• provide services in an economically competitive manner; and

• allow the City to phase out the existing incinerator for biosolids.

This RFP requires that Proposers prepare a Proposal inclusive of technical and financial qualifications, technical approach, business approach, and price. The City will evaluate the Proposals, and if found advantageous, select a Preferred Proposer with which it will enter into Contract negotiations.

1.3 Quantity and Characteristics of Feedstocks

Estimated quantities (tons per year-tpy) of Food Scraps and Yard Trimmings to be generated in the City at the start of the Contract are:

- Food Scraps: 12,100-15,500 tpy; likely estimate: 13,800 tpy
- Yard Trimmings: 13,500-14,300 tpy; likely estimate: 14,025 tpy

These estimates are expected to remain flat over the Contract period.

Projected estimates for biosolids based on 100% of the RWQCP output are as follows:

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2040</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biosolids (approximately 26% solids, tpy)</td>
<td>32,288</td>
<td>39,448</td>
<td>41,975</td>
</tr>
<tr>
<td>Biosolids (as liquid, approximately 3.3% solids, millions of gallons per year)</td>
<td>59.81</td>
<td>73.07</td>
<td>77.75</td>
</tr>
</tbody>
</table>

These estimates for biosolids do not include FOG and scum which are presented in Section 3.2 of this RFP.

It should be noted that the City will deliver Food Scraps and Yard Trimmings as separate materials or combined, depending on the needs of the technology selected for the E/C Facility. In regard to biosolids, either dewatered biosolids (approximately 26% solids) or liquid biosolids (approximately 3.3% solids, not dewatered) will be delivered to an E/C Facility, depending on the needs of the technology selected for the E/C Facility. Fats, oils and grease and scum will be included with biosolids to be managed by the selected company. The costs for additional City effort to meet the needs of the Proposer’s technology will be taken into account when comparing the economic competitiveness of Proposals. The City will be responsible for the construction cost of dewatering facilities without adding said costs for Proposal evaluation, but the costs for operating these facilities will be considered when comparing the economic competitiveness of Proposals.

For Export, the City will dewater biosolids and provide for storage and loading facilities for truck transport. The City will also be responsible for loading Contractor vehicles. The City will be responsible for the construction costs of these facilities without adding said costs for Proposal evaluation, but the costs for operating these facilities and services will be considered when comparing the economic competitiveness of Proposals.
If there is a benefit to the City, the City will consider a Regional E/C Facility capable of managing both City Acceptable Feedstock and Acceptable Feedstock from other sources outside of the City. Such a larger, Regional Facility will only be considered by the City, if proposed as an option to a proposed City only facility.

Further information regarding the quantity and characteristics of organic feedstocks can be found in Section 3 and Appendix E of this RFP.

1.4 Sites

Two Sites are available in the City for an E/C Facility. These include the RWQCP Site (approximately a 1-acre parcel after the existing incinerators and associated air pollution equipment are removed) and the 10-acre Landfill Site (Measure E site) at the City Landfill adjacent to the RWQCP. Significant portions of the Landfill Site include fill material. In addition, the City prefers that the existing Landfill postclosure facility located on the Landfill Site not be moved. The footprint for this facility is 80 feet by 100 feet, excluding the landscape berm. Detailed Site information can be found in Section 2 and Appendices C and D of this RFP.

Proposers may use one or both of these Sites. It should be noted that use of the Landfill Site is a sensitive issue to City residents since it borders Byxbee Park. Proposers should consider means to design the E/C Facility to minimize use of space at the Landfill Site, consider “terracing” site use to allow a more gradual transformation to the landfill slope and minimize retaining wall requirements, and utilize other means, such as use of buffer areas, to address these issues. Use of the highest retaining wall scenario assessed by the City, i.e., 20 feet, may present permitting issues with the regulatory agency, and its approval is not certain. Further, it should be noted that the Landfill is no longer receiving waste, and the City is in the process of designing the closure of the Landfill. Integration of the E/C Facility site needs and the Landfill closure are important considerations for the City. For purposes of this RFP, Proposers should assume that the City will prepare a site pad for use by the E/C Facility that is integrated with Landfill closure. The site pad will not include foundations, utility connections, stormwater management, security, or final site grading and landscaping needed by the selected company. The City has prepared cost estimates for preparing different size site pads for various scenarios involving different amounts of acreage that may be required for the E/C Facility (see Appendix C). The cost for site preparation will be taken into account by the City when it evaluates Proposals and the need for space. It should also be noted that landfill gas is currently collected and piped to the RWQCP where it is used to fuel the existing incinerator. When the incinerators are phased out, the City will require, to the extent practical, that the landfill gas be used in a common heat and power generation system or fuel production system at the E/C Facility, to avoid flaring at the Landfill. The City will provide for delivery of the landfill gas to the E/C Facility at no charge. Information on landfill gas generation can be found in Appendix C of this RFP.
1.5 RFP Approach

This RFP requires Proposers to provide a Base Case Proposal for Food Scraps, Yard Trimmings and Biosolids, and an Alternative Proposal for Food Scraps and Yard Trimmings only to satisfy requirements as set forth in this RFP. In addition, Proposers are invited to submit additional Alternative Proposals. Additional acceptable alternatives that will be considered are identified in Section 1.6 of this RFP. Proposers that do not provide a Base Case Proposal for Food Scraps, Yard Trimmings and Biosolids, and an Alternative Proposal for Food Scraps and Yard Trimmings only will not be considered for additional Alternative Proposals.

It is intended that this RFP be a performance-based request, and that the Contract that results will be a performance-based contract.

1.6 Summary of Services Requested

The selected private company with which the City will enter into a Contract for the requested Services is referred to herein as the Contractor. For purposes of this RFP, the Contractor may be that for the E/C Facility or for Export, whichever the City finds most beneficial in meeting its needs.

The E/C Facility may include Anaerobic Digestion and Gasification technologies as defined by this RFP. See the Definitions section of this RFP for a description of these technologies. For Export, the processing facility may include conventional composting, Anaerobic Digestion or Gasification technologies. For either an E/C Facility or Export, the processing facility will recycle and/or convert Acceptable Feedstock into marketable materials or products (including fuel, electricity, compost or other marketable products). Such a facility may have front-end processing to remove and recover recyclable materials and prepare the feedstock for conversion, and/or back-end processing for recovery of recyclables and marketable products. Neither the E/C Facility nor Export shall include conventional waste-to-energy or incineration. If the E/C Facility or Export includes Anaerobic Digestion, the digestate from the Anaerobic Digestion facility may be marketed directly if it meets California and Federal digestate standards for beneficial use or is used to produce renewable energy, or may be composted, and if composted, must yield compost that meets CalRecycle compost standards and, for biosolids or a combination of biosolids with Food Scraps and/or Yard Trimmings, that meets US EPA Exceptional Quality Standards for metals and Class A for pathogen reduction. It should be noted that CalRecycle is currently in the process of developing digestate standards. For Export, if a traditional compost facility is utilized, the compost must meet the standards described above.

The City will lease to the Contractor either the RWQCP Site or the City Landfill Site, or both of these areas, as needed for the E/C Facility. The City may prepare a site pad at the Landfill Site, as previously described in Section 1.4, or it may require the Contractor to prepare a site pad (for Proposal purposes, Proposers should assume that the City will prepare the site pad). The City will be responsible for remediation of existing contamination at the Site, if needed.
The City will provide Acceptable Feedstock to the E/C Facility. At its discretion, for the E/C Facility, the City may provide support to the Contractor for product marketing, project financing, and other activities that are the Contractor’s responsibility. For example, the City has committed to purchasing electricity from the E/C Facility at market prices for renewable energy (see Section 4 of this RFP for further information). As another example, the City could support Contractor efforts to obtain Federal and State grants, low interest loans, and capacity allocation within the State for tax-exempt financing for the E/C Facility. Also, for example, the City could, where appropriate, encourage use of suitable E/C Facility products, such as compost, in public projects. Proposers should specify the type of support desired for consideration by the City.

The Contractor will permit (with the exception of CEQA approval), finance, design, build, operate, and own the E/C Facility. The Contractor will be responsible for the cost associated with transporting and disposing of Residue and Bypassed Feedstock from the E/C Facility. The Contractor will be responsible for marketing all products and materials generated, recovered or beneficially used. The Contractor will be entitled to revenues for products and responsible for the cost associated with transporting and disposing of any such materials that are not marketed.

For Export, the Contractor will be responsible for picking up, transporting and managing Acceptable Feedstock. The City will provide handling, storage and loading facilities for biosolids at the RWQCP and will load the Contractor’s vehicles. The City will be responsible for permitting activities for these facilities at the RWQCP Site, as they may be needed to implement Export. For Food Scraps and Yard Trimmings, the Contractor will be responsible for transport and management of these Acceptable Feedstocks, assuming the City will deliver these feedstocks to a Contractor transfer or processing facility no more than 18 miles from City Hall.

The Contractor shall provide a staff of qualified and experienced employees to operate and maintain the E/C Facility and/or to provide Export services, and shall give consideration to hiring staff from the local labor force. The Contractor will be responsible for maintaining positive community relations, and shall assist the City with their public information programs by providing information and participating in activities to support those programs.

For the E/C Facility, the Contractor shall be responsible for guaranteeing a financing and construction schedule, including time required for Acceptance. Acceptance shall occur by January 1, 2019, after which the Contractor shall be responsible for accepting City Acceptable Feedstock at the E/C Facility, or at a facility designated by the Contractor and approved by the City if the E/C Facility is not operable by that date, or for any time thereafter during the operating period. After Acceptance, there will be a 20-year operating period, with two, five-year renewal options. The project development period, design and construction period and the operating period, including any renewals, shall comprise the Contract Term. The Contract will include an option for City purchase of the E/C Facility at the completion of the Term or earlier (see Section 1.9 and Section 5).

For Export, the Contractor shall be responsible for transport and all facilities needed for management of Acceptable Feedstocks, such transport services and facilities are to be available for a 20-year operating period, plus two, five-year renewal options. For Food
Scraps and Yard Trimmings, the City will deliver these feedstocks to a Contractor transfer or processing facility no more than 18 miles from City Hall. For biosolids, the City will construct and operate biosolids handling, storage and loading facilities at the RWQCP, and load the Contractor’s vehicles. For all Acceptable Feedstock, as an option, Alternative Proposals for Export will be considered for a shorter operating term, but no less than a 5-year operating period. For Export, the Contractor shall commence operations no later than July 1, 2017. As with the E/C Facility, once operations commence, the Contractor shall be responsible for accepting City Acceptable Feedstock at the primary facility(ies) designated by the Contractor, or at a Contractor designated/ City approved facility if the primary facility is not operable by that date, or for any time thereafter during the operating period.

Pricing for the Base Case Proposal for both the E/C Facility and Export must include all three Acceptable Feedstocks—Food Scraps, Yard Trimmings and biosolids. For the required Alternative Proposal for Food Scraps and Yard Trimmings only, pricing is to be provided for Food Scraps and Yard Trimmings only, for an E/C Facility or Export. Further instruction regarding pricing is provided in Section 8.8 of this RFP.

Additional Alternative Proposals can be provided at the option of the Proposer. Additional Alternative Proposals will be accepted by the City for the following:

- Proposals for accepting Food Scraps and biosolids only, Food Scraps only, Yard Trimmings only, or biosolids only;
- a larger E/C Facility size (Regional E/C Facility), to receive and process Acceptable Feedstock beyond that available from the City, if (i) related site and environmental issues can be successfully addressed to the City’s satisfaction, (ii) financial benefits such as host community payments to the City are considered sufficiently advantageous, (iii) such supplemental feedstock results in no or limited Bypassed Feedstock and no or limited Unacceptable Feedstock being landfilled; and (iv) Contractor is responsible for providing all Acceptable Feedstock not available from the City without recourse to the City if there is a shortfall in such feedstock;
- for the E/C Facility or Export, a term for the operating period to be 30 years, plus two, five-year renewal options; and
- for Export, a term of 5 years.

The City will consider Alternative Proposals only for those cases identified in this RFP or by Addenda to this RFP. Prior to the deadline for submitting written questions, a Proposer may request approval from the City to submit Alternative Proposals based on technical or business options not listed in this RFP or Addenda. If the City agrees to consider other Alternative Proposals, all parties that have received the RFP will be so informed by an Addendum to this RFP.

1.7 Financing

The Contractor shall finance and own the E/C Facility. The City will not be a party to, and shall have no rights or obligations regarding E/C Facility financing and ownership, except
for the option to purchase, as described in Section 1.9 and Section 5 of this RFP. The City will support the Contractor in its efforts to obtain financing, including supporting initiatives to obtain grants and tax-exempt financing, and similar initiatives.

For Export, the City will finance and construct facilities needed to handle, store and load biosolids to the Contractor’s vehicles. The Contractor will be responsible for financing any vehicles and disposal/management facilities for the Acceptable Feedstock.

1.8 Site Lease and Rent

The Landfill Site and/or RWQCP Site will be leased to the Contractor for an E/C Facility. The amount of the Site Lease Payment is specified in Section 5 of this RFP.

1.9 Option to Purchase E/C Facility, Require E/C Facility Removal

The Contract will include an option for the City to purchase the E/C Facility from the Contractor at the end of the Term or earlier, as further described in Section 5 of this RFP. The Contract will also include step-in rights for the City, allowing for the City to fix or to purchase the E/C Facility if certain schedule or performance requirements are not met (see Section 5 of this RFP).

If the City does not exercise its option to purchase the E/C Facility, the City shall have the right to require the Contractor to remove the E/C Facility from the Landfill Site and/or RWQCP Site and restore the Site to a condition that is safe and useable, as further described in Section 5 of this RFP.

1.10 Contract Administration

The City will provide Contract administration and day-to-day operational oversight of the Contract. The City may retain the services of an engineer, financial analyst and/or legal counsel, as necessary, to assist in monitoring Export activities or the E/C Facility design, construction and operation for conformance to Contract technical, environmental and financial requirements.

1.11 Schedule

The following project schedule has been established:

- Issue RFP On or about February 4, 2013
- Mandatory Pre-Proposal Meeting 9:00 AM PST, March 12, 2013
- Last Date for Submittal of Written Questions July 12, 2013
- Proposal Submission Due Date 3:00 PM PST, July 31, 2013
- Proposal Evaluation August 2013-January 2014
- City Council Review of Options February 2014
- Selection of Preferred Proposer February 2014
- Anticipated CEQA Approval By February 2016
- Company Contract Negotiations Completed By February 2016
- Operations no later than July 1, 2017 for Export; No later than January 1, 2019 for E/C Facility

There will be a mandatory Pre-Proposal Information Meeting in Palo Alto at 9:00 AM on March 12, 2013 to discuss this RFP. A tour of the RWQCP Site and the Landfill Site will be conducted after the meeting. See Section 6.3 for further information. Interested parties may attend or participate by conference call.

1.12 Evaluation of Proposals

The City will establish an Evaluation Committee to review Proposals. The Evaluation Committee will be supported by legal, technical and financial advisors as the City deems necessary.

Proposals will be evaluated in accordance with the evaluation procedures and the evaluation criteria described in this RFP, Section 7. Proposals must meet Minimum Evaluation Criteria as specified in Section 7. Proposals that do not meet the Minimum Evaluation Criteria will be considered unacceptable and will not be considered responsive and responsible for comparative ranking. Comparative ranking of non-cost elements of Proposals will be completed using a point-based ranking system as described in Section 7. The Proposal prices will be evaluated concurrently with non-cost elements of the Proposals. At the discretion of the City, Proposal prices may be evaluated separately. A value ranking, including consideration of both non-cost comparative ranking and price will be conducted to determine which Proposal is most advantageous, overall, to the City.

The City is not obligated to select a Proposal based solely on price. In addition to price, the City will consider such factors as the quality of the Proposal, how well Proposals meet the goals and objectives of the procurement, the technical and financial resources and experience of the Proposer, the record of performance and reliability of the proposed technology, the soundness of the technical and business approaches, conformance to terms and conditions of the Contract (as reflected in the Contract Principles in this RFP, Section 5), the level of risk which the Proposer is assuming and asking the City to assume, and other factors as are further described in this RFP.

The Proposer whose Proposal is found most advantageous, based on the value ranking, will be selected for contract negotiations (Preferred Proposer). If negotiations are not satisfactory, negotiations may be initiated with the next-highest ranked Proposer. Although not currently contemplated, the City reserves the right to conduct simultaneous negotiations with more than one Proposer. Subsequent award of a Contract will be made after CEQA certification, and such award will require City Council approval.

Proposers are encouraged to hire workers from the local labor force and purchase goods and services locally and in the region to the extent practical, as described in Section 6 of this RFP.
1.13 Consultant Team

The City has retained the services of Alternative Resources, Inc. (ARI) as management, technical and financial advisor.

1.14 Content of RFP

Included in the remainder of this RFP are: a description of the Site and existing facilities; information on Acceptable Feedstock supply and characteristics; a description of the project, scope of services and schedule; key terms and conditions of the contemplated Contracts (Contract Principles); a description of the procurement procedures and process; a description of the procedures and evaluation criteria that will be used for reviewing and evaluating Proposals, and instructions to Proposers for preparing Technical and Price Proposals. Appendices contain forms and certificates that must be completed by Proposers as well as documents and information that will facilitate Proposal preparation. Upon request, forms in the Appendices will be provided in Microsoft “Word” format and a “CAD” drawing of the City Landfill Site and the RWQCP Site will be provided.
2.0 DESCRIPTION OF SITE AND EXISTING FACILITIES

Proposals submitted in response to this RFP for an E/C Facility shall be based on development of the E/C Facility at the Landfill Site, the RWQCP Site, or both as defined in this RFP and as described herein. The Landfill Site and the RWQCP Site are further described below. For the purposes of this RFP, the word “Site” means the Landfill Site and/or the RWQCP Site.

For Export, for Biosolids, it is anticipated that the RWQCP Site will be used by the City for dewatering Biosolids, and constructing storage and loading facilities for Contractor vehicles. For Export, for Food Scraps and Yard Trimmings, the Contractor will be responsible for transport and management of these Acceptable Feedstocks, assuming the City will deliver these feedstocks to a Contractor transfer, processing, or other facility no more than 18 miles from City Hall. The City will be responsible for permitting activities at the RWQCP Site, as they may be needed to implement Export.

For either an E/C Facility or Export, access to both the Landfill Site and the RWQCP Site will be via Embarcadero Way from Embarcadero Road. The City will widen Embarcadero Way and will extend it as a paved roadway to the Site boundary. The City will also be responsible for bringing utility lines (water, stormwater, sewer, electricity, natural gas) to the boundary of the Site. Additional information on utilities is provided in Section 4.2.4 of this RFP, and Appendix F-2.

2.1 Landfill Site

The Landfill Site is located at 2380 Embarcadero Road in the City of Palo Alto, in Santa Clara County, California, east of U.S. Highway 101 and south of Embarcadero Road. The Landfill Site is adjacent to the RWQCP and is located on a portion of the former City Landfill, which stopped receiving waste in 2011. The Landfill includes a leachate collection and control system and a landfill gas collection system. The Landfill Site is owned by the City of Palo Alto. The Landfill Site footprint consists of approximately 10 acres. The land on which the Landfill Site sits was dedicated to Byxbee Park. In November 2011, as a result of a City ballot question (Measure E), approximately 10 acres of land were undedicated to Byxbee Park for the purpose of considering building an E/C Facility. Use of the Landfill Site is a sensitive issue to local residents since it borders Byxbee Park. Design, construction and operation of an E/C Facility on the Landfill Site shall minimize aesthetic, visual, noise, odor and lighting impacts on surrounding land users, as further described in Section 4 of this RFP. Proposers should consider means to design the E/C Facility to minimize use of space at the Landfill Site, incorporate effective use of buffer areas, consider “terracing” the Landfill Site to allow a more gradual transformation to the Landfill slope and minimize retaining wall requirements, and utilize other means to address these issues. Further, it should be noted that the Landfill is no longer receiving waste, and the City is in the process of designing the closure of the Landfill. There is an existing Landfill post-closure facility located within the 10-acre Landfill Site, as shown on Figure 1 in Appendix C. The footprint for this facility is approximately 80 feet by 100 feet, excluding a landscape berm. The City prefers that this existing Landfill post-closure facility not be moved. Integration of the E/C Facility site needs and the Landfill closure are important considerations for the City.
In conjunction with closure activities at the Landfill, the City will prepare a site pad for use by the E/C Facility that is integrated with Landfill closure. The site pad will not include foundations, utility connections, stormwater management, security or final site grading and landscaping needed by the selected company. The City has prepared grading plans and cost estimates for preparing different size site pads for various scenarios involving different amounts of acreage that may be required for the E/C Facility. Four different grading plan scenarios have been prepared, accommodating site pads ranging from 3.8 acres up to 10 acres. For all of the grading scenarios, there is a portion of the site pad (approximately 2 acres) that is outside the Landfill footprint, i.e., not over fill material to be excavated for purposes of closure. The remaining area of each site pad configuration is located within the landfill footprint. The site pad is expected to include 4-foot overexcavation of existing refuse, backfilled with engineered fill; some amount of refuse will remain below the engineered fill. These closure scenarios and site pad configurations, including delineation of the landfill footprint, are provided in Appendix C and generally described below. Appendix C also includes an illustrative cross section generally applicable to all of the site pad configurations, and an estimate of City costs to construct the pad and complete other Site preparation activities. At the mandatory Pre-Proposal meeting scheduled for this RFP (see Section 6.2), the City will provide a web link, FTP site, or other means for interested Proposers to access a CAD drawing for the Landfill Site.

One of the grading plans (Appendix C, Figure 1) is for a 10-acre site pad. One of the grading plans (Appendix C, Figure 2) is for a 7-acre site pad. The 10-acre site pad and the 7-acre site pad include a 20-foot high retaining wall to separate the site pad from the landfill side slope. Regulatory approval for use of a 20-foot high retaining wall is not certain, and Proposers should investigate means to reduce the height of the retaining wall for these scenarios. One grading plan (Appendix C, Figure 3) is for a 5.4-acre site pad, with a 10.5-foot retaining wall at the boundary with the landfill slope. One grading plan (Appendix C, Figure 4) is for a 3.8 acre site pad, with no retaining wall.

Proposers shall give appropriate consideration to requirements for foundations for structures and equipment built on the site pad, not only as a result of building on previously filled and subsequently backfilled material, but also because of the geotechnical properties of the underlying natural sediment of San Francisco Bay. Available subsurface geotechnical data is provided in Appendix C, including a 1989 geotechnical investigation prepared by BSK & Associates and a 2008 geotechnical report by Jensen-Van Lienden Associates. Also, the site pad is located in the Special Flood Hazard Area (Zone AE) with a base flood elevation of 10.5 feet above mean sea level (NAVD88). The site pad configurations provided in Appendix C show the pad is predominantly at elevations from 10.5 feet above mean sea level up to approximately 18 feet above mean sea level, with limited areas of the site pad at elevations below 10.5 feet. For Proposal purposes, Proposers shall assume that the final pad will be at an elevation of 10.5 feet or higher so as not to trigger requirements for construction within Zone AE.

Landfill gas is currently collected and piped to the RWQCP, where it is used to fuel the existing multiple hearth incinerator. When the incinerator is phased out, the City will require, to the extent practicable, that the Landfill gas be used in a common power generation system or fuel production system at the E/C Facility, to avoid flaring at the
Landfill. The City will be responsible for delivering Landfill gas to the E/C Facility Site at no charge. Information on Landfill gas generation projections through the year 2042 (Landfill gas generation, Landfill gas recovery, and percent methane) is presented in Appendix C.

### 2.2 Regional Water Quality Control Plant (RWQCP) Site and Facilities

The Regional Water Quality Control Plant (RWQCP) Site is located at the RWQCP, adjacent to and southeast of the existing multiple hearth incinerator, and northwest of the primary settling tanks. If the incinerator and associated air pollution control equipment are demolished in order to use the area for the E/C Facility, the Proposer will be responsible for interim handling, processing, and disposal of the RWQCP Biosolids during the period from the shutdown of the incinerator to the startup of the E/C Facility. The size of the RWQCP Site is 0.52 acres before demolition of the incinerator and associated air pollution control equipment. The 0.52-acre area is an open gravel lot, without structures. If the incinerator and associated air pollution control equipment are demolished, the area of the RWQCP Site will be approximately 1.1 acres. The incinerator is a free standing multiple hearth incinerator, and the air pollution control equipment is housed within a reinforced concrete building 50-feet tall with an adjacent air pollution control system supported by a steel superstructure; both facilities are pile supported. Site plans which show the extent of the RWQCP and the RWQCP Site (both before and after demolition of the incinerator and associated air pollution equipment) are included in Appendix D.

The City has prepared a summary of energy use at the RWQCP, for the period 2004 – 2011. The summary includes electricity use, natural gas use, and landfill gas use. The summary is included in Appendix D. Electricity use ranged from 17,554,400 kWh in 2004 to 16,310,202 kWh in 2011. Natural gas use ranged from 705,588 therms in 2004 to 382,289 therms in 2011. Landfill gas use ranged from 286,432 therms in 2008 to 204,864 therms in 2011. Landfill gas is used to fuel the existing multiple hearth biosolids incinerators.

Information on current and projected quantity and characteristics of Biosolids produced at the RWQCP are provided in Section 3 and Appendix E.
3.0 FEEDSTOCK SUPPLY AND CHARACTERISTICS

As further defined in the Definitions section of this RFP, Acceptable Feedstock includes Food Scraps and Yard Trimmings from residential, commercial and industrial sources, and Biosolids from municipal wastewater treatment including fats, oils and grease (FOG) as well as scum. This section provides available information on City Acceptable Feedstock.

3.1 Yard Trimmings and Food Scraps

GreenWaste of Palo Alto is currently the City's contractor for waste and recycling collection, transportation and processing services through June 30, 2017 with the City option to extend the contract up to four years in single year increments. GreenWaste has an exclusive agreement to collect residential waste, recyclables and Yard Trimmings. For commercial users, GreenWaste has an exclusive agreement with the City to collect waste only. However, GreenWaste has entered into separate contracts to collect the remaining waste streams (i.e., recyclables, Food Scraps and Yard Trimmings) with many of the City's commercial users. The City currently has a three-container residential curbside collection program. Recyclable materials are collected in a blue container and are delivered to GreenWaste's material recycling facility in San Jose. Yard Trimmings are collected in a green container. Through March 2012, Yard Trimmings were delivered for composting at a traditional, open windrow compost facility at the Landfill. Currently, GreenWaste delivers Yard Trimmings to the SMaRT Station. All other materials, including residential Food Scraps, are collected in a third container (as refuse) and taken to the SMaRT Station, and subsequently transported to and disposed at the Kirby Canyon Landfill in South San Jose. In the future, the City will be initiating curbside collection of source-separated residential Food Scraps (either mixed with Yard Trimmings or separately from Yard Trimmings, depending on the requirements of the proposed E/C Facility or Export). Commercial Food Scraps are collected separately, transported to and composted in Gilroy.

Yard Trimmings collected include the following items:

- Branches and stumps (less than 6-inches in diameter and shorter than 4-feet in length)
- Flowers, plants and shrubs
- Grass clippings and leaves
- Holiday trees (seasonal only; undecorated, unflocked, with stands removed and with tree sections not exceeding 4-feet in length)
- Lumber, sawdust, wood chips and wood waste (untreated/unpainted)

Items not currently accepted with Yard Trimmings and disposed of as waste are animal waste, bamboo, cactus, dirt, flax, ivy, painted or treated wood, palm, pampas grass, poison oak, sod, stable bedding and yucca.

The City will deliver Acceptable Feedstock to the E/C Facility for processing or otherwise deliver such Acceptable Feedstock for Export, in accordance with the Minimum Annual
Delivery Requirements and Maximum Annual Delivery Thresholds specified in Section 5 of this RFP. Notwithstanding the requirements and thresholds specified in Section 5, for informational purposes only, the likely projected annual tonnage of Yard Trimmings to be delivered by the City to the E/C Facility or for Export is 14,025 tons per year, and the likely projected annual tonnage of Food Scraps is 13,800 tons per year, both of which are projected to remain level during the Term of the Contract. Appendix E includes a summary of quantities and/or estimates of Yard Trimmings and Food Scraps generated in Palo Alto for Fiscal Year 2012. Appendix E also includes, for informational purposes, the City’s overall projections of the range of organics that are anticipated over the Term of the Contract, including from commercial, residential and City sources.

3.2 Biosolids

Acceptable Feedstock includes Biosolids from municipal wastewater treatment, including FOG and scum. Biosolids are generated by the City at the RWQCP, and are currently incinerated at the RWQCP. Biosolids will be dewatered by the City to support Export, as applicable, or if required by the Contractor for processing of Biosolids at the E/C Facility. Notwithstanding the requirements and thresholds specified in Section 5 of this RFP regarding Minimum Annual Delivery Requirements and Maximum Annual Delivery Thresholds, for informational purposes only, the projected quantity of Biosolids to be delivered by the City to the E/C Facility either dewatered or not, or for Export as dewatered feedstock, is summarized in Table 3-1 below for the years 2015, 2040, and 2050. The projected quantity of Biosolids summarized in Table 3-1 is presented as a range, representing 70% of the RWQCP output (low end of range) up to 100% of the RWQCP output (high end of range). Appendix E contains additional information regarding projections for Biosolids, as well as information on metals content and volatile solids levels.

Table 3-1. Projected Quantities of Biosolids

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<tbody>
<tr>
<td>Dewatered Biosolids at 26% solids (wet tons per day)(2)</td>
<td>62.0 - 88.5</td>
<td>75.7 - 108.1</td>
<td>80.5 - 115.0</td>
</tr>
<tr>
<td>Dewatered Biosolids at 26% solids (wet tons per year)(2)</td>
<td>22,602 - 32,288</td>
<td>27,614 - 39,448</td>
<td>29,383 - 41,975</td>
</tr>
<tr>
<td>Undewatered Liquid Biosolids at 3.3% solids (gallons per day)(2)</td>
<td>114,703 - 163,862</td>
<td>140,137 - 200,196</td>
<td>149,114 - 213,020</td>
</tr>
<tr>
<td>Undewatered Liquid Biosolids at 3.3% solids (million gallons per year)(2)</td>
<td>41.87 - 59.81</td>
<td>51.15 - 73.07</td>
<td>54.43 - 77.75</td>
</tr>
<tr>
<td>FOG and Scum (tons per year at 55% solids and 94% VSS)</td>
<td>158 - 226</td>
<td>158 - 226</td>
<td>158 - 226</td>
</tr>
</tbody>
</table>

1. Projected quantities of Biosolids, FOG and scum are presented as a range based on 70% of the RWQCP output (low end) up to 100% of the RWQCP output (high end).
2. Excludes FOG and scum.
City records of the existing quantity of Biosolids produced at the RWQCP and projections for future quantities (for 5-year increments from 2010 through 2050) are included in Appendix E. Information about the metals content of the Biosolids and the volatile solids content of the Biosolids is also provided in Appendix E.

Scum originates in the sewage sludge, and it is also brought to the RWQCP in grease trucks by two permitted waste haulers, primarily from restaurant grease traps in the region. The grease from waste haulers is pumped into a “scum pit” that can handle about two truckloads per day. The grease deliveries from waste haulers in FY10 totaled 672,000 gallons per year. Scum is also collected within the treatment process, primarily from the primary treatment tanks. Scum includes anything less dense than water and can include grease, oils and plastics. Floating scum is collected, transported, and ultimately concentrated into a thick grease of 35 to 50% solids. The concentrated scum has a high heat content; when incinerated, it reduces the auxiliary fuel (natural gas) demand in the incinerator’s combustion zone. The concentrated scum is pre-mixed with Biosolids, so that flash fires do not occur in the upper drying zones of the incinerator, and fed to the incinerator at a consistent rate. The total quantity of scum (inclusive of FOG) generated within the treatment plant, is approximately 158 gallons per day at 55% solids and 94% VSS (at 100% of the RWQCP output). This is equivalent to 226 tons of concentrated scum per year (at 100% of the RWQCP output). These quantities are projected to remain level during the Term of the Contract.
4.0 DESCRIPTION OF PROPOSED PROJECT, SCOPE OF SERVICES AND SCHEDULE

As described in this RFP, the City is soliciting proposals for either an E/C Facility at the Site designated in this RFP or for the Export of Acceptable Feedstock to a processing facility or facilities located outside of the City. This section of the RFP establishes the scope of services, schedule and design requirements, and applies to both the E/C Facility and Export, unless specific requirements are outlined for the E/C Facility or Export. The scope of services, schedule and design requirements outlined herein for the E/C Facility and, as applicable, Export, include: 1) general specifications which must be met by all of the proposed projects; and 2) more detailed specifications, where appropriate, for specific technologies. These more detailed design requirements are included in Appendix F-1. Proposers shall respond as required for their specific technology(ies). Appendix F-1 also includes construction requirements, design document review and construction review procedures, testing requirements, and operation and maintenance requirements. A summary of such requirements is included in this Section 4, along with a general description of the project, schedule requirements, and performance guarantees.

4.1 General Description of Proposed Project

The proposed project is to be a system for managing the City of Palo Alto's Food Scraps, Yard Trimmings, and Biosolids (Acceptable Feedstock), consisting of an E/C Facility to be developed, owned, operated and maintained by the Contractor and located at the RWQCP Site and/or the Landfill Site or Export of Acceptable Feedstock to a processing facility or facilities located outside of the RWQCP Site or Landfill Site in Palo Alto. Among other objectives (see Section 1), the E/C Facility or Export is intended to allow for the phasing-out of the existing biosolids incinerator at the RWQCP and is intended to enhance beneficial use of organics by producing useable products and renewable energy, reduce landfill disposal of Food Scraps and Yard Trimmings and reduce greenhouse gas emissions. The E/C Facility or Export shall provide for reliable and efficient management of the Acceptable Feedstock and for compliance with environmental standards as required herein.

This RFP requires Proposers to provide a Base Case Proposal for Food Scraps, Yard Trimmings and Biosolids, and a required Alternative Proposal for Food Scraps and Yard Trimmings only to satisfy requirements as set forth in this RFP. In addition, Proposers are invited to submit additional Alternative Proposals that are identified in Section 1.6 of this RFP. If there is a benefit to the City, the City will consider a Regional E/C Facility capable of managing both City Acceptable Feedstock and Acceptable Feedstock from other sources outside of the City.

As proposed, the E/C Facility or Export shall be designed to manage the current and projected quantities of Acceptable Feedstock to be delivered by the City. As further detailed in Section 3 and Section 5 of this RFP, this includes: up to 15,500 tons per year of Food Scraps; up to 14,300 tons per year of Yard Trimmings; up to 32,288 tons per year of Biosolids in 2015 (at 26% solids), which is projected to increase over the initial Term of the Contract to approximately 38,900 tons per year in 2038; and up to 288 tons per year of FOG and scum.
4.1.1 E/C Facility

The E/C Facility can utilize Anaerobic Digestion, Gasification, or a combination of these technologies. The E/C Facility shall not include conventional waste-to-energy combustion or incineration systems. The E/C Facility can be located at the RWQCP Site and/or the Landfill Site. The City will deliver Acceptable Feedstock to the E/C Facility. The City will install or upgrade dewatering facilities at the RWQCP, and will dewater Biosolids, as necessary, prior to delivery to the E/C Facility. If a proposed technology, such as low solids Anaerobic Digestion, does not require Biosolids to be dewatered, the City will deliver Biosolids that are not dewatered. The City may provide for separation of Food Scraps and Yard Trimmings during collection if required for the E/C Facility.

The E/C Facility shall recycle and/or convert Acceptable Feedstock into marketable materials or products including fuel, electricity, compost and/or other marketable products. The E/C Facility shall include any necessary preprocessing to remove and recover recyclables and other materials and to prepare the Acceptable Feedstock for conversion, and/or back-end processing and recovery of recyclables, marketable products and energy, as applicable. The E/C Facility can include any type of energy production (e.g., electricity, gas, fuel), except that injection of biogas into the City’s natural gas distribution system is not allowed, and if a fuel is produced it must be exported for sale (i.e., the City does not plan to purchase fuel generated by the E/C Facility). Electricity can be sold to the City or exported to a third party. To the extent practical, the E/C Facility shall include the beneficial use of landfill gas generated at the City Landfill. In such instance, the City will deliver the landfill gas to the E/C Facility for use by the Contractor. The Contractor will be responsible for cleaning the gas as needed for use.

For Anaerobic Digestion, the E/C Facility may digest Biosolids separately from Food Scraps and Yard Trimmings or may co-digest these materials. The digestate generated by the E/C Facility can be composted and cured either on the Site or at another location. The E/C Facility shall make available to the City and its residents, at no charge, 1,000 tons per year of compost that meets CalRecycle Compost Standards and, for compost generated from Biosolids, US EPA Exceptional Quality Standards for metals and Class A requirements for pathogen reduction.

The E/C Facility, including all technologies incorporated into the E/C Facility, must be designed to meet or exceed all applicable Federal, State and local codes, standards, and requirements of Applicable Law for such facilities, including air emissions requirements. Control of process air emissions and emissions from engines or other energy generation equipment shall meet the requirements of the Bay Area Air Quality Management District. For Gasification systems that generate electricity with on-site combustion of synthesis gases, the E/C Facility must comply with Federal standards contained in 40 CRF Part 60, Subpart Eb, Standards of Performance for Municipal Waste Combustors, in addition to State and local standards. If a stack is needed, the E/C Facility must be designed with a Good Engineering Practice stack height in accordance with regulatory requirements.
The E/C Facility shall have totally enclosed feedstock receiving, storage and processing areas including negative pressure on the receiving area with odor control of the collected air, and adequate odor control for all other areas of the E/C Facility, to ensure there are no objectionable odor impacts off the Site. As applicable, composting and curing areas shall be enclosed or otherwise have covers for such operations with collection of air and odor control of the collected air. There shall be no "outside" placement or storage of feedstock, products, or Residue. All truck movements and processing areas shall be located on the Site so as to minimize exposure and related impacts on the surrounding area. Equipment shall be located in enclosed buildings or structures with control for noise mitigation. The E/C Facility design and operation shall ensure that noise levels conform to the City Comprehensive Plan, which currently limits noise level to 70 dB as a "normal level" and 70-85 dB as a "conditionally acceptable" level for an industrially-zoned area.

The E/C Facility shall be designed to minimize consumptive water use using recycled water to the extent possible. The E/C Facility shall be designed to minimize process wastewater discharge (with a goal of zero discharge). To the extent possible, process wastewater shall be reused within the E/C Facility to reduce consumptive water needs. City sewer limits shall be met for any sewer discharge. The E/C Facility shall include stormwater collection for surface water run-off from buildings, impervious surfaces and other, disturbed areas. The Contractor can direct clean stormwater to the City's stormwater collection system with discharge of any contaminated stormwater (or potentially contaminated stormwater, e.g., from the presence of Biosolids operating areas) to the sanitary sewer, or the Contractor can contain stormwater in on-site basins/ponds designed for on-site treatment and control of stormwater. Catch basins used for stormwater collection shall include oil and grease traps and allow for sediment collection.

The E/C Facility shall be designed, at a minimum, for a 30-year operating life. It shall include redundant design features, as appropriate, to meet the proposed annual availability guarantee and to minimize the need for emergency management of Acceptable Feedstock. It shall include adequate storage of incoming feedstock and outgoing products to meet feedstock delivery schedules and product shipments to markets, and to provide for efficient operation. The E/C Facility shall include a public education center and necessary administrative office areas, laboratories and maintenance facilities, as further outlined in Appendix F-1. Buildings shall be designed to meet at least minimum LEED certification requirements, as appropriate.

The E/C Facility shall be arranged on the Site to minimize aesthetic, visual, noise, odor and lighting impacts on surrounding land users, including effective use of buffer areas. For the RWQCP Site and for the Landfill Site adjacent to the RWQCP, the E/C Facility (including its architectural treatment) shall be designed to be compatible with existing buildings and structures at the RWQCP. For the Landfill Site, for all areas except that adjacent to the RWQCP, the E/C Facility (including its architectural treatment) shall be designed to be compatible with a park setting, with landscaping and buffers to minimize visual impacts. Design of buffer areas shall take into account measures to mitigate noise, lighting and potential odors, as well as visual impacts, including the use of landscaping and/or vegetated berms. As previously
described, the E/C Facility shall have totally enclosed feedstock receiving, storage and processing areas with no outside placement or storage of feedstock, products, or Residue, to mitigate potential impacts including reducing aviation hazards associated with the Palo Alto Airport, located directly north of the RWQCP. For the Landfill Site, design of the E/C Facility should minimize use of site space and must be integrated with plans for Landfill capping as well as consideration of minimizing impacts on Byxbee Park. Such integration should consider terracing of the Landfill Site to minimize the height of any headwall needed for Landfill integration. The Contractor will be responsible for design and construction of foundations, as well as providing for routing of on-site utilities, stormwater management, roads and other necessary Site infrastructure and ensuring that these needs are satisfied in a manner to protect the integrity of the Landfill cap. Additional information on environmental mitigation measures is provided in the Preliminary CEQA Checklist (Initial Study) included in Appendix G of this RFP.

4.1.2 Export

For Export, the Contractor will be responsible for transporting and managing Acceptable Feedstock using traditional composting, Anaerobic Digestion, Gasification, or a combination of these technologies to recycle and/or convert Acceptable Feedstock into marketable materials or products. The City will dewater Biosolids, provide handling, storage and loading facilities for dewatered Biosolids and will load the Contractor’s vehicles. Liquid Biosolids will not be exported. For Food Scraps and Yard Trimmings, the City will deliver these feedstocks to a Contractor transfer, processing or other facility located no more than 18 miles from City Hall. The Contractor will be responsible for transport and management of these Acceptable Feedstocks delivered by the City. For Export to facilities that produce a compost product, the compost must meet CalRecycle Compost Standards. Compost produced from Biosolids must meet US EPA Exceptional Quality Standards for metals and Class A requirements for pathogen reduction. Export shall not include export to conventional waste-to-energy or incineration systems.

4.2 Scope of Services and Schedule

The services and schedule described herein are for the Base Case Proposal. For the Base Case Proposal, Proposers are to propose a system to manage only City Acceptable Feedstock, including Food Scraps, Yard Trimmings and Biosolids (including FOG and scum with the Biosolids). The system may be an E/C Facility, Export or a combination of these approaches. For an E/C Facility, the Base Case Proposal may include Anaerobic Digestion, Gasification, or both technologies, and the E/C Facility may be located at the Landfill Site, the RWQCP Site, or both. For Export, the Base Case Proposal may include conventional composting, Anaerobic Digestion or Gasification. Proposers are required to submit a required Alternative Proposal for Food Scraps and Yard Trimmings only, and can submit additional Alternative Proposals as described in this RFP.
4.2.1 Role of City

For the Base Case Proposal, the City will provide the Landfill Site and the RWQCP Site for the E/C Facility and will lease one or both of the Sites, as applicable, to the Contractor for the Term of the Contract. The City will bring utilities (water, stormwater, sewer, natural gas, and electricity at 75KVA @ 480V) to the boundary of the Site. The City will widen Embarcadero Way and extend it as a paved roadway to the Site boundary. The City will be responsible for subsurface conditions at the Site, including existing subsurface soil contamination and the presence and consequences of natural or man-made contamination, infrastructure and existing construction, and shall be responsible for remediating existing contamination at the Site, if any. For the Landfill Site, the City is in the process of designing the closure of the Landfill. For purposes of responding to this RFP, Proposers should assume that the City will cap the Landfill, and will prepare a site pad (up to 10 acres) for use by the E/C Facility that is integrated with Landfill closure. The site pad will not include foundations, utility connections, stormwater management, security, or final grading and landscaping needed by the Contractor.

The City will complete CEQA activities for the E/C Facility and Export, including preparation of CEQA-related studies, documentation and applications. For Export, the City will also be responsible for permitting activities for dewatering of Biosolids, and storage and loading facilities for Biosolids at the RWQCP Site. The City will be responsible for permitting for Landfill capping, including integration of the site pad with the Landfill cap.

For the E/C Facility, the City will deliver landfill gas to the E/C Facility. The Contractor will be responsible for cleaning the gas for use in making energy products, either fuel or electricity.

The City will install or upgrade, at its own cost, dewatering facilities at the RWQCP, and will dewater Biosolids. For Export of Biosolids, the City will provide handling, storage and loading facilities for Biosolids at the RWQCP, and will load Biosolids into Contractor vehicles. For Export of Food Scraps and Yard Trimmings, the City will deliver such feedstock to a Contractor transfer, processing or other facility located no more than 18 miles from City Hall. For the E/C Facility, the City will deliver Acceptable Feedstock to the E/C Facility. The City may provide for separation of Food Scraps and Yard Trimmings during collection if required for the proposed project. The Contractor will be responsible for disposing any Unacceptable Feedstock delivered to and accepted at the E/C Facility by the City or on its behalf, but the City shall pay the Contractor for disposal of any such Unacceptable Feedstock.

For energy products generated by the E/C Facility, the City of Palo Alto’s electric utility will buy electricity at prevailing market rates, but at no less than $0.077/kWh over the Contract Term. The City’s current estimate of the market price is $0.094/kWh over the Contract Term. The Proposer has the freedom to choose the most economic use of the energy, either to sell such electricity to the City or to wheel the power out of Palo Alto for sale to another utility. The City does not intend to buy
any fuel generated by the E/C Facility, and will not allow the injection of biogas into the City's natural gas distribution system.

At its discretion, the City may provide support to the Contractor for product marketing, project financing and other activities that are the Contractor’s responsibility. For example, the City could support Contractor efforts to obtain federal and State grants, low interest loans, and capacity allocation within the State for tax-exempt financing for the E/C Facility. Also, for example, the City could, where appropriate, encourage use of suitable E/C Facility products, such as compost, in public projects. Proposers should clearly specify the type of support desired for consideration by the City.

The City will, during the course of the Contract, conduct design review and construction monitoring activities, review start-up and acceptance testing and monitor performance during operations.

4.2.2 Role of Contractor in General

For the E/C Facility, the Contractor shall lease the Site from the City and shall be responsible for surface conditions, construction of surface infrastructure, foundations, utility connections, drainage systems, roads and the like, including new construction of subsurface infrastructure, such as foundations and utilities, necessary for the E/C Facility and compatible with Landfill capping.

For the E/C Facility, the Contractor shall accept and process Acceptable Feedstock from the City, permit (with the exception of CEQA approval), finance, design, construct, start-up, acceptance test, own, operate and maintain the E/C Facility, all in accordance with the requirements of this RFP and the Contract to be negotiated; Federal, State and local laws, regulations and policies; Good Industry Practice; Good and Accepted Construction Practice, and Good and Accepted Operating Practice. In addition, the Contractor shall be responsible for marketing all materials recovered or beneficially used, and transporting and disposing of any materials that cannot be marketed (Residue). Contractor shall be responsible for the costs of transporting all marketable materials as well as the costs for transporting and disposing all Residue. The Contractor shall be responsible for testing the Residue in accordance with local, State and Federal guidelines to ensure that it meets appropriate disposal requirements.

For the E/C Facility, the Contractor shall include, to the extent practical, the beneficial use of landfill gas generated at the City Landfill and delivered by the City to the E/C Facility. The Contractor will be responsible for cleaning the gas for use in making energy products, either fuel or electricity.

For Export, the Contractor shall be responsible for picking up Biosolids at the RWQCP, which will be dewatered and loaded into the Contractor's vehicles by the City, and for transporting and processing the Biosolids. The Contractor shall be responsible for transporting and managing other Acceptable Feedstock (Food
Scraps and Yard Trimmings) delivered by the City to a Contractor transfer or processing facility located no more than 18 miles from City Hall.

For both the E/C Facility and Export, the Contractor shall be responsible for management of Acceptable Feedstock at all times over the Term of the Contract, during normal operations and during periods when the E/C Facility or primary Export option is inoperable. The Contractor shall provide alternative management/processing locations for periods when the E/C Facility or primary Export option is inoperable, subject to City approval of such alternative facilities.

The Contractor shall be responsible for disposing any Unacceptable Feedstock delivered to and accepted at the E/C Facility by the City or on its behalf, but the City shall pay the Contractor for disposal of any such Unacceptable Feedstock.

The Contractor shall be responsible for maintaining positive community relations, and shall assist the City with their public information programs by providing information and participating in activities to support those programs.

4.2.3 Permitting Process

As stated previously, the City will complete CEQA activities for the E/C Facility and Export and will be responsible for permitting activities for facilities at the RWQCP Site for Biosolids, as may be needed for Export. The City will also be responsible for permitting activities for Landfill closure. Otherwise, the Contractor shall be responsible for obtaining all Federal, State and local permits and approvals needed for construction and operation of the E/C Facility and for implementing Export, as applicable. To assist the Proposer understand key environmental issues, a preliminary CEQA checklist is provided in Appendix G. The information provided in Appendix G is not necessarily all inclusive and the Contractor is responsible for defining permitting requirements specific to its Proposal, obtaining said permits and complying with permit requirements. The City will support the Contractor in obtaining permits and approvals. Note, however, that the role of the City shall in no way mean implicit approval of local permits and approvals.

4.2.4 Utilities

The City will bring utilities (natural gas, water, sanitary sewer, stormwater and electricity) to the boundary of the Site, for connection by the Contractor. The following utilities are currently available inside or adjacent to the Landfill Site:

- Natural gas - 4-inch line (capped)
- Potable water - 1-inch line (in use)
- Reclaimed water - 4-inch or 6-inch line (in use)
- Sanitary sewer - 4-inch line and 52-inch main trunk (in use)
• Electricity - 75kVA, 277/280V transformer (3-phase), and 50kVA, 120/240V transformer (in use)

As described previously, the Contractor can direct clean stormwater to the City's stormwater collection system with discharge of any contaminated stormwater (or potentially contaminated stormwater, e.g., from the presence of Biosolids operating areas) to the sanitary sewer, or the Contractor can contain all stormwater in on-site basins/ponds designed for on-site treatment and control of stormwater. A drawing showing the stormwater collection system at the Landfill is provided in Appendix F-2. The system consists of storm drain inlets that feed to an 8-inch diameter stormwater pipe. The pipe discharges to a surface drain and flows out to the bay.

If the Contractor will need the City to supply the utilities identified above to the project, those purchases will be subject to the applicable utility rate schedule. All non-residential rates are available through the following web link:


As further described in Section 5 of this RFP, the City shall bear the risk of increases in utility rates but not for increases in consumption of utility services, as agreed to in the Contract.

If the E/C Facility generates electricity, the City of Palo Alto's electric utility will purchase it at prevailing market prices, but at no less than $0.077/kWh. The City's current estimate of the market price is $0.094/kWh over the Contract Term; this is an indicative price, and does not represent a commitment on the part of the City. Any sale of electricity to the City of Palo Alto would include both the energy and the renewable attributes (RECs). Electricity could also be sold to offset the electric needs of the RWQCP. Historical electrical usage for the RWQCP is provided in Appendix D. Electricity sold to offset needs of the RWQCP would be at a discount to the rates provided in Utility Rate Schedule E 7, provided in Appendix F-2 and also available through the web link provided above.

If proposing to use the energy from the E/C Facility to offset E/C Facility electricity use, any on- Site use will be subject to standby charges as shown in the applicable Utilities Rate Schedule (e.g., E-7 for Large Commercial Electric Service), available through the web link provided above. The Contractor would not be subject to standby charges, but will be subject to interruptible power supply conditions, if the E/C Facility provides its own backup power using a system that ensures no power is drawn from the utility.

The Proposer has the freedom to choose the most economic use of the energy, either to sell such electricity to the City or to wheel the power out of Palo Alto for sale to another utility. If proposing to sell electricity to another utility, the wheeling of electricity will be subject to a wheeling charge.
Proposers are advised that Palo Alto is not in PG&E’s service territory. If the Proposer is assuming participation in a PG&E procurement program, the Proposer must confirm the applicability of that program to the Site.

E/C Facilities that will connect a generator to the City’s electric distribution system, regardless of whether the electricity will be sold or used on Site, must obtain all necessary permits and approvals, including approvals from the City’s Building Division and Bay Area Air Quality Management District, and must request an interconnection agreement from the City’s Electric Engineering Division pursuant to Utilities Rule and Regulation 27 (Generator Interconnection). This Rule and Regulation is available online through the following web link:

http://www.cityofpaloalto.org/gov/depts/utl/about/rules.asp

A copy of the City’s standard interconnection agreement may be found in Appendix F-2. For purposes of Proposal preparation, Proposers shall assume that the term of the interconnection agreement will be consistent with both the Term of the Contract and the term of the power sales agreement to be negotiated with the City, and shall assume a cost of $100,000 for interconnection construction.

Generators considered by the California Independent System Operator (CAISO) to be “Participating Generators” (typically those larger than 1 MW) may also be subject to CAISO scheduling requirements. Although the City of Palo Alto, not CAISO, will be responsible for generator interconnection, the CAISO may require the generation owner to enter into a “Participating Generator” and/or “Meter Services Agreement for CAISO Metered Entities”.

If the Proposer plans to sell electricity to the City and is subject to CAISO scheduling requirements, the City is open to arrangements where either the City provides Scheduling Coordinator services, or the developer/owner of the project provides these services. The City uses the Northern California Power Agency (NCPA) as its Scheduling Coordinator. Unless specified otherwise in the Proposal, it will be assumed that Palo Alto will provide any necessary Scheduling Coordinator services and bear the associated costs. NCPA’s scheduling protocols are attached in Appendix F-2.

As previously stated, the City will not consider proposals involving injection of biogas into the City’s gas distribution system. Proposers may produce fuels, but such fuels must be transported off Site for sale. The City will not purchase fuels from the Contractor.

Proposers are advised that the RWQCP does not currently have any significant uses for waste heat that may be generated by the E/C Facility.
4.2.5 City Option to Purchase E/C Facility, Require E/C Facility Removal

Upon the expiration of the initial operating Term or any renewals thereof, or upon Contract termination, the City shall have an option to purchase the E/C Facility from the Contractor, as further described in Section 5 of this RFP.

As further described in Appendix F-1, at the end of the Contract, whether at its stated expiration or by earlier termination for whatever reason, the Contractor shall provide services necessary for a smooth uninterrupted transition of services to the City or its designated contractor. The Contractor shall prepare an Exit Transition Plan describing such services, which shall be provided to the City prior to initiating Services.

If the City does not exercise its option to purchase the E/C Facility, the Contractor shall remove the E/C Facility from the Site and restore the Site to a condition reasonably equivalent to its condition before construction of the E/C Facility, as further described in Section 5 of this RFP.

4.2.6 Schedule for Delivery of Services

It is anticipated that the Contract Date will occur upon completion of CEQA, estimated to be by February 2016. The Contractor shall complete the permitting, financing, design, construction and Acceptance Testing of the E/C Facility, or implementation of Export, as applicable, in accordance with a guaranteed schedule to be specified in the Contract. The schedule shall be based on the schedule proposed by the Proposer and as negotiated with the City. For Export, Biosolids operations are required to commence no later than July 1, 2017, and for Food Scraps and Yard Trimmings, operations shall commence on July 1, 2017, upon expiration of the current franchise agreement. For the E/C Facility, commercial operation is required no later than January 1, 2019. Earlier completion of the E/C Facility is encouraged.

After E/C Facility Acceptance, the Contractor shall be responsible for E/C Facility operations and maintenance for 20 years, with options for two five-year renewals by mutual consent. As applicable, Export services shall be provided for 20 years, with options for two, five year renewals by mutual consent. These operating periods are for Base Case Proposals, with options for other operating terms under Alternate Proposals.

4.3 E/C Facility Requirements

The E/C Facility shall include all elements necessary to receive, store, recycle, process, and convert Acceptable Feedstock to marketable products and store products prior to shipping. In general, these elements include:

- an access road to the Site which may share existing Landfill and RWQCP roadways, as applicable;
• a weigh station;
• an enclosed receiving building and storage facilities for Acceptable Feedstock;
• transfer facilities for Unacceptable Feedstock, Bypassed Feedstock, Unprocessible Feedstock, Residue, and marketable materials or products;
• pre-conversion feedstock recycling and processing facilities (as applicable);
• a minimum of two independent conversion process trains, or other methods to provide adequate redundancy of processing equipment for purposes of meeting the annual throughput requirements and reducing the frequency and extent of Bypassed Feedstock;
• synthesis gas, biogas and landfill gas cleaning systems (as applicable);
• post-conversion composting, curing, product screening, and product recovery facilities (if applicable);
• enclosed product storage area(s);
• heat recovery and power generating equipment (if applicable);
• fuel production and storage facilities (if applicable)
• enclosed Residue processing and Residue recycling facilities (if applicable);
• air pollution control (APC) equipment (if applicable);
• stack (if applicable);
• noise and odor control;
• water use and wastewater reuse and control equipment;
• electrical interconnection for sale of electricity, as applicable;
• interconnection of all necessary utilities to meet E/C Facility needs;
• instrumentation and controls;
• a control room;
• administrative offices;
• public education center;
• general facility features – buildings and grounds, utility, chemical and supplemental fuel handling;
• stormwater collection and control of all surface water run-off from buildings, impervious surfaces and other disturbed areas, with catch basins that include oil and grease traps and allow for sediment collection, and discharge to the City's stormwater or sanitary sewer system (for contaminated stormwater) or use of stormwater basins/ponds that are designed for on-site control of stormwater;
• maintenance facilities;
• laboratory facilities; and
• all appurtenances and equipment thereto.

4.4 General Design and Construction Standards

The E/C Facility shall be designed and constructed in accordance with Applicable Law, Good Industry Practice, Good and Accepted Construction Practice, and applicable design and construction codes and standards (see Appendix F-1). Proposers shall take note of the local climatology, subsurface conditions, seismology and Site-specific characteristics and conditions (see Section 2 and Appendices C and D), and shall design the E/C Facility accordingly for anticipated conditions and in accordance with related codes and requirements. All materials and equipment shall be new and unused, be of heavy-duty construction and of quality suitable and commonly used for high availability, long-term service in utility applications. The E/C Facility shall be designed and constructed utilizing equipment and processes proven to be reliable in similar applications. The E/C Facility shall be designed and constructed for a minimum useful life of thirty (30) years. Buildings should be designed to meet at least minimum LEED certification requirements to the extent possible.

4.5 Design Requirements

Design requirements are provided in Appendix F-1 for specific E/C Facility components.

4.6 Environmental Design and Performance Requirements

The Contractor shall, at a minimum, meet the environmental design and performance specifications as required by all Federal, State and local permits and approvals required to construct and operate the E/C Facility, including any mitigation measures required by CEQA (see Appendix G, Preliminary CEQA Checklist, for additional information on potential mitigation measures). If not required by a permit or approval, the E/C Facility shall still, at a minimum, meet the requirements specified herein.

For Proposal purposes, the requirements described below shall be the minimum basis for design and performance.

**AIR EMISSIONS** Specification:
- Compliance with Federal, State and local permit requirements.
- Compliance with requirements for good combustion practices, as applicable.
- Implementation of Best Management Practices as applicable during construction and operations

**ODOR** Specification:
- Fully enclosed facilities
- Feedstock receiving and storage area, recycling and pre-processing area, intermediate storage area(s) (if any), product storage areas, and Residue handling and storage areas shall be maintained under negative air pressure;
Digestate composting and curing areas, as applicable, shall be enclosed or covered with collection of air and odor treatment;

Conformance to Odor Impact Minimization Plan or Odor Management Plan, as applicable, to be prepared during permitting, with no objectionable odor beyond site boundary.

**NOISE**

**Specification:**

Compliance with noise standards as established during permitting by appropriate State and local agencies, including conformance to City Comprehensive Plan currently limiting noise level to 70 dB as a "normal level" and 70-85 dB as a "conditionally acceptable" level for an industrially-zoned area.

**AESTHETICS/LIGHTING**

**Specification:**

Design and arrangement of the E/C Facility on the Site, including use of buffer areas and integration of landscaping and/or vegetated berms, shall minimize aesthetic, visual and lighting impacts on surrounding land users.

Any lighting shall be hooded and directed onto the project site.

**WATER USE**

**Specification:**

Design must minimize water use.

**WASTEWATER**

**Specification:**

Design must minimize process wastewater discharge.

Sanitary discharge to be treated and reused or discharged to the sewer in accordance with City sewer limits.

**STORMWATER**

**Specification:**

Design must include stormwater collection for surface water run-off from buildings, impervious surfaces and other disturbed areas, with on-site treatment and control or with use of the City's stormwater collection system for clean stormwater and discharge of any contaminated stormwater to the sanitary sewer.

Catch basins shall include oil and grease traps and allow for sediment collection.

Development and compliance with a Stormwater Pollution Prevention Plan.

**RESIDUE**

**Specification:**

Residue must be routinely tested and disposed of appropriately.

**COMPOST**

**Specification:**

Compost must meet CalRecycle Compost Standards.

Compost from Biosolids (including compost from Biosolids co-digested with Food Scraps
The compost specifications identified above as a minimum requirement shall also apply to Export.

### 4.7 Construction Requirements

The Contractor shall perform the Construction Work in accordance with the Design Work and using Good and Accepted Construction Practice and shall have exclusive responsibility for providing all construction means, methods, techniques, sequences, start-up, and Acceptance Tests, and all procedures necessary and desirable for the correct, prompt and orderly conduct and completion of the Construction Work as required by the E/C Facility. Construction shall be scheduled and conducted, as practical, to minimize impacts and disruptions on existing operations at Byxbee Park, the RWQCP and other surrounding land users.

The Contractor’s exclusive responsibility to provide all construction means shall include, but is not limited to, providing the following construction requirements: temporary power, light and other utilities; temporary offices and construction trailers; a room for on-site, project review meetings; a furnished office with telephone and computer hook up for use by the City’s on-site resident engineer; required design certifications; required approvals; field document control and filing system for the control of all submittals and project communications; quality control and testing; independent laboratory testing services; weather protection for stored materials; site cleanup and housekeeping; construction trade management; temporary parking; safety and first aid facilities; correction or compensation for defective work or equipment; equipment and materials storage areas; workshops and warehouses; temporary fire protection for the construction site; site security; potable water; telephone and portable two-way communication; subcontractor coordination and control; receipt and unloading of delivered materials and equipment; erection rigging; temporary supports, and coordination of all construction activities of the Contract.

The Contractor warrants to the City that materials and equipment incorporated in the E/C Facility will be new unless otherwise specified, and in conformance with the Contract documents.

The Contractor shall fully cooperate with the City and its designated representatives to allow the City to monitor and review construction progress, design documents and any proposed changes to design.

The Contractor shall apply Federal, State and local wage and hour laws to the extent required by Applicable Law. For purposes of its Proposal, the Proposer should assume that prevailing wages will be required for the E/C Facility and Export. The Contractor shall make a good faith effort to employ staff from the local and regional labor markets. Appendix F-1 specifies requirements for Construction Work Monitoring, Testing and Observation; correction of Construction Work; provision of record drawings and documents;
procedures for design document review and construction review; and start-up requirements.

4.8 Start-Up Test and Acceptance Test Requirements

Testing of equipment and systems installed, as part of the E/C Facility, will occur in two phases: the start-up testing and the Acceptance Test. The City will provide Acceptable Feedstock during both test(s), upon receipt of reasonable notice from the Contractor.

4.8.1 Start-up Testing

In the initial phase, start-up testing of equipment and systems will be completed to demonstrate that each is installed correctly, functions as intended and meets the applicable conditions specified. Start-up testing will occur once the equipment or system has been installed and is mechanically and electrically complete. The City or its representatives shall have the right to observe any start-up testing.

4.8.2 Acceptance Test

Upon successful completion of the start-up testing, the Acceptance Test will occur. The Contractor shall prepare an Acceptance Test Plan and conduct an Acceptance Test. The Acceptance Test is to demonstrate that the E/C Facility functions as intended to meet Performance Guarantees, including permit limits. The Acceptance Test Plan is defined here as a plan for conduct of the Acceptance Test, which is to include sequencing of operations, test methodologies, and scheduling of the testing.

No temporary equipment will be allowed to operate during the Acceptance Test. The Acceptance Test shall be repeated in its entirety at the Contractor's expense if there are any permit violations, or if the Contractor is forced to use temporary equipment to maintain operation.

A Draft Acceptance Test Plan shall be submitted to the City a minimum of 120 days prior to the start of the Acceptance Test. A Final Acceptance Test Plan shall be submitted to the City a minimum of 30 days prior to the start of the Acceptance Test. Acceptance Testing shall not commence prior to receipt of the City's approval of the Final Acceptance Test Plan. Note that prior to conducting the Environmental Compliance Test, EPA and State and local regulatory agencies, as appropriate, must approve the environmental testing component of the Acceptance Test Plan. If the Contractor will use landfill gas delivered to the E/C Facility by the City, the Acceptance Test Plan shall incorporate the use of the landfill gas during the Acceptance Test, as appropriate.

The Contractor must satisfy the following Acceptance Test requirements, as applicable to the proposed technology:

- Reliability Test – a test to be conducted over a continuous 14-day period (or alternate duration, as appropriate for the technology and as agreed to
by the City) to demonstrate that the E/C Facility can operate as intended while processing Acceptable Feedstock over a sustained period of time. During the Reliability Test, the E/C Facility shall process ninety five percent (95%) of the Rated Capacity of Acceptable Feedstock over a continuous 14-day period (or alternate duration, as appropriate for the technology and as agreed to by the City), on a batch or continuous operating schedule depending on the design and intended operation of the E/C Facility. As applicable, the fuel and/or power generation equipment shall be on-line, producing (and exporting, as applicable) energy for a minimum of 95% of the duration of the Reliability Test.

- Capacity Test – a test to be conducted over a continuous 48-hour period (or alternate duration, as appropriate for the technology and as agreed to by the City), to demonstrate that the E/C Facility can process one hundred percent (100%) of the Rated Capacity of Acceptable Feedstock during that time. The Capacity Test shall be conducted simultaneously with the Material Recovery Test and the Diversion Test, as appropriate for the technology. During the Capacity Test, the E/C Facility shall operate in compliance with parameters as measured by the continuous emission monitoring system, as applicable.

- Regulatory Environmental Compliance Test – a test to demonstrate that the E/C Facility can meet air emissions compliance limits in its permits and other environmental approvals as well as contractual performance proposed and included in the Contract. The Environmental Compliance Test shall be conducted using standard State and EPA testing methods (40 CFR, Part 60, Appendix A) and/or methods otherwise approved in advance by the City, the EPA, and applicable State and local regulatory agencies. The appropriate regulatory agency(ies) shall approve the environmental testing component of the Acceptance Test Plan prior to conducting the Environmental Compliance Test.

- Electric Output Test – a test for those facilities that produce electricity for export to the City or another utility or to the RWQCP, to be conducted over a continuous 24-hour period (or alternate duration, as appropriate for the technology and agreed to by the City) to demonstrate the E/C Facility can meet the contractual performance proposed and included in the Contract, for the production rate of electricity for sale.

- Fuel Output Test – a test for those facilities that produce fuel for export, to be conducted over a continuous 24-hour period (or alternate duration, as appropriate for the technology and agreed to by the City) to demonstrate the E/C Facility can meet the contractual performance proposed and included in the Contract for the production rate of fuel for sale.

- Material Recovery Test – a test to be conducted over a continuous 48-hour period (or alternate duration, as appropriate for the technology and agreed to by the City), to demonstrate the E/C Facility can meet the contractual performance proposed and included in the Contract for quantity and quality of materials and products recovered by the pre-
processing, conversion, and post-processing systems of the E/C Facility, as applicable. The Material Recovery Test shall be conducted simultaneously with the Capacity Test, as appropriate for the technology.

- Diversion Test – a test to be conducted over a continuous 48-hour period (or alternate duration, as appropriate for the technology and agreed to by the City), to demonstrate the E/C Facility can meet the contractual performance proposed and included in the Contract for landfill diversion. The Diversion Test shall be conducted simultaneously with the Capacity Test, as appropriate for the technology.

- Ambient Noise – a test to be conducted while all equipment is operating, consisting of ambient noise measurements taken at appropriate locations to demonstrate that noise levels are in compliance with all State and local regulations and in accordance with the requirements of this RFP and the Contract.

- Ambient Odor – a test to be conducted while all equipment is operating, consisting of ambient odor measurements taken at appropriate locations to demonstrate that no objectionable odors from the E/C Facility are detectable beyond the Site boundaries in accordance with the requirements of this RFP and the Contract.

The duration and sequencing of the Acceptance Test procedures shall be as described above or otherwise as appropriate for the type of technology used in the E/C Facility, and as agreed to by the City. In all cases, the schedule and sequencing shall allow for proper administration and complete documentation of the tests, and shall be customary for industry practices for the technology used. The Contractor shall propose the schedule and sequencing of the Acceptance Test in the Acceptance Test Plan, which shall be subject to review and approval by the City.

4.9 Operation and Maintenance Requirements

Operation and maintenance (O&M) requirements for the E/C Facility and service requirements for Export, as applicable, are provided in Appendix F-1. These requirements include the following, which are applicable to both the E/C Facility and Export unless otherwise noted as being specifically applicable to one or the other of the two:

- providing services necessary for a smooth start-up for operation and maintenance of the E/C Facility or for start-up and provision of Export services;

- providing continuous, full-service operation and maintenance services and asset management for the E/C Facility, in accordance with an approved O&M manual and in accordance with the Contract and Good Industry Practices, whichever is most stringent;

- providing a staff of qualified and experienced employees, and providing appropriate training of staff;
acquiring and holding all required Federal, State and local approvals, licenses, and certifications necessary to operate, maintain and manage the E/C Facility, or, as applicable, to receive, transport and process Acceptable Feedstock delivered by the City for Export;

administering operation and maintenance activities for the E/C Facility using computerized operations and maintenance management system provided by the Contractor;

maintaining records and preparing reports;

preparing an Emergency Preparedness Plan (EPP) in accordance with Federal and State regulations governing emergency action and fire prevention plans and in cooperation with Federal, State and local officials and public safety departments;

preparing and implementing a technical and safety training plan and program in accordance with OSHA requirements, Good Industry Practice and the Contractor standard practices, whichever are most stringent;

meeting the requirements of Applicable Law and minimizing noise impacts on surrounding land use for the E/C Facility, and, as appropriate for Contractor vehicles using the Site for Biosolids Export;

managing odors from the E/C Facility such that no objectionable odor can be detected beyond the Site boundaries, and investigating and satisfying odor complaints and correcting any odor problems should they occur, and, as appropriate for Contractor vehicles using the Site for Biosolids Export;

performing all required sampling, testing and laboratory analyses and preparing and filing the required reports;

providing information and other support to assist the City in their public education programs;

maintaining positive community relations, and

preparing an Exit Transition Plan and providing services necessary for a smooth, uninterrupted transition of service to the City or its designated contractor (at the end of the Contract, whether at its stated expiration or by earlier termination for whatever reason).

4.10 Records and Reports

The Contractor shall maintain records and prepare reports as described in Appendix F-1, including reports to the City documenting (as applicable) Export activities, operation and maintenance of the E/C Facility, regulatory activities, and other relevant information. Reports shall include a monthly and an annual operations and maintenance report, a monthly complaint log reporting any and all complaints relating to the E/C Facility or Export activities and a description of the response, and a monthly statement verifying payments due and/or owed (with supporting information).
4.11 Staffing

As further described in Appendix F-1, the Contractor shall provide a staff of qualified and experienced employees in accordance with the plan for staffing and shall provide such additional third-party support as may be needed to perform its duties and obligations.

4.12 Training

The Contractor shall provide, as appropriate, overall career development and support to its staff through the use of training programs. Training programs shall cover specialized areas such as safety, community relations, and emergency preparedness. As described in Appendix F-1, the Contractor shall notify the City in advance of any such training programs held by the Contractor, and shall allow participation by the City up to the class size prescribed by the Contractor’s training policy.

4.13 Community Relations

As further described in Appendix F-1, the Contractor shall maintain positive community relations within the community. At a minimum, the Contractor will provide a 24-hour telephone hotline and email address for those who wish to comment on areas of concern, and will report to the City any complaints related to the E/C Facility or Export activities.

4.14 Public Information Program

The Contractor shall be responsible for assisting the City with their public information programs by providing information to support those programs. The Contractor shall describe its proposed efforts, which may include activities such as:

- Creation of a Web Page informing the public of the status of the E/C Facility or Export activities and various public education materials and programs available associated with the E/C Facility or Export activities.
- Issuance of newsletters and/or press releases to inform the public of the Contractor's activities related to the E/C Facility or Export.
- Preparation of fact sheets and household guides explaining State and local community regulations and activities at the E/C Facility or through Export that positively affect recycling and renewable energy generation.
- Presentations to local civic, environmental and other groups or at public events, which will include presentation of available videos.
- Providing a repository of publications pertaining to policies, programs and related information associated with generation and management of Food Scraps, Yard Trimmings, and Biosolids, including information on products generated from the management of such feedstock. Such publications shall be available to interested parties at the E/C Facility or another location agreed to by the City. Such repository shall be inclusive of information or guides generated and provided by the City.
• Hosting of E/C Facility open houses and scheduled tours for interested members of the public.

• Technical assistance on source and waste toxicity reduction to target users of concern.

• Participation in public hearings, public meetings, and meetings of elected officials and interested groups.

• Participation in State and local community public events.

4.15 Performance Guarantees

The Contractor shall meet Performance Guarantees for the E/C Facility, no less stringent than the limits specified below and as proposed by the Proposer on Proposal Form 10 (provided in Appendix A). Confirmation for agreeing to meet these guarantees shall be provided by completing, signing and submitting the Guarantor Acknowledgement (Proposal Form 4) and E/C Facility Performance Guarantees (Proposal Form 10) provided in Appendix A.

Feedstock Throughput Guarantee
The Contractor and Guarantor shall guarantee that the E/C Facility shall be capable of processing the Rated Capacity of Acceptable Feedstock, as specified by the Proposer and included in the Contract.

Availability Guarantee
The Contractor and Guarantor shall guarantee that the percentage of Rated Capacity of the E/C Facility available during any Contract Year shall be at least eighty-five percent (85%). Availability shall be measured as a percentage of Rated Capacity.

Annual Feedstock Throughput Guarantee
The Contractor and Guarantor shall guarantee that the E/C Facility shall process an annual quantity of Acceptable Feedstock that is no less than the Availability Guarantee (which shall be no less than 85%) multiplied by the Rated Capacity of Acceptable Waste per year.

Electric Generating Guarantee
For E/C Facilities that generate electricity for sale to the City (including offset of the electric needs of the RWQCP) or export to another utility, the Contractor and Guarantor shall guarantee that the E/C Facility shall be capable of generating for export, on average, a minimum amount of electricity measured in terms of kilowatt hours (kWh) of electric power per ton of as-received Acceptable Feedstock processed, as specified by the Proposer and included in the Contract.

Annual Electric Output Guarantee
For E/C Facilities that generate electricity for sale to the City (including offset of the electric needs of the RWQCP) or export to another utility, the Contractor and Guarantor shall guarantee that the E/C Facility shall deliver annually for sale a
quantity of electricity calculated by multiplying the Annual Feedstock Throughput Guarantee by the Electric Generating Guarantee.

**Fuel Generating Guarantee**
For E/C Facilities that generate fuel for sale, the Contractor and Guarantor shall guarantee that the E/C Facility shall be capable of generating for sale, on average, a minimum amount of fuel measured in terms of units of fuel per ton of as-received Acceptable Feedstock processed, as specified by the Proposer and included in the Contract.

**Annual Fuel Output Guarantee**
For E/C Facilities that generate fuel for sale, the Contractor and Guarantor shall guarantee that the E/C Facility shall deliver annually for sale a quantity of fuel calculated by multiplying the Annual Feedstock Throughput Guarantee by the Fuel Generating Guarantee.

**Material Recovery Guarantee**
As applicable, the Contractor and Guarantor shall guarantee that the E/C Facility shall be capable of producing or otherwise recovering for sale or beneficial use a minimum quantity of materials and/or products per ton of Acceptable Feedstock processed, with the Proposer to specify the materials and/or products to be recovered/produced and the guaranteed quantity and quality of each such material or product.

**Diversion Guarantee**
The Contractor and Guarantor shall guarantee that the E/C Facility shall achieve an annual diversion rate to be specified by the Proposer, which rate shall be no less than 80%. The diversion rate shall be calculated annually as the total tons of Acceptable Feedstock processed less the tons of Residue disposed, divided by the tons of Acceptable Feedstock processed.

**Environmental Performance Guarantee**
The Contractor and Guarantor shall guarantee that the E/C Facility is operated and maintained in compliance with Applicable Law and all Environmental Performance Requirements included in the Contract. It shall include noise, odor and other required environmental performance guarantees.

**Scheduled Acceptance Date Guarantee**
The Contractor and Guarantor shall guarantee the successful completion and Acceptance of the E/C Facility by the Acceptance Date, as proposed by the Proposer. The Acceptance Date proposed by the Proposer shall be based on the Proposer's schedule to permit, design and construct the E/C Facility, as agreed to by the City, and shall not be any later than January 1, 2019.

For Export, the Contractor shall be responsible for meeting performance obligations as specified below. Confirmation for agreeing to meet these performance obligations shall be provided by completing, signing and submitting the Guarantor Acknowledgement (Proposal Form 4).
**Annual Feedstock Throughput Obligation**
The Contractor and Guarantor shall annually Export Acceptable Feedstock delivered by or on behalf of the City up to and including the Maximum Annual Delivery Thresholds of Acceptable Feedstock specified in Section 5 of this RFP, over the Contract Term.

**Environmental Performance Obligation**
The Contractor and Guarantor shall provide Export services in compliance with Applicable Laws, regulations and standards and all Environmental Performance Requirements included in the Contract, as negotiated

**Guaranteed Schedule for Commencing Export Services**
For Export, the Contractor and Guarantor shall guarantee to commence Export services no later than July 1, 2017.
5.0 KEY TERMS AND CONDITIONS OF CONTRACT

Key terms and conditions (the Contract Principles) of the Contract are presented in this Section. The Contract Principles presented below have been developed as a summary of the significant cost and risk provisions that the City expects will be included in the Contract. These should be used by the Proposer as a guide to the responsibilities that are to be undertaken by the Contractor, to enable the Proposer to assess the risks associated with specific performance obligations and to develop pricing. The City expects that the Proposer will include in its Business Proposal any comments, exceptions or requested modifications regarding the Contract Principles, and the City shall assume that the Proposer’s pricing is based on the Contract Principles, as the Proposer may request to modify. Although modifications to the Contract Principles are acceptable, the extent of deviation from the provisions of this RFP will be an important Proposal evaluation consideration. Certain provisions of the RFP are required. These provisions are listed in Section 6.2.12.

As described in this RFP, the City is soliciting proposals for either an E/C Facility at the Site designated in this RFP or for Export of Acceptable Feedstock to a processing facility or facilities located outside of the City. In the discussion of key terms and conditions that follows, Proposer’s should note that terms apply to both the E/C Facility and Export, unless specific terms and conditions are described for either the E/C Facility or Export.

As described elsewhere in this RFP, for an E/C Facility Proposal, the Contractor will be responsible for permitting, designing, constructing and operating an E/C Facility. The Contractor shall also finance and own the E/C Facility. For the Base Case Proposal, Acceptable Feedstock includes food scraps, yard trimmings and biosolids from the City. For the required Alternative Proposal, Acceptable Feedstock includes food scraps and yard trimmings from the City. This Section of the RFP addresses associated terms and conditions of Contract for the Base Case Proposal.

5.1 Feedstock Delivery Requirements

5.1.1 Minimum Annual Deliveries

The City shall be required to deliver (or cause to be delivered) a minimum quantity of Acceptable Feedstock each Contract Year (the Minimum Annual Delivery Requirement), or shall be subject to a Shortfall Charge. If the Contractor accepts Spot Market Feedstock in response to the City’s inability to meet its Minimum Annual Delivery Requirement, any Shortfall Charge that may be due from the City shall be reduced by the total amount of revenues realized by the Contractor from any such Spot Market Feedstock.

5.1.2 Maximum Annual Deliveries

The City shall be allowed to deliver (or cause to be delivered) in each Contract Year a quantity of Acceptable Feedstock up to the Maximum Annual Delivery Threshold before incurring Excess Tonnage Fees, as described in this Section 5.
5.1.3 Application of Acceptable Feedstock Tipping Fee(s) and Excess Tonnage Fee

For the E/C Facility or Export, the Proposer may provide separate tipping fees for each type of Acceptable Feedstock or a single combined tipping fee that encompasses all Acceptable Feedstock. As described under “Annual True-Up/Settlement Process,” below, all tonnage in excess of the Maximum Annual Delivery Thresholds shall be subject to the Excess Tonnage Fee, should there be one.

5.1.4 Minimum and Maximum Deliveries Specified

The Minimum Annual Delivery Requirements and Maximum Annual Delivery Thresholds are identified below in Table 5-1:

While the Contractor may accept and process all types of Acceptable Feedstock, such as clean wood waste that is not painted or pressure treated, and agricultural waste suitable for anaerobic digestion or gasification, these materials shall not be included in the City’s Minimum Annual Delivery Requirement or Maximum Annual Delivery Threshold, and the City shall have no obligations or liabilities regarding the delivery to the Contractor of such materials, or the amounts or characteristics of such materials.

5.1.5 Periodic Delivery Reset

5.1.5.1 Periodic Delivery Reset Assuming 20-Year Operating Period

The Minimum Annual Delivery Requirements and Maximum Annual Delivery Thresholds shall be in effect for the first ten (10) Contract Years following the Acceptance Date. Effective with the eleventh (11th) Contract Year, the City may, without penalty or cost, implement a one-time reset of its Minimum Annual Delivery Requirements and/or Maximum Annual Delivery Thresholds, provided that such resets for either are no more nor less than 10% of the previously established Minimum Annual Delivery Requirements and Maximum Annual Delivery Thresholds, respectively. In the event such resets result in additional capacity becoming available at the E/C Facility or Export or any individual component of the E/C Facility or Export, the Contractor may contract for Spot Market Feedstock on whatever terms it deems appropriate, and the Most Favored Pricing provisions of the Contract shall not apply to the quantity of Acceptable Feedstock that is affected by the reset.
Table 5-1
MINIMUM ANNUAL DELIVERY REQUIREMENTS AND MAXIMUM ANNUAL DELIVERY THRESHOLDS

<table>
<thead>
<tr>
<th>Participant</th>
<th>Contractual Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimum Annual Delivery Requirement (Tons/Year)</td>
</tr>
<tr>
<td>Food Scraps</td>
<td>12,100</td>
</tr>
<tr>
<td>Yard Trimmings</td>
<td>13,500</td>
</tr>
<tr>
<td>Biosolids (Dewatered to 26% Solids, excluding FOG and scum)</td>
<td>22,602-Year 2015</td>
</tr>
<tr>
<td></td>
<td>27,614-Year 2040</td>
</tr>
<tr>
<td></td>
<td>29,382-Year 2050</td>
</tr>
<tr>
<td>Biosolids (Liquid @ Approx. 3.3% Solids, excluding FOG and scum)</td>
<td>41.87-Year 2015</td>
</tr>
<tr>
<td></td>
<td>51.15-Year 2040</td>
</tr>
<tr>
<td></td>
<td>54.42-Year 2050</td>
</tr>
<tr>
<td>FOG and scum</td>
<td>158</td>
</tr>
</tbody>
</table>

(1) All quantities are expressed in tons per year except for liquid Biosolids, which are expressed in millions of gallons/year. Minimum Annual Delivery Requirement for Biosolids (excluding FOG and scum) represents 70% of RWQCP output. Maximum Annual Delivery Threshold for Biosolids (excluding FOG and scum) represents 100% of RWQCP output.

5.1.5. Second Periodic Delivery Reset Assuming 30-Year Optional Operating Period

The Minimum Annual Delivery Requirements and Maximum Annual Delivery Thresholds as may have been reset under Section 5.1.5.1 of this RFP shall be in effect for the first twenty (20) Contract Years following the Acceptance Date. Effective with the twenty first (21st) Contract Year, the City may, without penalty or cost, implement an additional reset of its Minimum Annual Delivery Requirements and/or Maximum Annual Delivery Thresholds, provided that such resets for either are no more nor less than 10% of the previously established Minimum Annual Delivery Requirements and Maximum Annual Delivery Thresholds, respectively. In the event such resets result in additional capacity becoming available at the E/C Facility or Export or any individual component of the E/C Facility or Export, the Contractor may contract for Spot Market Feedstock on whatever terms it deems...
appropriate, and the Most Favored Pricing provisions of the Contract shall not apply to the quantity of Acceptable Feedstock that is affected by the reset.

5.2 Fees, Payments and Compensation

5.2.1 Construction Payments to Contractor

E/C Facility

The Contractor shall fund all E/C Facility construction through the financing implemented under its financing plan. The City shall have no obligation to contribute or provide any funds for construction of the E/C Facility and shall have no role or involvement in or liability regarding the management or disbursement of construction funds. The City shall provide utility service to the Site as described in this RFP.

Export

The Contractor shall fund all construction for any facilities required outside of the City. The City shall have no obligation to contribute or provide any funds for construction of any facilities or equipment, except as otherwise described in this RFP for construction of biosolids storage and loading facilities in the City, and the City shall have no role or involvement in or liability regarding the management or disbursement of construction funds for any facilities required outside of the City.

5.2.2 Operations Payments to Contractor

E/C Facility

For the E/C Facility, the Contractor shall be compensated monthly through a Processing Service Fee, plus, annually, any payments or adjustments that might be due the Contractor as a result of the annual settlement process provided for in this Section. Such compensation and payments or adjustments that result from the annual settlement process shall be the only compensation paid to the Contractor and shall include and provide for all costs of the Contractor, including payments due from the Contractor to the City as described under “Contractor Payments and Costs,” below. No other source of payment or cost recovery shall be allowed the Contractor.

Export

The Contractor shall be paid monthly a Processing Service Fee plus, annually, any payments or adjustments that might be due the Contractor as a result of the annual settlement process provided for in this Section. The Processing Service Fee and payments or adjustments that result from the annual settlement process shall be the only compensation paid to the Contractor and shall include and provide for all costs of the Contractor. No other source of payment or cost recovery shall be allowed the Contractor.
5.2.3 Processing Service Fee

**E/C Facility**
The Processing Service Fee (PSF) shall be the monthly amount represented in the following formula for the Processing Service Fee.

\[
PSF = (AFC + MADJ)
\]

Where:

Acceptable Feedstock Charge (AFC) means the product of the per ton fee for the Contractor’s acceptance and processing of all Acceptable Feedstock that is delivered to the Contractor (the Acceptable Feedstock Tipping Fee/AFTF) times the quantity of Acceptable Feedstock that is actually delivered or caused to be delivered by the City to the Contractor during a monthly billing period. The annual settlement process shall provide procedures for: (a) the calculation of any Excess Tonnage Fee, if proposed, in the event that the deliveries of individual types of Acceptable Feedstocks to the Contractor during a Contract Year from the City exceed the Maximum Annual Delivery Thresholds; and, (b) the calculation of any Shortfall Charge in the event that the deliveries of individual types of Acceptable Feedstock to the Contractor during a Contract Year from the City are less than the Minimum Annual Delivery Requirements (taking into account revenues from Spot Market Waste, as provided for under Section 5.2.6).

The Acceptable Feedstock Tipping Fee shall include all costs associated with the recovery and/or amortization of the financing of the E/C Facility and all costs associated with the operation and maintenance of the E/C Facility, and the provision of services to the City, including all costs due from the Contractor as described under “Contractor Payments and Costs,” Section 5.2.4. The Acceptable Feedstock Tipping Fee shall be subject to adjustment by the Adjustment Factor. The Acceptable Feedstock Tipping Fee may be adjusted in the event of agreed-to capital improvements or modifications and in the event of certain financing-related events (such as a debt refinancing which lowers interest costs to the Contractor).

Expressed as a formula:

\[
AFC = AFTF \times \text{monthly tonnage delivered}
\]

Monthly Adjustments (MADJ) means adjustments and other payments that may be due the Contractor for conditions, events and causes as may be provided for in the Contract, such as Uncontrollable Circumstances or Change in Law.

**Export**
The Processing Service Fee (PSF) shall be the monthly amount represented in the following formula.
PSF = (AFC + MADJ)

Where:

Acceptable Feedstock Charge (AFC) means the product of the per ton fee for the Contractor’s acceptance and processing of Acceptable Feedstock that is delivered to the Contractor (the Acceptable Feedstock Tipping Fee/AFTF) times the quantity of Acceptable Feedstock that is actually delivered or caused to be delivered by the City to the Contractor during a monthly billing period. The annual settlement process shall provide procedures for: (a) the calculation of any Excess Tonnage Charge, if proposed, in the event that the deliveries of individual types of Acceptable Feedstocks to the Contractor during a Contract Year from the City exceed the Maximum Annual Delivery Thresholds; and, (b) the calculation of any Shortfall Charge in the event that the deliveries of individual types of Acceptable Feedstock to the Contractor during a Contract Year from the City are less than the Minimum Annual Delivery Requirements (taking into account revenues from Spot Market Waste, as provided for under Section 5.2.6).

The Acceptable Feedstock Tipping Fee shall include all costs for pick up, transport, and management/disposal of Acceptable Feedstock, and for Contractor Payments and Costs as specified in Section 5.2.4.

Expressed as a formula:

\[ AFC = AFTF \times \text{monthly tonnage delivered} \]

Monthly Adjustments (MADJ) means adjustments and other payments that may be due the Contractor for conditions, events and causes as may be provided for in the Contract.

5.2.4 Contractor Payments and Costs

E/C Facility

- For RFP purposes, the following Landfill Site and RWQCP Site lease payments shall be assumed for use of these sites: Landfill Site Lease Payment of $10,800 per acre per year, payable in equal monthly installments on the first business day of each month after the E/C Facility financing.

- RWQCP Site Lease Payment of $1.00 per year per year after E/C Facility financing, payable in equal monthly installments on the first business day of each month.

Export

This provision shall not apply to Export.
5.2.5 Most Favored Pricing

E/C Facility
If the E/C Facility has the capacity to accept and process Acceptable Feedstock from parties other than the City, the Contractor shall not, without the prior agreement of the City, enter into processing service agreements with terms of more than three (3) years with parties other than the City that include pricing that is more favorable to such parties than the then prevailing Acceptable Feedstock Tipping Fee that is being charged to the City. In the event that the Contractor desires to accept non-City Acceptable Feedstock for contract terms greater than three (3) years and at a more favorable price than the then prevailing Acceptable Feedstock Tipping Fee, it shall adjust the Acceptable Feedstock Tipping Fee charged to the City to equal the more favorable fee(s) to be charged to others. The Contractor may enter into processing service agreements with terms of less than three (3) years with other parties on any pricing basis that it determines to be prudent at the time.

The most favored pricing provisions shall not apply to Spot Market Feedstock that is accepted by the Contractor in the event of a reduced delivery reset by the City. Moreover, the most favored nation pricing provisions shall not apply to Spot Market Feedstock that is accepted by the Contractor in the event that the City does not meet its Minimum Annual Delivery Requirements, for the duration of such period. In such case, the Shortfall Charge shall apply only to the extent that the total of the fees charged by the Contractor for such Spot Market Feedstock are less that the Shortfall Charge provided for in the Contract.

Export
The same provisions shall apply to Export

5.2.6 Host Community Payment for Spot Market Feedstock

E/C Facility
The Contractor shall pay the City a Host Community Payment of $__ per ton (as proposed by the Proposer in its Proposal), adjusted annually by the Adjustment Factor, for Spot Market Feedstock delivered to the E/C Facility, except that Host Community Benefits shall not apply to Spot Market Feedstock that is accepted by the Contractor in the event that the City does not meet its Minimum Annual Delivery Requirements or if the Contractor accepts Spot Market Feedstock in response to a reduced Periodic Delivery Reset (as provided for in section 5.1.5 above). Payments shall be made in accordance with the Annual True Up/ Settlement Process described in Section 5.2.10.

Export
The provision described above for spot market payments shall not apply to Export.
5.2.7 Cost Savings Sharing

**E/C Facility**
Should the cost of E/C Facility financing, construction or operation and maintenance be reduced below that proposed by the Contractor and provided for in the Contract, for example, through the adoption of more efficient or cost effective processes or systems, the Contractor shall provide an equitable reduction in the Acceptable Feedstock Tipping Fee and the Excess Tonnage Fee, as proposed in the Pricing Proposal Forms.

**Export**
This provision shall not apply to Export.

5.2.8 Payment

The Contractor shall be paid the Processing Service Fee by the City on a monthly basis for services provided in the just concluded month, based upon invoices submitted by the Contractor to the City, and subject to City review and approval. The Contractor shall be paid other charges, if incurred, such as the Shortfall Charge and the Excess Tonnage Fee, as part of the Annual Adjustment process.

5.2.9 Compensation Adjustments

**E/C Facility**

**Construction-Related Adjustments**
Construction related adjustments will be allowed for the E/C Facility, if appropriate and as negotiated with the City, as allowed by Contract, such as for Uncontrollable Circumstances, a Change in Law, or City directed design changes. Any such adjustment shall be made through an adjustment to the Processing Service Fee.

**Annual Adjustments**
The following fees and payments shall be subject to annual adjustment by the Adjustment Factor for the E/C Facility:

1. Acceptable Waste Tipping Fee (AWTF)
2. Excess Tonnage Fee (ETF)
3. Shortfall Charge (SC)

With the exception of the Host Community Benefit for Spot Market Feedstock, in the event that the application of the Adjustment Factor results in the reduction of a fee or cost, such fee or cost shall be so reduced.

**Other Adjustments**
The AFTF or Annual Service Fee, as appropriate, ETF, and SC shall be subject to equitable adjustment through negotiations in the event that causes specified in the
Contract, such as an Uncontrollable Circumstance or Change in Law, act to increase or decrease the costs of the Contractor, except as provided for in Sections 5.10.13 and 5.10.17 regarding duration of such occurrences and except that the Contractor shall not be entitled to an adjustment of such fees if the costs associated with such Uncontrollable Circumstances or Changes-in-Law, individually, are less than $25,000 in the aggregate for Uncontrollable Circumstances or Changes-in-Law in any one Contract Year.

The AFTF, ETF and SC may also be subject to equitable adjustment through negotiations in the event that the Contractor incurs additional costs due to City-directed changes.

**Export**
The Annual Adjustments described above shall also apply to Export, with the exception of the Host Community Benefit for Spot Market Feedstock which shall not apply to Export.

### 5.2.10 Annual True-up/Settlement Process

Within 45 days of the conclusion of each Contract Year, the Contractor shall provide the City with an Annual Settlement Statement setting forth the determination of outstanding fees or obligations of the parties with respect to such Contract Year and a reconciliation of such amount with the amounts actually paid by each party with respect to such Contract Year. The Annual Settlement Statement shall include sufficient documentation to allow the City to verify quantities, unit prices, and all resulting costs and revenues as applicable. The City, or the Contractor, as appropriate, shall pay all undisputed amounts within 45 days after the receipt of such Annual Settlement Statement. If any amount is then in dispute, the Annual Settlement Statement shall identify the subject matter and reasons for such dispute, and include a good faith estimate of the amount in question. The appropriate party shall review any disputed matter within thirty (30) days of the receipt of the notice of dispute and, if the matter cannot be resolved through discussion and negotiation, shall refer the matter to dispute resolution.

As a part of the settlement process, and subject to substantiation by the City, the following shall also be calculated and paid to the affected party, as appropriate:

- **Shortfall Charge.** The Shortfall Charge shall be levied by the Contractor in the event that deliveries by the City during the Contract Year of Acceptable Feedstock are below the Minimum Annual Delivery Requirements set in the Contract. The Shortfall Charge shall be calculated by multiplying the Shortfall Charge ($___ per ton), as proposed by the Contractor in its Proposal and included in a subsequent Contract, times the difference between the amount of Acceptable Feedstock actually delivered and the minimum amount of Acceptable Feedstock that was required under the Contract to be delivered. The City shall retain the right to mitigate any shortfall tonnage in any individual Acceptable Feedstock by allocating any other excess feedstocks.
delivered by the City that exceeds that Minimum Annual Delivery Requirement. In addition, the revenue from Spot Market Feedstock shall be used to mitigate any shortfall tonnage of the City.

- **Excess Tonnage Fee.** The Excess Tonnage Fee, if proposed, shall be levied by the Contractor in the event that delivery by the City during the Contract Year of Acceptable Waste exceeds the Maximum Annual Delivery Thresholds set forth in the Contract. The total Excess Tonnage Fee due shall be calculated by multiplying the per ton Excess Tonnage Fee ($___), if proposed by the Contractor in its Proposal, times the amount of excess tonnage accepted by the Contractor during the Contract Year. The City shall retain the right to mitigate any excess tonnage by allocating any individual shortfall in excess Acceptable Feedstock delivered by the City.

- **Host Community Payments.** The Annual Settlement Statement shall include the calculation of the host community payments to the City, as provided for in Section 5.2.6.

### 5.3 Ownership and Financing

**E/C Facility**
The Contractor shall finance and own the E/C Facility and improvements to the Site that it has made. The City shall retain ownership of the Site(s), subject to the Lease referenced in Section 1.4 of this Request for Proposals. The Contractor shall be solely responsible for the cost of the design, construction and operation of the E/C Facility and all components thereof. The Contractor itself, or through third-party financing or other equity contributions, shall provide in a timely manner all funds required to perform the design-build-operation work.

**Export**
The Contractor shall own any facilities that are used in the provision of transport and processing services under the Contract or, if it does not own such facilities, shall demonstrate to the satisfaction of the City that it has the right to deliver City Acceptable Feedstock to such facilities for the Term of the Contract. If the Contractor intends to expand existing facilities or construct new facilities in order to enable it to provide services under the Contract, it shall be solely responsible for the cost of design, construction and operation.

### 5.4 Option to Acquire or Remove the E/C Facility

**E/C Facility**
Upon the expiration of the Initial Term or any renewals thereof, or Contract termination, the City shall have the exclusive option, at its sole discretion, to acquire the E/C Facility or any components thereof and any other improvements made by the Contractor at the Site. If the right to purchase is exercised prior to the end of the Initial Term or any renewal, the City shall make payment equal to the then remaining debt service. If the right to purchase is exercised at the expiration of the initial Term, or any Contract renewal, the City shall make
payment of $1.00. If the City determines not to exercise such option, the Contractor shall remove the E/C Facility from the Site and restore the Site to a condition reasonably equivalent to its condition before construction of the E/C Facility within three hundred and sixty five (365) days from written notice from the City of its intention not to acquire the E/C Facility. The City shall provide the Contractor with at least one hundred eighty (180) days written notice of its intention to acquire or require the removal of the E/C Facility. In no event shall the Contractor be allowed to occupy the Site and operate the E/C Facility after termination or the expiration of the Term or any renewal(s) thereof except in the case of the execution of a new or amended contract between the City and the Contractor.

Export
This provision shall not apply to Export.

5.5 Failure to Achieve Project Financing

E/C Facility
If the Contractor has not obtained E/C Facility financing within one year from the date upon which financing is to occur in the Contractor's project schedule as set forth in the Contract, the City shall have the right to terminate the Contract at its convenience.

Export
In the event that the Contractor intends or needs to finance an expansion of existing facilities or the construction of a new facility(ies) in order to accept and process City Acceptable Feedstock, and if the Contractor has not obtained financing within one year from the date upon which financing is to occur in the Contractor’s project schedule as set forth in the Contract, the City shall have the right to terminate the Contract at its convenience.

5.6 Design and Construction of the E/C Facility

5.6.1 Design-Construct Responsibility

The Contractor shall have complete responsibility for the design and construction of the E/C Facility. The Contract shall set forth the minimum design requirements for the E/C Facility based on the technical requirements set forth in Section 4 of this RFP and the Contractor's Proposal, as negotiated. The Contractor shall complete all design requirements for full capacity operation of the E/C Facility, and shall complete the E/C Facility according to the its final design. Construction shall be of the quality required by the Design Requirements and the Construction Requirements set forth in Section 4 of this RFP using Good and Accepted Construction Practice as defined by the definition section of this RFP, and the E/C Facility shall have a minimum useful life of 30 years. The Contractor shall be responsible for complying with all requirements imposed by Applicable Law relating to the development of the E/C Facility. For purposes of responding to this RFP, it should be assumed that the City will: close and cap the landfill; construct a retaining wall between the Site and the portions of the landfill that will not be used by the E/C Facility; relocate existing landfill leachate and landfill gas lines; construct utility services to the Site boundary (sewer, stormwater, water, gas, electricity); construct a stone or gravel pad on the
Site; and deliver landfill gas to the Site. Excavated material from E/C Facility Site will be placed in the landfill as part of landfill closure. All other Site preparations and/or Site improvements shall be the responsibility of the Contractor.

5.6.2 Permits and Licenses

With exception of CEQA, the Contractor shall be responsible for all necessary permits and licenses to provide Services.

5.6.3 Applicable Employment Laws

The Contractor shall apply federal, State and local wage and hour laws to the extent required by Applicable Law. For purposes of its Proposal, the Proposer should assume that prevailing wages will be required for the E/C Facility and Export.

5.6.4 Site Conditions

The City shall be responsible for subsurface conditions, including existing subsurface soil contamination and the presence and consequences of natural or man-made contamination, infrastructure and existing construction. The Contractor shall be responsible for surface conditions, construction of surface infrastructure, foundations, drainage systems, roads and the like, including new construction of subsurface infrastructure, such as foundations, necessary for the E/C Facility and compatible with landfill capping.

5.6.5 Capital Modifications and Improvements

E/C Facility
City approval shall not be required for small-scale capital modifications or improvements under a Contract-specified cost ($50,000), provided that such will not reduce the capacity of or otherwise adversely affect the aesthetics, environmental impacts, operational integrity or performance of the E/C Facility. City approval shall be required for all other capital modifications or improvements, including the financing approach and costs for such capital modifications.

If modifications or improvements are made in response to events or causes as may be specified in the Contract, such as an Uncontrollable Circumstance or Change in Law, Contractor service fees will be appropriately adjusted as per Section 5.2.9 of this RFP. If modifications or improvements are made at the City’s request, Contractor compensation shall be appropriately adjusted. If modifications are made at the Contractor’s request, as approved by the City, Contractor compensation shall be appropriately adjusted. If modifications or improvements result in cost savings, the Contract will specify standards for City/Contractor sharing of cost savings.

Export
The City shall finance and construct any facilities that may be needed to dewater, store and load biosolids into the Contractor’s vehicles at the Site. The Contractor shall be responsible for financing any vehicles required to accept and transport City
biosolids as well as any financing associated with the construction or improvement of any Contractor facility that is to receive Acceptable Feedstock, including site conditions associated with that facility.

5.7 Operations and Maintenance

5.7.1 Operations Generally

E/C Facility
Operation of the E/C Facility shall occur no later than the date for such operation as set forth in the Contract between the City and the Contractor, unless otherwise agreed to by the parties. Operation of the E/C Facility is described in Section 4 of this RFP.

The Contractor, at its expense, shall provide uninterrupted operation of the E/C Facility in accordance with Applicable Law, Good Industry Practice, Good and Accepted Operating Practice, the Operation and Maintenance Manual, the Operations and Maintenance Standards set forth in the Contract, the Performance Guarantees, and any other applicable requirements of the Contract. At no time shall the Contractor use or permit the use of the E/C Facility for any purposes other than those contemplated by the Contract. Should the E/C Facility not be operable, for planned outage or unplanned outage, the Contractor shall be responsible after the dates specified in the Contract for alternative processing of Acceptable Feedstocks. In such an event, the Contractor shall transport and process Acceptable Feedstocks at facilities approved by the City. Such facilities shall meet the same processing requirements as those specified for the primary facilities, unless the City approves alternative processing requirements.

The Contractor shall make a good faith effort to employ staff from the local and regional labor markets.

The Contractor shall be responsible for arranging for the disposal of E/C Facility residuals and of unprocessed or by-passed Acceptable Feedstock received, except that the Contractor may refuse deliveries of Unacceptable Feedstock, the disposal of which shall be a City responsibility. Disposal sites and/or facilities shall be subject to the approval of the City, whether the sites and/or facilities are those originally contracted for by the Contractor or subsequently selected by the Contractor as replacements for the original sites and/or facilities.

The City shall deliver landfill gas to the E/C Facility at no cost to the Contractor.

The City shall provide to the Contractor the following utility services: water supply, wastewater treatment (with a surcharge for ammonia treatment), stormwater system access, electric power, and natural gas. With the exception of stormwater system access, the Contractor shall guarantee its annual consumption of such utility services (see Pricing Proposal Forms 1.5 and 1.6). The City shall bear the risk of increases in utility rates (i.e., it will allow tipping fee adjustments to accommodate increases in utility rates incurred by the Contractor, but not for increases in consumption of utility services, as agreed to in the Contract).
Should the Contractor plan to sell electric power to an electric utility other than the City, the City shall agree to provide wheeling services, at a per kWh rate to be determined during Contract negotiations. Standby charges will be required for backup electric service.

**Export**
The Contractor shall, at its own expense, provide for the uninterrupted provision of the Services through its operation of the its facility(ies) or use of third-party facilities, all of which must be approved by the City and meet the City’s primary processing requirements, unless otherwise approved by the City. For food scraps and yard trimmings, the City shall deliver these feedstocks to a Contractor transfer station, processing or other facility no more than 18 miles from City Hall. For biosolids, the City shall operate dewatering and storage facilities, and shall load the Contractor’s vehicles at the Site.

**5.7.2 Maintenance Generally**

**E/C Facility**
As set forth in further detail in Section 4 of this RFP, the Contractor, at its own expense, shall maintain the E/C Facility in good and acceptable condition in accordance with Applicable Law, Good Industry Practice, Good and Accepted Operating Practice, the Operations and Maintenance Manual, the Operations and Maintenance Standards set forth in the Contract, the Performance Guarantees, and any other applicable requirements of the Contract. The Contractor shall also be responsible for maintenance of the Site utilized by the Contractor, including all Site infrastructure, grass cutting, brush-cutting, and cleanup of litter on the Site, and for cleanup of any spills, leaks or contamination to the Site(s) resulting from construction and operation of the E/C Facility.

**Export**
The Contractor shall be responsible for cleanup of any spills, leaks or contamination to the Site resulting from its operations.

**5.7.3 Safety and Security**

**E/C Facility**
The Contractor shall maintain the safety of the E/C Facility at a level consistent with Applicable Law, all Required Insurance, the safety plan and Good Industry Practice. The Contractor shall provide for safe and orderly vehicular movement. The Contractor shall be responsible for maintaining the security of the E/C Facility and the Site, and shall take all responsible actions to prevent vandalism to the E/C Facility and the Site.

**Export**
The Contractor shall be responsible for safe and orderly vehicular movement on and off the RWQCP Site, and ensuring all such equipment meets the standards of
Applicable Law. The City shall not be liable for the safety or security of transportation equipment or management/disposal facilities used by the Contractor.

5.7.4 No Nuisance

**E/C Facility**
The Contractor shall be responsible for keeping the E/C Facility and the Site organized, clean, and litter-free at all times, to ensure that the operation of the E/C Facility does not create any impermissible odor, litter, noise, lighting, fugitive dust, vector or other adverse environmental effects constituting, with respect to each of the foregoing, a nuisance condition. Should any nuisance condition occur, the Contractor shall expeditiously remedy the condition, pay any regulatory fines and indemnify the City from any third-party nuisance claims.

**Export**
The provisions of this Section shall apply to the Contractor to any nuisance condition that results from Contractor activities on City property and/or required by Applicable Law. The City shall have no liability or obligations regarding the operation and maintenance or compliance with Applicable Law of the operation and maintenance of any Contractor equipment or facilities.

5.8 Performance

5.8.1 Performance Guarantees

**E/C Facility**
For the E/C Facility, the Contractor shall be responsible for meeting the Performance Guarantees as set forth in Section 4 of this RFP. In the event that the City elects to purchase the electric power generated by the E/C Facility, such purchase shall be provided for under a separate Power Purchase Agreement with the Contractor. Notwithstanding the potential City purchase of electric power, the Contractor shall, to the extent practicable, accept and use in its processes the gas generated by the City’s landfill.

**Export**
The Contractor shall be responsible for meeting the following performance obligations: 1) accepting, on schedules and at sites or facilities specified in the Contract, up to the Maximum Annual Delivery Thresholds of Acceptable Feedstock annually and as scheduled and applicable on a daily, weekly or monthly basis; 2) continuously providing any and all Contract-required handling, transportation, processing and/or disposal activities in compliance with Applicable Law, including all environmental laws and regulations; 3) initiating full Service on the Commercial Operation Date.

5.8.2 Compliance and Remedies

The City may at any time it possesses reasonable cause to believe that the Contractor is not performing in accordance with the Performance Guarantees,
require the Contractor to provide reasonable assurances of compliance. The Contractor shall at all times comply with the Performance Guarantees, except to the extent compliance is prevented or excused by Uncontrollable Circumstances or Change in Law. If the Contractor fails to comply with any Performance Guarantee and is not prevented or otherwise excused from performance, the Contractor shall: (1) notify the City within 24 hours of the Contractor's having knowledge of any such non-compliance; (2) provide the City within 24 hours with copies of any notices sent to or received from any Governmental Body having regulatory jurisdiction with respect to any violations of Applicable Law; (3) pay any resulting direct damages, fines, judgments or awards, including liquidated damages, levies, assessments, impositions, penalties or other charges resulting therefrom; (4) at its own cost and expense, take any commercially practicable action (including, without limitation, making repairs, replacements and operating and management practices changes) necessary, in light of the nature, extent and repetitiveness of such noncompliance, in order to comply with such Performance Guarantee, to continue or resume performance hereunder and eliminate the cause of, and to reasonably assure that such non-compliance will not recur; (5) promptly prepare all public notifications required by Applicable Law, and submit such notifications to the required party and the City for publication; and (6) assist the City with all public relations matters necessary to adequately address any public concern caused by such non-compliance, including, but not limited to, preparation of press releases, attendance at press conferences, and participation in public information sessions and meetings.

5.8.3 Damage Provisions

The Contract will provide for reasonable compensatory, consequential, and liquidated damage provisions between the parties consistent with comparable contracts for major works of public improvement under California law.

5.9 Default, Termination and Dispute Resolution

5.9.1 Remedies for Breach

Except where damages for specific instances of breach or default are specified, the City may, in the event that the Contractor breaches any provision of the Contract, exercise any legal rights it has under the Contract, under the security instruments and under Applicable Law to recover damages or to secure specific performance.

5.9.2 Events of Default by the Contractor without Further Notice and Cure Opportunity

The City shall have the right to terminate the Contract without additional notice and cure opportunity, and to the extent not excused by Uncontrollable Circumstances, upon the occurrence of the following events of default:

- Abandonment of the E/C Facility;
• Repeated failure by the Contractor to accept Acceptable Feedstock from the City;
• Default of Guarantor;
• Bankruptcy or insolvency of the Contractor or Guarantor;
• Failure to maintain any financial security instrument;
• Any intentional misrepresentation of information and facts relating to the Contractor's performance obligations and performance.

5.9.3 Events of Default by the Contractor with Notice and Cure Opportunity

The City shall have the right to terminate the Contract with notice and cure opportunity, upon the occurrence of the following events of default:

• Materially false or inaccurate representations or warranties made under the Contract or Guaranty.
• Failure to pay amounts owed to the City within time specified in the Contract.
• Failure to perform a material obligation under the Contract.

5.9.4 Purchase of E/C Facility in Event of Default

E/C Facility
Upon any termination for Contractor default, the City shall determine whether it desires to purchase the E/C Facility for the then remaining debt service on the E/C Facility on the date of default and such other costs as are set forth in the Contract. If the City determines not to purchase the E/C Facility, the Contractor shall, unless otherwise agreed to by the parties, complete removal of the E/C Facility from the Site within three-hundred-sixty-five (365) days from written notification by the City to remove the E/C Facility.

Export
These provisions do not apply to Export.

5.9.5 Events of Default by the City

The following shall constitute an Event of Default by the City: Repeated and persistent failure or refusal by the City to perform its material obligations under the Contract, provided that: (i) the Contractor shall have given prior written notice of the breach of the Contract giving rise to the default, which is not excused by an Uncontrollable Circumstance or the fault of the Contractor, and (ii) such breach has not been corrected or the City has not taken reasonable steps to correct such breach within thirty (30) days of such notice. If the default results from the City failing to meet its Minimum Annual Delivery Requirements, then the default may be remedied by accounting for deliveries of other Acceptable Feedstock. In no event shall the City be in default for failure to meet Minimum Delivery Requirements in the
event that the Contractor is able to offset such amounts through other deliveries, including Spot Market Feedstock.

5.9.6 No Consequential or Punitive Damages

No consequential or punitive damages shall be payable on any claim arising out of the performance or non-performance of obligations under the Contract by the City.

5.9.7 City Step-In Rights

E/C Facility
For the E/C Facility, in the event of default and termination of the Contractor, subject to approval of lenders and surety, the City shall have the right to step in and assume completion and/or operation of the E/C Facility (or engage a successor contractor and assume outstanding obligations to lenders), with full assignment of rights to use any proprietary or licensed technology involved (including any licensor technical support). The Contractor shall have “winding down” obligations during the transition to City completion and/or operation or completion and/or operation by a successor contractor.

The City’s step-in rights shall enable a temporary City step-in to resolve specific difficulties or problems (with eventual return to Contractor activities).

Export
This provision shall not apply to Export.

5.10 General Provisions

5.10.1 Term

E/C Facility
Unless otherwise provided for, the Initial Term of the Contract shall commence on the Contract Date and shall remain in effect until the completion of twenty (20) years of operation. The City shall have the right to extend the Initial Term of the Contract for two additional five-year periods, under mutually agreeable terms and conditions. Provided a Base Case Proposal is submitted, a Proposer may propose as an option an Initial Term of 30 years of operation and Services provision, with renewal options for two five-year periods.

Export
This provision shall apply to Export. In addition, a Proposer may propose as an option a shorter operating term, but no less than five (5) years, provided a Base Case Proposal is submitted.

5.10.2 Comprehensive Inspections

Upon reasonable written notice, the City or its designees, may periodically perform a comprehensive inspection of all facilities operated or controlled by the Contractor at
the Site, or in the case of Export, at facilities utilized by the Contractor for provision of Services, and relevant records of the Contractor, to determine compliance with the Contract and Applicable Law. The Contractor shall cooperate fully with such inspections, which shall not interfere unreasonably with the Contractor's performance of the Contract Services.

5.10.3 Contract Security – Guaranty

**E/C Facility**
The Guaranty shall provide that the Guarantor shall guarantee to the City in accordance with the Form of Guarantee (Appendix J, as appropriate for the E/C Facility or Export), that the Contractor will: (1) expeditiously make all payments required to be made or credited to the City under the Contract and (2) perform and observe all of the covenants and agreements it entered into under the Contract. The Guarantor may cap its financial liability, but during construction to no less than the full E/C Facility construction cost and, during operations to no less than the cost of one year of operation and maintenance of the E/C Facility. The Contractor and Guarantor shall immediately notify the City of any material decline in the Guarantor's credit standing. If a material decline in the Guarantor's credit standing occurs, the City may require the Guarantor to provide one of the following: (i) an increase in the value of the letter of credit to no less than a level equivalent to the minimum dollar value of the Guaranty as specified in this Section; or (ii) the substitution of the Guarantor by another guarantor acceptable to the City which shall enter into a guaranty agreement substantially the same in form and substance to the Guarantee.

**Export**
This provision shall apply to Export, with the exception that in the event that the Proposer specifies that the Guarantor will cap its liability, such cap shall be limited to a value of no less than one year of the cost for Services.

5.10.4 Contract Security – Construction Performance Bond

**E/C Facility**
As further security for the performance of the Contract, the Contractor shall provide a construction payment and performance bond in the amount of the estimated full cost of construction of the E/C Facility, securing the construction of the E/C Facility, in a form acceptable to the City. Such bond shall be in standard AIA form, and shall be issued by a surety company or companies rated "A" or better pursuant to current AM Best Company ratings and listed in the United States Treasury Department's Circular 570. Such surety shall be an admitted surety in California.

**Export**
This provision shall not apply to Export

5.10.5 Contract Security – Operations Bond

**E/C Facility**
As further security for the performance of the Contract, the Contractor shall provide an operations payment and performance bond in the amount of the estimated full cost of annual operations and maintenance of the E/C Facility, securing the operations and maintenance of the E/C Facility, in a form acceptable to the City, and with the City named as a co-beneficiary, if agreed to by the surety. Such bond shall be in standard AIA form, and shall be issued by a surety company or companies rated "A" or better per current AM Best Company ratings and listed in the United States Treasury Department's Circular 570. Such surety shall be an admitted surety in California.

**Export**

This provision shall apply to Export in the amount equal to the annual value of the Contract.

### 5.10.6 Contract Security – E/C Facility Demolition, Removal and Site Restoration Financial Assurance

#### E/C Facility

For the E/C Facility, as further security for the performance of the Contract, the Contractor shall provide a bond or other surety device as set forth herein and acceptable to the City to cover the full cost of removal of the E/C Facility from the Site and restoration of the Site to a condition reasonably equivalent to its condition before construction of the E/C Facility, should it be required by the City at Contract expiration or earlier termination as set forth in the Contract.

No later than the start of E/C Facility construction, the Contractor shall establish or obtain, and thereafter continuously maintain, financial assurance that is adequate to assure the City that the Contractor will be, at all times, financially capable of complying with the requirement to demolish and remove the E/C Facility, and restore the Site, should the City exercise its right to require such action. The type of financial assurance mechanism provided may be of the Contractor’s choosing (e.g., a performance bond similar to a landfill closure bond or an alternative means subject to the City’s approval, such as a direct access letter of credit or a separate cash reserve account with direct access by the City), provided that the City shall be a party to the mechanism to the extent that the City shall have the right to obtain, without the consent of the Contractor, exclusive direction and control over the use and disbursement of the full financial value of the mechanism and, without limitation or interference, may apply such to E/C Facility demolition and removal and restoration of the Site in the event that the Contractor fails to, or is not able to, perform as required.

As a part of its Proposal, the Contractor shall provide an estimate from a properly qualified expert of the cost at E/C Facility completion of E/C Facility demolition, removal and restoration of the Site. The Contractor shall revise the estimate every year and shall submit in written form a revised estimate from a properly qualified expert and, if necessary, adjust or reset (i.e., increase or decrease) the value of the mechanism to reflect such revised estimate. The mechanism shall similarly be adjusted or reset if any capital modifications made to the E/C Facility are of a nature...
to materially affect the cost of demolition, removal and restoration of the Site. The Contractor may not terminate the mechanism or change the form or source of the mechanism without the prior consent of the City. In the event of the termination for Contractor default of the Contract once construction of the E/C Facility has begun, the ownership and control of the mechanism shall transfer in full to the City and the mechanism shall become the property of the City for its sole discretionary use.

**Export**
This provision shall not apply to Export.

### 5.10.7 Contract Security – Letter of Credit

**E/C Facility**
As further security for the performance of the Contract, for an E/C Facility the Contractor shall provide at the Financing Date an irrevocable, direct pay letter of credit to the benefit of the City in the amount of ten percent (10%) of the full cost of E/C Facility construction that shall be in force until Acceptance, at which time the value of the letter of credit shall be adjusted to be fifty percent (50%) of the full cost of annual operations (or, a new letter of credit of equivalent value is provided) during the operations period.

**Export**
This provision shall apply to Export in the amount of fifty percent (50%) of the annual Contract value.

### 5.10.8 Compost Production and Provision to City Residents

**E/C Facility**
Pursuant to Section 1.6 of this RFP, if the E/C Facility includes anaerobic digestion, and the Proposer elects to compost the digestate, such compost must meet CalRecycle compost standards and, for biosolids, US EPA Exceptional Quality Standards for metals and Class A for pathogen reduction. Should anaerobic digestion technology be applied, the Contractor shall make available for use by City residents or the City 1000 tons per year of compost at no cost. Compost for City and City resident use shall meet the standards described above. If the E/C Facility does not compost digestate on the Site, digest composted off Site must meet the above requirements. If the E/C Facility intends to directly market and beneficially utilize digestate, the digestate shall be subject to CalRecycle standards for such use, including those currently under development by CalRecycle.

**Export**
The above requirement shall apply to Export, should either anaerobic digestion or composting technology be utilized for Acceptable Feedstock.
5.10.9 Local Goods and Services

**E/C Facility**
For the E/C Facility, the Contractor shall take all commercially reasonable steps to purchase materials, goods and services from in-City and regional vendors and businesses.

**Export**
This provision shall apply to Export to the extent practical.

5.10.10 Required Insurance

**E/C Facility**
The Contractor shall procure no later than start of construction for the E/C Facility and maintain at its expense until termination of the Contract insurance in the amounts shown below with insurance companies authorized to do business in the State of California. The Contractor shall name the City, and its employees, agents and contractors as additional insured parties on such insurance policies.

Insurance coverage limits shall include:

**Design and Construction**

a. General Liability*: $5 million per occ/agg
b. Workers Comp/Employers Liability: statutory limits
c. Automobile Liability: $1 million
d. Errors and Omissions (Professional Liability): $1 million per occ/ $2 million agg
e. Environmental/Pollution Liability: $10 million per occ/agg

*The City must be named as an additional insured.

**Operations**

a. General Liability*: $5 million per occ/agg
b. Workers Comp/Employers Liability: statutory limits
c. Automobile Liability: $1 million
d. Errors and Omissions (Professional Liability): $1 million per occ/ $2 million agg
e. Environmental/Pollution Liability: $10 million per occ/agg
f. Property – All Risk Replacement Cost Coverage: full value of improvements and trade fixtures
* The City must be named as an additional insured. The City must be named as “loss payees” on the property policy.

All policies are required to be primary and non-contributory with any insurance or self-insurance programs carried or administered by the City. Any deductible or Self-Insured Retention (SIR) over $10,000 requires approval by the City.

**Export**

The Operations insurance requirements above shall apply to Export.

5.10.11 **Indemnification by Contractor**

5.10.11.1 **E/C Facility Engineering and Design**

(a) To the fullest extent permitted by law, Contractor shall protect, indemnify, defend and hold harmless City, its Council members, officers, employees and agents (each an “Indemnified Party”) from and against any and all demands, claims, or liability of any nature, including death or injury to any person, property damage or any other loss, including all costs and expenses of whatever nature including attorneys fees, experts fees, court costs and disbursements (“Claims”) that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the Contractor, its officers, employees, agents or contractors under this Contract, regardless of whether or not it is caused in part by an Indemnified Party.

(b) Notwithstanding the above, nothing in this Section shall be construed to require Contractor to indemnify an Indemnified Party from Claims arising from the active negligence, sole negligence or willful misconduct of an Indemnified Party.

(c) The acceptance of Contractor’s services and duties by City shall not operate as a waiver of the right of indemnification. The provisions of this Section shall survive the expiration or early termination of the Contract.

5.10.11.2 **E/C Facility Construction and Operation**

To the fullest extent allowed by law, Contractor will defend, indemnify, and hold harmless City, its City Council, boards and commissions, officers, agents, employees, representatives and volunteers (hereinafter collectively referred to as "Indemnitees"), through legal counsel acceptable to City, from and against any and all Losses arising directly or indirectly from, or in any manner relating to any of, the following:

(a) Performance or nonperformance of the Work by Contractor or its Subcontractors or Sub-subcontractors, of any tier;

(b) Performance or nonperformance by Contractor or its Subcontractors or Sub-subcontractors of any tier, of any of the obligations under the Contract Documents;
(c) The construction and operations activities of Contractor or its Subcontractors or Sub-subcontractors, of any tier, either on the Site(s) or on other properties;

(d) The payment or nonpayment by Contractor to any of its employees, Subcontractors or Sub-subcontractors of any tier, for Work performed on or off the Site(s) for the E/C Facility; and

(e) Any personal injury, property damage or economic loss to third persons associated with the performance or nonperformance by Contractor or its Subcontractors or Sub-subcontractors of any tier, of the Work.

However, nothing herein shall obligate Contractor to indemnify any Indemnitee for Losses resulting from the sole or active negligence or willful misconduct of the Indemnitee. Contractor shall pay City for any costs City incurs to enforce this provision. Nothing in the Contract Documents shall be construed to give rise to any implied right of indemnity in favor of Contractor against City or any other Indemnitee.

The provisions of Section shall survive the termination of the Contract.

5.10.11.3 Export

These same provisions shall apply for Export.

5.10.12 Assignment

The Contract may not be assigned by either party without the express written consent of the other party. The Contract will include an assignment provision substantially in the form and content set forth in Appendix I.

5.10.13 Uncontrollable Circumstances

Unless covered by insurance, in the event of an Uncontrollable Circumstance, the performance of the Contractor shall be excused (other than any Site Lease payment to the City) if the Contractor is unable to perform, provided such event was not caused by or contributed to by any act or omission of the Contractor and the effects of which could not have been prevented or avoided by due diligence if reasonable efforts had been expended by the Contractor. The Contractor shall provide prompt notice to the City of the commencement and cessation of an Uncontrollable Circumstance. At the conclusion of any such Uncontrollable Circumstance, the obligations of the Contractor shall resume in full force and effect. The Contractor shall use reasonable efforts to eliminate its cause and resume performance under the Contract as expeditiously as possible. The Contractor shall be liable for the payment of any fines and/or civil penalties levied against the Contractor or the City by any regulatory agency with jurisdictional activity should such agency find that the Contractor was negligent by its actions or lack of action in restoring service to required levels. The Contractor shall be responsible for all costs associated with
restoring operating service to meet performance criteria as specified by the Contract, recognizing that subsequent reimbursement and or a fee adjustment by the City may be provided for in the Contract. In any case, the Contractor shall be responsible for the first $25,000 in costs incurred annually in responding to one or more individual Uncontrollable Circumstances occurring in a Contract Year.

The City may terminate the Contract if an Uncontrollable Circumstance results in the “total constructive loss” of the E/C Facility or Export facilities (i.e., damage or destruction is beyond repair), if the E/C Facility or Export facilities are inoperable for a period of six months or longer and/or the Uncontrollable Circumstance increases City costs above 10% in any year, or there is a cumulative increase of 35% over the Initial Term of the Contract or any renewals or extensions thereof. In the event of termination due to an Uncontrollable Circumstance, each party shall pay to the other any amounts due up to the time of termination, except that the City shall have no obligations regarding either any amount of outstanding Contractor debt, or any equity that may have been invested in the E/C Facility and remains unrecovered, at the time of Contract termination.

If, based on notice of an Uncontrollable Circumstance, the unaffected party reasonably concludes that a Uncontrollable Circumstance or its impact on the affected party or the E/C Facility or Export facilities will continue (i) for a period of one hundred and twenty (120) or more consecutive calendar days, or (ii) for an aggregate period of one hundred and eighty (180) or more non-consecutive calendar days in the case of any claimed Uncontrollable Circumstance or series of claimed Uncontrollable Circumstance events, the unaffected party shall have the right to terminate the Contract effective upon notice to the affected party.

5.10.14 Ground Lease

E/C Facility
The Contractor and the City shall enter into a ground lease for the Site.

Export
This provision shall not apply to Export.

5.10.15 Governing Law

The Contract shall be governed by and construed in accordance with the Laws of the State of California, without regard to the conflicts of laws or rules thereof.

5.10.16 Forum and Venue

All legal actions and proceedings relating to the Contract or to any rights or any relationship between the parties arising therefrom shall be governed solely by the laws of California and shall solely and exclusively be initiated and maintained subject to the venue of the Santa Clara County Superior Court, State of California, or the United States District Court, Northern District.
5.10.17 Changes in Law

Neither this Contract nor any provision hereof may be amended, waived, discharged or terminated except by an instrument in writing signed by the practices not already known or anticipated as of this Contract become effective, or changes in relevant permits materially alter the procedures applicable to the City or Contractor’s performance of their respective obligations hereunder, the parties will endeavor in good faith to negotiate appropriate and mutually agreeable amendments to the Contract or separate protocols to account for such changes, attempting in all events to restore or maintain for each party as nearly as possible, its respective rights and obligations and benefits under the Contract. Contractor shall be responsible for providing the City at least thirty (30) days written notice of any such Change in Law, including written documentation setting forth the basis for the Change in Law, the estimated costs of compliance, and a description of the actions that need to be taken to comply with the Change in Law. The Contractor shall be responsible for all costs associated with responding to the Change in Law to meet performance criteria as specified by the Contract, recognizing that subsequent reimbursement and or a fee adjustment by the City may be provided for in the Contract. In any case, the Contractor shall be responsible for the first $25,000 in costs incurred annually in responding to one or more Changes in Law in a Contract Year.

The City may terminate the Contract if a Change in Law results if the E/C Facility or Export facilities being inoperable for six months or longer or increases City costs above 10% in any year, or results in a cumulative increase of 35% over the Term of the Contract. In the event of termination due to A Change-in-Law, each party shall pay to the other any amounts due up to the time of termination, except that the City shall have no obligations regarding either any amount of outstanding Contractor debt, or any equity that may have been invested in the E/C Facility and remains unrecovered, at the time of Contract termination.

If, based on notice of a Change in Law, the unaffected party reasonably concludes that a Change in Law or its impact on the affected party will continue (i) for a period of one hundred and twenty (120) or more consecutive calendar days, or (ii) for an aggregate period of one hundred and eighty (180) or more non-consecutive calendar days in the case of any claimed Change in Law or series of claimed Change in Law events, the unaffected party shall have the right to terminate the Contract effective upon notice to the affected party.

5.10.18 Product Risks

The Contractor shall bear all risks associated with product quantity, quality and marketability, without recourse to the City. The Contractor shall bear all comparable risks regarding feedstocks from non-City sources, if any, with no recourse to the City. All revenues earned from the sale of products shall be and remain the property of the Contractor. The Contractor shall bear all risks related to material declines in product prices.
**5.10.19 Dispute Resolution**

There shall be three levels of dispute resolution: 1) discussions and negotiations between the principal representatives of the parties who are authorized to commit their respective parties; 2) if discussions and negotiations are not successful, the parties will proceed to non-binding mediation, facilitated by a certified contract mediator mutually acceptable to both parties; 3) if non-binding mediation is not successful in resolving the dispute, the dispute will be resolved via litigation.
6.0 PROCUREMENT PROCESS

6.1 Overview of Procurement Process

This RFP is being issued to procure the Services of and will provide the basis for selecting the Preferred Proposer and negotiating a contract with said Preferred Proposer.

The City will evaluate all responsive Proposals containing the information requested and prepared in the format required by this RFP. Upon evaluation of the Proposals submitted in response to this RFP and completion of the CEQA process, it is the intent of the City to enter into a Contract with the Proposer whose Proposal is responsive to this RFP, and is deemed most advantageous to the City. Although price is an important factor, it will not be the sole determining factor when identifying the Preferred Proposer.

The City reserves the right to waive minor informalities in Proposals or to reject all Proposals or parts thereof, if deemed in the best interest of the City. The City reserves the right to solicit further Proposals if it deems such action to be in its own best interest. In the selection of a Preferred Proposer, the City reserves the right to waive portions of the RFP or to reject any and all Proposals or parts thereof for any reason deemed appropriate by the City in order to serve its best interests.

As set forth in Proposal Form 1, by submitting a Proposal, a Proposer agrees, if selected as a Preferred Proposer, to negotiate in good faith and enter into the Contract based on this RFP and the Contract Principles as set forth in Section 5 herein.

Neither the City, its staff, nor any of its consultants and advisors shall be liable in regard to the completeness and/or accuracy of any data and information presented during this procurement. The Proposer shall conduct all reviews, studies, inspections and fieldwork it believes necessary to verify information or gather new information necessary to prepare its Proposal.

6.2 General Conditions of Procurement

6.2.1 Mandatory Pre-Proposal Meeting

Proposers are required to attend (or participate by call-in) a mandatory Pre-Proposal meeting which will be held at 9:00 AM on March 12, 2013. The Pre-Proposal meeting will be held at the Cubberley Community Center, Room H-1, 4000 Middlefield Road, Palo Alto, California, 94303. The meeting will be followed by a tour of the RWQCP, including the RWQCP Site, and the Landfill Site, including the area within the Landfill property designated for potential development of an E/C Facility. For those who cannot attend the meeting in person, a call-in number will be provided. Details regarding call-in logistics will be provided at least seven (7) days in advance of the meeting to those requesting participation by telephone. For planning purposes, Proposers are requested to notify the Contact Person by March 1, 2013, providing the names of the people who are planning to participate in the Pre-Proposal meeting and designating whether each person will participate in
person or by telephone. This notification is for planning purposes only, and can be changed by the Proposer as necessary.

6.2.2 Proposal Submission

A Proposal submitted in response to this RFP must fully conform with and satisfy the submission requirements described in Section 8 of this RFP.

6.2.2.1 Proposal Deadline and Submittal Format

All Proposals, including all attachments, must be received by the City, as described in Section 8, in a sealed package no later than 3:00 p.m. (local time) on July 31, 2013 (Proposal Submission Due Date). All Proposals submitted after the Proposal Submission Due Date will be marked "Received Late" and will be returned unopened to the Proposer along with an explanation of the reason for rejection.

6.2.2.2 Completeness

Each of the instructions set forth in Sections 6, 7 and 8 of this RFP must be followed for a Proposal to be deemed responsive to this RFP. In all cases, the City reserves the right to determine, in their sole discretion, whether any aspect of the Proposal meets the submission requirements of this RFP and to waive minor informalities in Proposals. The City further reserves the right to reject any Proposal or part thereof which, in its sole judgment, does not comply with these Proposal requirements.

6.2.3 Contact Person

Alternative Resources, Inc. (ARI) will serve as the designated Contact Person for this RFP. The primary and secondary Contact Persons at ARI will be:

<table>
<thead>
<tr>
<th>Primary Contact Person:</th>
<th>Secondary Contact Person:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. James Osborn</td>
<td>Ms Susan Higgins</td>
</tr>
<tr>
<td>Alternative Resources, Inc.</td>
<td>Alternative Resources, Inc.</td>
</tr>
<tr>
<td>1732 Main Street</td>
<td>1732 Main Street</td>
</tr>
<tr>
<td>Concord, MA 01742</td>
<td>Concord, MA 01742</td>
</tr>
<tr>
<td>Tel: (978) 371-2054</td>
<td>Tel: (978) 371-2054</td>
</tr>
<tr>
<td>Fax: (978) 371-7269</td>
<td>Fax: (978) 371-7269</td>
</tr>
<tr>
<td>Email: <a href="mailto:josborn@alt-res.com">josborn@alt-res.com</a></td>
<td>Email: <a href="mailto:shiggins@alt-res.com">shiggins@alt-res.com</a></td>
</tr>
</tbody>
</table>

Any explanation(s) desired by the Proposer(s) regarding the meaning or interpretation of information in this RFP must be requested from the Contact Person in writing, as is further described below.

Only written responses from the Contact Person, in the form of an addendum to this RFP, shall be considered official responses concerning the meaning or interpretation of information in this RFP. Proposers shall not rely on any representations,
statements, or explanations unless same are conveyed in such a written response from the Contact Person.

In order to maintain a fair and impartial process, the City will adopt procedures to assure that communications with Proposers during the Proposal preparation and evaluation periods involve all Proposers. The City will prepare summaries of all questions received and all answers given, without identifying the entity asking the question, and will send this information to all RFP recipients.

6.2.4 Additional Information/Questions

Requests for additional information or clarifications may be discussed with the Contact Person, but must be made in writing (by mail, fax or email) no later than the date specified in this RFP schedule.

Please address all such written requests to the designated Contact Person as specified in Section 6.2.3.

A fax request must contain the RFP name, Proposer's name, address, phone number, facsimile number and number of pages transmitted. An email request must contain the RFP name, Proposer's name, address, and telephone number.

For administrative purposes, a copy of each written request submitted to the Contact Person shall also be emailed to:

Mr. Matthew Krupp, AICP
Zero Waste Administrator
City of Palo Alto
MSC, Building C
3201 E. Bayshore Road
Palo Alto, California 94303
Tel: (650) 496-5958
Email: Matthew.Krupp@CityofPaloAlto.org

The Contact Person will issue responses to inquiries and any other corrections or amendments deemed necessary by the City in written addenda prior to the Proposal Submission Due Date. Proposers should not rely on any representations, statements, or explanations other than those made in this RFP or in any written addenda to this RFP. Where there appears to be a conflict between this RFP and any addenda issued, the last addendum issued that addresses that specific issue will prevail.

It is the Proposer's responsibility to assure receipt of all addenda. Prior to submitting its Proposal, the Proposer should verify with the designated Contact Person that all addenda have been received. Acknowledgement of receipt of addenda should be made with the Proposal in Proposal Form 1.
6.2.5 Access to RWQCP and Potential Landfill Site

Proposers shall be provided access to the RWQCP and the Landfill Site by appointment only. Appointments will be made on a first-come, first-served basis, and will be limited to Monday through Thursday between the hours of 9:00 a.m. and 4:00 p.m. To arrange for access, Proposers shall contact:

Mr. Matthew Krupp, AICP  
Zero Waste Administrator  
City of Palo Alto  
MSC, Building C  
3201 E. Bayshore Road  
Palo Alto, California 94303  
Tel: 650-496-5958  
Email: Matthew.Krupp@CityofPaloAlto.org

Requests for access to the RWQCP and Landfill Site shall be made in writing (email is acceptable) and shall include the date and time requested, an alternate date and time should the first request be unavailable, the purpose of the visit, the names and affiliations of Proposer representatives that will participate in the visit, and contact information (name, phone number, email address) of the person coordinating the visit on behalf of the Proposer. Written requests for access to the RWQCP and the Landfill Site shall provide at least three (3) business days advance notice for coordination and confirmation of an appointment. Copies of all written requests for access to the RWQCP and Landfill Site shall be emailed to the Contact Person identified in Section 6.2.3.

6.2.6 Modified Submissions

A Proposer may submit a modified Proposal to replace all or any portion of a previously submitted Proposal up until the Proposal Submission Due Date. Only the latest version of the Proposal will be considered, and it must be received in complete, final form as of the date of the last version.

6.2.7 Late Submissions/Late Modifications

Proposals and/or modifications received after the Proposal Submission Due Date and time will not be considered.

6.2.8 RFP Postponement/Cancellation

The City may, at its sole and absolute discretion, reject any and all, or parts of any and all, Proposals; postpone or cancel at any time, this RFP process; or waive any minor irregularities in this RFP or in the responses received as a result of this RFP.
6.2.9 Withdrawal from Procurement Process

A Proposer may withdraw its Proposal, prior to the Proposal Submission Due Date, if a written request to withdraw the Proposal is delivered to the Contact Person, by or on behalf of an authorized representative of the Proposer, or the request is delivered by certified mail.

6.2.10 Costs Incurred by Proposer

All costs involved with the preparation and submission of responses to this RFP, or any work performed in connection therewith, clarifications requested, interviews, and negotiations that result therefrom shall be borne by the Proposer. No payment will be made for any responses received, or for any other effort required of or made by the Proposer, prior to commencement of work, as defined by the Contract.

6.2.11 Oral Presentation/Interview

The City may require Proposers to make oral presentations in support of their Proposal or otherwise demonstrate the information contained therein. The City also reserves the right to visit facilities designed, constructed and/or operated by the Proposer and facilities utilizing the proposed technology.

6.2.12 Exceptions to this RFP

Proposers may take exceptions to terms of this RFP, unless the RFP specifically states that exceptions may not be taken. All exceptions taken MUST BE specific, and the Proposers must indicate clearly what alternative is being offered and why it is being offered to allow the City a meaningful opportunity to evaluate Proposals. Any potential cost impacts (increases or decreases), or increased or decreased financial or other risks to the City, that are associated with or would result from the City’s acceptance of such exceptions must be enumerated by the Proposer.

There are certain provisions of this RFP that are required, including:

- that Proposers submit a Base Case Proposal and an Alternative Proposal for Food Scraps and Yard Trimmings only;
- that only Alternative Proposals as specified in this RFP and Addenda will be considered;
- that the Contractor provide all Services requested within the schedule and cost structure described in this RFP and Addenda;
- that the Contractor meet all Performance Guarantees;
- that the required Proposal Bond or alternative form of security as specified in this RFP be supplied with the Proposal;
- that required insurance, bonding and other financial security means be provided by the Contractor regarding design, construction and operation of
the E/C Facility or providing Services with Export, whichever is proposed, with surety/insurance company letters of intent provided with the Proposal (see Proposal Forms 5 and 6, Appendix A);

- that Proposers not take any exception(s) that will make financing dependent on a material increase in financial risk to the City;

- that the required Guaranty Agreement be provided by the Contractor, the Contractor’s parent company or a third-party guarantor, with Proposers including the Guarantor Acknowledgement (Proposal Form 4) with the Proposal.

If there is any question as to whether the City will consider an exception, it is suggested that Proposers provide a written list of proposed exceptions to the Contact Person prior to submitting their Proposals. The Contact Person will respond to all such questions or requests for clarification.

Where exceptions are permitted, the City shall determine the acceptability of the proposed exceptions. The City, after completing evaluations, may accept or reject said exceptions.

6.2.13 Proprietary/Confidential Information

Proposers are hereby notified that, except as more fully explained below, all information submitted as part of, or in support of Proposals, may be subject to the California Public Records Act, California Government Code section 6250 et seq. (PRA). Certain confidential and other proprietary and trade secret information may be exempt from disclosure under the PRA, and Proposers should, therefore, familiarize themselves with the applicable requirements and exemptions under the PRA. Any information submitted that a Proposer reasonably believes is exempt from disclosure under the PRA should be clearly identified as “confidential” or “proprietary and trade secret.” To the extent permitted by the PRA, the City will not voluntarily disclose such information so identified to persons other than the City’s employees, directors, members of an evaluation committee and any consultants or advisors involved in the evaluation of Proposals. In the event that any third party requests such information under the PRA, the Contact Person designated in this RFP or the City Attorney will promptly advise the Proposer of such request. The Proposer may thereafter, at its own expense, seek to legally enjoin the disclosure of such requested information; provided, however, the Proposer shall be obligated to indemnify the City from any and all liability, including attorneys’ fees, occasioned by the failure of the City in complying with the PRA based upon the Proposer’s assertion that the information requested is “confidential” or “proprietary and trade secret."

6.2.14 Rules, Regulations, and Licensing Requirements

The Proposer agrees to comply with Applicable Law. The Proposer shall obtain and maintain, entirely at its own expense, all licenses, certifications, permits, and inspections required for services to be provided in accordance with any forthcoming
Contract and shall comply with all laws, ordinances, and regulations applicable to the Services.

Damages, penalties, and fines imposed on or incurred by the City, or the Proposer, for failure by the Proposer to obtain and keep current required licenses or permits, or to comply with laws, ordinances, or regulations, shall be borne by the Proposer.

The Proposer agrees to abide and be governed by Federal, State, City and other local laws, regulations and/or ordinances, which may have a bearing on the work contemplated hereunder.

6.2.15 Disclosure

A Proposer shall prepare a Disclosure Affidavit (Proposal Form 9) stating that except as disclosed, neither the Proposer nor its officers, principals, stockholders, and affiliates are debarred by the State of California which would prohibit them from entering into a Contract with the City or are debarred by any state in the United States or its political subdivisions from entry into contracts with such government entities. Further, the Proposer must state that it will not use any contractors or subcontractors who are so debarred.

Any Proposer who fails to prepare a Disclosure Affidavit shall not be considered by the City. Any person who willfully fails to disclose the required information or who knowingly discloses false information can be punished by civil or criminal penalties, or both, as provided for in the law, and will not be awarded a contract.

6.2.16 Personnel

In submitting their Proposals, Proposers are representing that the personnel in their Proposal shall be available to perform the services described, barring illness, accident, or other unforeseeable events of a similar nature, in which case the Proposer must be able to provide a qualified replacement.

6.2.17 Responsible Wages and Benefits

Per Section 5 of this RFP, Proposers are advised that the Contractor will be responsible for applying Federal, State, City and other local wage and labor laws to the extent required by Applicable Law. For Proposal purposes, the Proposer shall use prevailing wages in preparation of its Proposal.

6.2.18 Period of Acceptance and Proposal Bond or Alternative Security Requirements

The Proposer must provide a Proposal Bond, in the amount of $100,000 payable to the City, upon submittal of its Proposal, or shall provide one of the following forms of alternative security:

1) a certified bank check payable to the City in the amount of $100,000;
2) a direct-pay, irrevocable letter of credit to the City with a bank chartered to do business in California; or

3) a certificate of deposit with the City as a beneficiary in the amount of $100,000 with a bank licensed to do business in California.

A Proposer who withdraws its Proposal, except as allowed by this RFP, and a Preferred Proposer who fails to negotiate a Contract in good faith shall forfeit its Proposal Bond or alternative security to the City. If the Preferred Proposer fails to do so, the Surety will pay to the City, as liquidated damages, the full amount of the Proposal Bond, or for alternative securities, the City shall have rights to the applicable securities.

The Proposal Bond or alternative security must be valid for a period from the Proposal Submission Due Date through February 2016, the date estimated for award of a Contract. If the Contract has not been executed prior to that time, the City may require the renewal of the Proposal Bond or retain the alternative security for an additional 180 days. No Proposal shall be considered unless accompanied by the required Proposal Bond or alternative security. The form of the Proposal Bond which must be submitted is included in Proposal Form 3 of this RFP.

The surety which issues the Proposal Bond must be properly licensed to do business in the State of California. Alternative security measures should be from a bank chartered under the laws of the United States and authorized to conduct business in the State of California.

Additional security beyond the Proposal Bond or alternative security requirements specified herein may be required from the Preferred Proposer if the Public Participants elect to negotiate a contract with the Preferred Proposer based on an Alternative Proposal.

6.2.19 City Rights and Options

The City reserves, holds and may exercise, at its sole discretion, the following rights and conditions with regard to this RFP. By responding to this RFP, Proposers acknowledge and consent to the following conditions relative to the procurement process and the selection of the Preferred Proposer to negotiate the Contract:

- This RFP does not obligate the City to procure or contract for any services.
- The City reserves the right to change or alter the schedule for any events associated with this procurement upon notice to the Proposers, and a Proposer by submitting a Proposal agrees to be bound by any modification made by the City.
- All costs incurred by a Proposer in connection with responding to this RFP, the evaluation and selection process undertaken in connection with
this procurement, and any negotiations entered into in connection with developing the Contract will be borne by the Proposer.

- The City reserves the right to reject, for any reason, any and all Proposals and components thereof and to eliminate any and all Proposers responding to this RFP from further consideration for this procurement.

- The City reserves the right to eliminate any Proposer who submits incomplete or inadequate responses or is not responsive to the requirements of this RFP.

- The City reserves the right, at any time, to determine that any or all Proposers will not be selected for further consideration and to notify such Proposers of the City’s determination.

- The City may require Proposers to send representatives to its offices for interviews and presentations.

- The City reserves the right to discontinue negotiations with any Proposer.

- The City reserves the right to negotiate with one or more Proposers, sequentially or concurrently.

- The City may conduct clarification discussions, at any time following the submission of Proposals, with one or more Proposers.

- The City reserves the right to receive questions concerning this RFP from Proposers and to provide such questions, and the City’s responses, if any, to all Proposers.

- The City reserves the right, without prior notice, to supplement, amend or otherwise modify this RFP, or otherwise request additional information.

- Any and all responses not received by the Proposal Submission Due Date, shall be rejected and returned unopened.

- All Proposals become the property of the City and will not be returned.

- All activities related to the project shall be subject to Applicable Law.

- Neither the City, its staff, its representatives, nor any of its consultants or agents will be liable for the completeness or accuracy of any data or other information presented at any time and in any form in connection with this RFP. The Proposer shall be responsible for conducting any and all studies, investigations and tests necessary to prepare its Proposal.

- Neither the City, its staffs, its representatives, nor any of its consultants or agents will be liable for any claims or damages resulting from the solicitation, collection, review or evaluation of responses to this RFP.

- The City (including its staff, representatives, consultants and agents) reserves the right to visit and examine any of the facilities referred to by the Proposer in its Proposal and to observe and investigate the operations of such facilities.
The City reserves the right to conduct investigations of the Proposers and their responses to this RFP and to request additional evidence to support the information included in any such response.

The City reserves the right to contact references and parties knowledgeable of the Proposer and its performance.

The City reserves the right to investigate the Disclosure Affidavit provided by the Proposer.

The City reserves all rights with respect to the evaluation, clarification, selection and negotiation process set forth in this RFP.

By submitting a Proposal, the Proposer waives its right to sue the City in the event the City does not select the Proposer.

### 6.3 Procurement Schedule

A summary of the major activities associated with the procurement of the services described in this RFP is presented below.

Please note that the dates indicated are subject to change. The City reserves the right to modify this schedule, as it may deem necessary, in its sole discretion. All changes to this RFP schedule will only be made by a formal, written addendum.

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Release RFP</td>
<td>On or about February 4, 2013</td>
</tr>
<tr>
<td>Mandatory Pre-Proposal information meeting</td>
<td>9:00 AM, March 12, 2013</td>
</tr>
<tr>
<td>Last date for submitting written questions</td>
<td>July 12, 2013</td>
</tr>
<tr>
<td>Written responses from the City on questions received and Addenda to RFP</td>
<td>As questions received</td>
</tr>
<tr>
<td>Proposal Submission Due Date</td>
<td>3:00 p.m., local time July 31, 2013</td>
</tr>
<tr>
<td>Review and evaluation of Proposals</td>
<td>August 2013 to January 2014</td>
</tr>
<tr>
<td>Proposer Interviews (if required)</td>
<td>September/October 2013</td>
</tr>
<tr>
<td>Selection of Preferred Proposer</td>
<td>By February 2014</td>
</tr>
<tr>
<td>Anticipated CEQA Approval</td>
<td>By February 2016</td>
</tr>
<tr>
<td>Complete Contract Negotiations</td>
<td>By February 2016</td>
</tr>
</tbody>
</table>
As described in Section 6.2.1, participation in the Pre-Proposal meeting is mandatory. Proposers are required to attend or participate by telephone call-in. The Pre-Proposal meeting will be held at 9AM at the Cubberley Community Center, Room H-1, 4000 Middlefield Road, Palo Alto, California 94303. The meeting will be followed by a tour of the RWQCP and Landfill Site including the area within the Landfill Site designated as the site for a E/C Facility. For those who cannot attend the meeting in person, a call-in number will be provided. Details regarding call-in logistics will be provided at least seven (7) days in advance of the meeting to those requesting participation by telephone. For planning purposes, Proposers are requested to notify the Contact Person by March 1, 2013, providing the names of the people who are planning to participate in the Pre-Proposal meeting and designating whether each person will participate in person or by telephone. This notification is for planning purposes only, and can be changed by the Proposer as necessary.

### 6.4 Conflicts of Interest and Lobbying Prohibition

The proposed project is an important public project subject to significant political and public scrutiny. Transparency in the selection of the Contractor for this important public project is essential.

In view of the potential conflicts of interest pursuant to California Government Code §1090 et seq., the inherent potential for lobbying and undue influence, and the need to preserve and protect confidential and trade secret information submitted in connection with the Proposals for the RFP, it is imperative that the RFP process be managed through a centrally managed communication process. Consequently, all communications from vendors and Proposers shall only be directed to the designated project point of contact or the City’s designated representatives. The designated representative for purposes of all communication from vendors and Proposers shall be the Contact Person identified in Section 6.2.3.

Proposers shall complete Proposal Form 1 (Proposal Transmittal Letter) and Proposal Form 1A (Acknowledgement of Conflicts of Interest and Lobbying Prohibition) indicating the Proposer has reviewed and understands the requirements stated within this Section 6.4.
7.0 PROPOSAL EVALUATION

Proposals received will be evaluated by the procedures and criteria described in this section for the purpose of determining which Proposal best meets the City’s objectives, is in the best interest of and is most advantageous to the City. Base Case Proposals and Alternative Proposals will be evaluated using the same evaluation process and criteria.

7.1 Evaluation Process

Proposals received in response to this RFP will be evaluated based upon the Minimum Evaluation Criteria and Comparative Evaluation Criteria (see Sections 7.2 and 7.3). The City will establish an Evaluation Committee to review and evaluate the Proposals. The Evaluation Committee will be assisted by its consultants and advisors, as appropriate. The Evaluation Committee will prepare a report as to the ranking of Proposals and the selection of the Preferred Proposal.

Proposals will be reviewed in two phases:

- **Phase 1 Review.** Compliance with Minimum Evaluation Criteria (see Section 7.2, Table 7-1), to confirm that a Proposal is responsive and responsible. A Proposal that does not meet the Minimum Evaluation Criteria will be considered “unacceptable” and will not be considered for comparative review.

- **Phase 2 Review.** For Proposals that meet the Minimum Evaluation Criteria, a comparative review generally following the Comparative Evaluation Criteria (see Section 7.3, Table 7-2) and the procedures described herein.

Comparative ranking of non-cost elements of Proposals will utilize a point-based ranking system with weighting as identified below:

- **Quality of Proposal:** 5% (5 points)
- **Proposer’s Technical Resources and Experience:** 15% (15 points)
- **Financial Resources and Strength of Proposer:** 15% (15 points)
- **Record of Performance and Reliability of Technology:** 25% (25 points)
- **Technical Approach:** 25% (25 points)
- **Business Proposal (excluding price):** 15% (15 points)

**TOTAL:** 100% (100 points)

The comparative review and evaluation will be based on all information submitted by a Proposer, inclusive of the Proposal, and, as applicable, responses to questions and requests for clarification, information provided in an interview, information provided by references and visits to reference facilities. The comparative review and evaluation will consider the qualifications of “Participating Firms.” “Participating Firms,” as used in this RFP, include as applicable for the E/C Facility or Export: (1) the Proposer; (2) the Guarantor; (3) a new company, if any, to be formed for the sole purpose of executing and performing the Contract; (4) the firm(s) that will actually operate, maintain and manage the E/C Facility; (5) the firm that will design the E/C Facility; (6) the firm that will construct the
E/C Facility; (7) the firm that will market the products; and (8) any other significant participant(s) in the transaction, including those who will permit and those who will finance the project.

Proposal prices will be evaluated concurrently with non-cost elements of Proposals. A value ranking, including consideration of both non-cost comparative ranking and price will be conducted to determine which Proposal is most advantageous, overall, to the City.

Prices included in the Proposals will be reviewed and ranked based on price and economic benefit to the City, using pricing information provided by the Proposers. A net present value analysis of annual projected cash flow, as proposed in the Pricing Proposal Forms will be completed, assuming an annual escalation factor of 2.50% and a discount factor of 4.00%. Consideration will be given to the cost of site preparation, including access, provision of utilities and preparing a pad for the E/C Facility and integration with the landfill cap. Estimates for such costs are provided in Appendix C for varying amounts of space required by the Proposer. These costs will be added by the City to the Proposal pricing when comparing individual Proposals for an E/C Facility and when comparing an E/C Facility to Export. In addition, the operating costs of dewatering biosolids will be added to Proposal pricing for those Proposals for an E/C Facility that receive dewatered biosolids and to Proposals for Export. For purposes of Proposal evaluation, the operating costs for dewatering biosolids to 28% solids will be $23 per ton of biosolids (2015$). The analysis will be conducted for the initial Term of the Contract, excluding Contract renewal options.

Upon completion of the comparative review and ranking of non-cost Proposal elements and review and ranking of price, a value analysis will be completed to determine which Proposal is most advantageous to the City. The prices for management of Acceptable Feedstock are important factors in the evaluation and ranking of each Proposal; however, the City does not have to select the Proposal offering the lowest prices or highest economic benefit.

7.2 Minimum Evaluation Criteria

In order for a Proposal to be considered responsive and responsible, it must meet the Minimum Evaluation Criteria identified in Table 7-1.
Table 7-1. Minimum Evaluation Criteria

1. Any considered E/C Facility or Export facility must be capable of processing the Maximum Annual Delivery Threshold of the City specified in Section 5.1.4, Table 5-1, for Food Scraps, Yard Trimmings and Biosolids, including FOG and scum.

2. Any considered E/C Facility or Export facility must be capable of operating for a minimum of 30 years.

3. Any considered E/C Facility or Export facility must be compatible with City solid waste management programs, including recycling and organics programs.

4. Any considered E/C Facility or Export facility must be capable of diverting at least 80% by weight of the Acceptable Feedstock received from Landfill disposal.

5. Any considered E/C Facility or Export facility must produce end products that have probable, identifiable or existing markets (including compost, electricity and/or fuel products).

6. Any considered E/C Facility or Export facility must conform to Applicable Law.

7. Any considered E/C Facility or Export facility must have been demonstrated at a minimum of one facility of similar size or with a minimum unit size of 20 tons per day (tpd), and shall have been in operation for at least six months (as of the Proposal Submission Due Date) processing Acceptable Feedstock. Demonstration facilities that have operated intermittently, but processed at least 1,000 tons of Acceptable Feedstock over a one-year period, will be considered to meet the requirement of this minimum criterion.

8. Any considered E/C Facility or Export facility must have a project team that has experience financing, designing, building and operating a solid waste management facility, either individually or as a team.

9. The Proposer must not be debarred from contracting in California

10. The Proposer has submitted a Base Case Proposal and a required Alternative Proposal for Food Scraps and Yard Trimmings only

11. If the Proposal is an Alternative Proposal, such Alternative Proposal was specified as allowable in the RFP or an Addendum to the RFP.

12. The Proposal is based on the Contractor providing all Services required within the schedule and cost structure described in the RFP and any Addenda to the RFP.

13. The Contractor will agree to meet all Performance Guarantees.
Table 7-1. Minimum Evaluation Criteria

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<tr>
<td>14.</td>
<td>For the E/C Facility, the Proposer must have bonding ability equal to the estimated cost of facility design and construction, and, during operation, equal to the estimated annual operating cost; must not be in bankruptcy; must provide evidence that it can acquire the letter of credit and facility demolition/site restoration financial assurance required; and, must provide a financing plan that reasonably demonstrates that it can offer private project financing. For Export, the Proposer must provide evidence of its ability to meet the financial security requirements as specified in Section 5 of this RFP.</td>
</tr>
<tr>
<td>15.</td>
<td>Assurance that the required insurance, bonding and other financial security means, as required in Section 5 of this RFP for the E/C Facility or Export will be provided by the Contractor, with Proposal Forms 5 and 6 completed and included with the Proposal.</td>
</tr>
<tr>
<td>16.</td>
<td>The Proposer has not taken any exception(s) that will make financing dependent on a material increase in financial risk to the City.</td>
</tr>
<tr>
<td>17.</td>
<td>The required Guaranty Agreement will be provided by the Contractor, the Contractor’s parent company or a third-party guarantor, with the Guarantor Acknowledgement (Proposal Form 4) included with the Proposal.</td>
</tr>
<tr>
<td>18.</td>
<td>The required Proposal Bond or alternative form of security as specified in the RFP has been provided.</td>
</tr>
</tbody>
</table>

7.3 Comparative Evaluation Criteria

Comparative Evaluation Criteria are identified in Table 7-2, located at the end of this Section 7. Included in Table 7-2 is guiding language for application of the Comparative Evaluation Criteria.

The Comparative Evaluation Criteria will be applied to evaluate, not only project approach, reliability of the technology, environmental issues (including an analysis of greenhouse gas emissions), the potential for beneficial use of organic materials and diversion from landfilling, and phase out of the existing biosolids incinerator, but also the experience, capability, qualifications and resources of the Proposer and each Participating Firm, based on the role proposed for the Participating Firm in the Proposal and the nature of the commitment that the Participating Firm is expected to make in ultimately performing the Services. The Proposal shall clearly distinguish among Participating Firms, where appropriate, in order to make clear whose qualifications are being offered and how the work will be divided.

7.4 Clarification of Proposals

The Evaluation Committee may, at its sole discretion, prepare a written request for clarification to some or all Proposers for the purpose of clarifying any information submitted in a Proposal. The request may seek written clarification from the Proposer of any
ambiguities in its Proposal and additional information the Evaluation Committee believes is necessary to complete the evaluation process. The Evaluation Committee may, at its sole discretion, require some or all Proposers to attend individual interviews to clarify Proposals. The Evaluation Committee, or certain members thereof, may, at its sole discretion, visit reference facilities and speak with Proposers' references.

The Evaluation Committee will complete its evaluation utilizing all of the information submitted by the Proposers, including the Proposals themselves, responses to questions and requests for clarification, information presented at interviews, and information gained in the process of conducting reference plant visits and calling Proposer's references.

7.5 Contract Negotiations

Once the Preferred Proposer has been selected, the City will enter into contract negotiations with the Preferred Proposer, concurrent with completion of CEQA. Simultaneous negotiations with more than one Preferred Proposer may be conducted, although it is not currently the intent to do so. Contract award will be contingent on CEQA certification.

The City, may, in its sole discretion and at any time, exclude a Proposer from further participation in the negotiation process if it determines that any proposed Contract with such Proposer would not be in the best interest of the City. Negotiations with another Proposer may be initiated, if negotiations with the Preferred Proposer are not satisfactory in the sole judgment of the City. The Preferred Proposer will receive written notification of any decision to discontinue negotiations with any such Proposer.

A Proposer who fails to negotiate a Contract in good faith shall forfeit its Proposal Bond or alternative security. The Proposal Bond Requirements and alternative security options are set forth in Section 6.

7.6 Contract Authorization

The Contract must be approved by the City Council. The City Council expressly reserves the right to reject any and or all Proposals.
## Table 7-2

### NON-COST PROPOSAL COMPARATIVE EVALUATION CRITERIA

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>LOWEST VALUE</th>
<th>MID VALUE</th>
<th>HIGHEST VALUE</th>
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</thead>
<tbody>
<tr>
<td><strong>1. Quality of Proposal (5%, 5 points)</strong></td>
<td>Proposal includes limited detail, and/or contains inconsistencies that require significant clarification and request for submittal of supplemental information. Proposal is lacking definitive commitments such that Contract negotiations are anticipated to be laborious.</td>
<td>Proposal is generally complete and responsive, with limited need to request clarification and/or supplemental information. Contract negotiations are anticipated to be less laborious.</td>
<td>Proposal is complete and responsive, with information presented in a clear and organized manner and inclusive of supplemental, relevant information as applicable. Proposal includes definitive commitments and a level of detail sufficient for expeditious evaluation and contract negotiations. Overall, Proposal requires minimal clarification.</td>
</tr>
<tr>
<td><strong>2. Proposer's Technical Resources and Experience (15%, 15 points)</strong></td>
<td>Proposer has successfully developed, permitted, designed and constructed, and put in operation a municipal solid waste management facility and biosolids facility, but not of similar technology as proposed.</td>
<td>Proposer has successfully developed, permitted, designed and constructed, and put in operation one solid waste management facility of similar technology as proposed.</td>
<td>Proposer has successfully developed, permitted, designed and constructed, and put into operation one facility of the same technology and similar size as proposed.</td>
</tr>
<tr>
<td><strong>2.1 Experience of Proposer in Project Development, Permitting, Design and Construction of Municipal Solid Waste and Biosolids Facilities</strong></td>
<td>Proposer has relevant experience in the successful operation and maintenance of a municipal solid waste management facility and biosolids facility, but not of similar technology.</td>
<td>Proposer has relevant experience in the successful operation and maintenance of a solid waste management technology similar to that proposed.</td>
<td>Proposer has successfully operated one facility of the same technology as proposed for at least one year, and at a similar facility size as proposed.</td>
</tr>
<tr>
<td><strong>2.2 Experience of Proposer in Operation of Municipal Solid Waste and Biosolids Facilities</strong></td>
<td>Proposer has relevant experience in the successful operation and maintenance of a municipal solid waste management facility and biosolids facility, but not of similar technology.</td>
<td>Proposer has relevant experience in the successful operation and maintenance of a solid waste management technology similar to that proposed.</td>
<td>Proposer has successfully operated one facility of the same technology as proposed for at least one year, and at a similar facility size as proposed.</td>
</tr>
<tr>
<td>CRITERIA</td>
<td>LOWEST VALUE</td>
<td>MID VALUE</td>
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</tr>
<tr>
<td>2.3 Experience of Proposer as Team with Municipal Solid Waste Facility Development, Design, Construction and Operation</td>
<td>Proposer, Guarantor and Participating Firms have not worked together previously in development, permitting, design, construction and operation of a municipal solid waste management facility.</td>
<td>Proposer, Guarantor and Participating Firms have worked together as a team in development, permitting, design, construction and operation of a solid waste management facility, but not of similar technology.</td>
<td>Proposer, Guarantor and Participating Firms have worked together as a team in development, permitting, design, construction and operation of a similar solid waste management facility.</td>
</tr>
<tr>
<td>2.4 Depth and Location of Resources</td>
<td>Proposer has requisite capabilities and resources to perform the requested services, but not primarily located in the U.S.</td>
<td>Proposer has requisite capabilities and resources to perform the requested services, primarily located in the U.S.</td>
<td>Proposer has requisite capabilities and resources to perform the requested services, primarily located in the U.S., and with significant resources in California.</td>
</tr>
<tr>
<td>2.5 Regulatory, Permitting Experience</td>
<td>Proposer has permitted the construction and operation of a municipal solid waste management facility and biosolids facility, but not of a similar technology in the U.S.</td>
<td>Proposer has permitted the construction and operation of a similar solid waste management facility in the U.S.</td>
<td>Proposer has permitted the construction and operation of a solid waste management facility in the U.S., of the same technology as proposed, or of a similar technology in California.</td>
</tr>
<tr>
<td>2.6 Record of Regulatory Compliance</td>
<td>Proposer has a satisfactory compliance record for a municipal solid waste management facility and biosolids, but not in the U.S.</td>
<td>Proposer has a satisfactory compliance record for a similar solid waste management facility in the U.S.</td>
<td>Proposer has a satisfactory compliance record in the U.S. for a solid waste management facility of the same technology as proposed, or of a similar technology in California.</td>
</tr>
<tr>
<td>2.7 Experience in Selling Products – Electricity, Fuels, Compost, Other Products</td>
<td>Proposer does not have experience in the U.S. in marketing similar products as those proposed.</td>
<td>Proposer has experience in the U.S. in marketing similar products as those proposed.</td>
<td>Proposer has experience in the U.S., including California, in marketing similar products as those proposed.</td>
</tr>
<tr>
<td>2.8 Record of Contract Performance</td>
<td>Proposer has a satisfactory contract performance record for a municipal solid waste management facility and biosolids facility, but not in the U.S.</td>
<td>Proposer has a satisfactory contract performance record in the U.S. for a similar solid waste management facility.</td>
<td>Proposer has a satisfactory contract performance record in the U.S. for a solid waste management facility of the same technology as that proposed, or of a similar technology in California.</td>
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<tr>
<td>CRITERIA</td>
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<tr>
<td>2.9 Record of Labor Relations</td>
<td>Proposer has a satisfactory record of labor relations for a municipal solid waste management facility and biosolids facility, but not in the U.S.</td>
<td>Proposer has a satisfactory record of labor relations in the U.S. for a similar solid waste management facility.</td>
<td>Proposer has a satisfactory record of labor relations in California for a similar solid waste management facility, or a record in the U.S. that exceeds industry standards for a similar solid waste management facility.</td>
</tr>
<tr>
<td>2.10 Safety Record</td>
<td>Proposer has a satisfactory safety record for a municipal solid waste management facility and biosolids facility, but not in the U.S.</td>
<td>Proposer has a satisfactory safety record in the U.S. for a similar solid waste management facility.</td>
<td>Proposer has a satisfactory safety record in California for a similar solid waste management facility, or a record in the U.S. that exceeds industry standards for a similar solid waste management facility.</td>
</tr>
<tr>
<td>2.11 References and Reference Project Descriptions</td>
<td>Proposer has identified and described at least one relevant municipal solid waste facility and biosolids facility that the Proposer has been involved with as a service provider, but not of similar technology to that proposed and/or with the Proposer having limited involvement with the project.</td>
<td>Proposer has identified and described at least one relevant solid waste facility that the Proposer has been involved with as a service provider, of similar technology to that proposed.</td>
<td>Proposer has identified and described two or more relevant solid waste facilities that the Proposer has been involved with as a service provider, with at least one being the same technology as that proposed.</td>
</tr>
<tr>
<td>3. Financial Resources and Strength of Proposer (15%, 15 points)</td>
<td><strong>Note:</strong> Proposer means the entity submitting a Proposal in response to this RFP, including, as applicable, the Guarantor and all entities sponsoring the Proposal or preparing to act as a Participating Firm.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1 Financial Strength of Proposer/ Guarantor</td>
<td>Proposer did not have a positive net worth in any of the last three fiscal years, and/or other indicators suggest difficulty in completing project development, achieving full-scale facility operation and providing on-going financial benefits over time.</td>
<td>Proposer had a positive net worth for the last fiscal year, with a current ratio of 1.2:1, or better, and/or supplied other evidence which, in the judgment of the City, demonstrates equivalent liquidity.</td>
<td>Proposer had a positive net worth for the immediate past three fiscal years, with a current ratio of 1.6:1 or better, and/or supplied other evidence which, in the judgment of the City demonstrates equivalent liquidity.</td>
</tr>
<tr>
<td>CRITERIA</td>
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<tr>
<td>3.2 Experience in Project Financing</td>
<td>Proposer has not participated in a financing for a similar project as that</td>
<td>Proposer has experience in the project financing of one similar project.</td>
<td>Proposer has experience in the project financing of two or more similar projects.</td>
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<td>proposed.</td>
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<tr>
<td>3.3 Experience as Guarantor</td>
<td>Proposer has limited experience as a guarantor.</td>
<td>Proposer has experience as a guarantor on at least one comparable project that has operated for at least one year.</td>
<td>Proposer has experience as a guarantor on more than one comparable project that has operated for at least two years.</td>
</tr>
<tr>
<td>3.4 Record of Business Integrity</td>
<td>Not Applicable</td>
<td>Strong record of business integrity and performance.</td>
<td>Exemplary record of business integrity and performance.</td>
</tr>
<tr>
<td>4. Record of Performance and Reliability of Technology (25%, 25 points)</td>
<td>Proposed technology has been demonstrated at minimum unit size for at least six months, but not at proposed project size.</td>
<td>Proposed technology has been demonstrated at the proposed project size for at least six months, or proposed technology has been demonstrated at minimum unit size in the U.S. for at least six months.</td>
<td>Proposed technology has been operating commercially for more than one year at either the minimum unit size or the proposed project size.</td>
</tr>
<tr>
<td>5. Technical Approach (25%, 25 points)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.1 Project Management Plan</td>
<td>Project Management Plan does not show strong understanding of key project development, permitting, financing, design, construction, operations, product marketing and public outreach issues, nor does it show a well thought out approach or commitment of key, experienced staff.</td>
<td>Project Management Plan demonstrates strong understanding of key project development, permitting, financing, design, construction, operations, product marketing and public outreach issues, describes a well thought out approach and shows commitment of Proposer, including assignment of experienced staff to most key positions, to resolve issues and achieve project success.</td>
<td>Project Management Plan demonstrates superior understanding of key project development, permitting, financing, design, construction, operations, product marketing and public outreach issues, describes superior approach and shows stronger commitment of Proposer, including assignment of experienced staff to all key positions, to resolve issues and achieve project success.</td>
</tr>
<tr>
<td>5.2 Permitting Plan</td>
<td>Permitting Plan does not show strong understanding of key permitting requirements and issues, nor does it describe a well thought out approach to obtaining permit approvals.</td>
<td>Permitting Plan demonstrates strong understanding of key permitting requirements and issues, and describes reasonable approach for obtaining permit approvals.</td>
<td>Permitting Plan demonstrates superior understanding of permit requirements and issues, and demonstrates superior approach for obtaining permit approvals.</td>
</tr>
<tr>
<td>CRITERIA</td>
<td>LOWEST VALUE</td>
<td>MID VALUE</td>
<td>HIGHEST VALUE</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>5.3 Environmental Mitigation</td>
<td>Environmental mitigation measures do not meet those specified, but are judged to be satisfactory regarding environmental impact. Greenhouse gas emissions reductions are not significant.</td>
<td>Environmental mitigation measures meet those required. Greenhouse gas emissions reductions are significant.</td>
<td>Environmental mitigation measures exceed those required. Greenhouse gas emissions reductions are maximized.</td>
</tr>
<tr>
<td>5.4 Design, Construction, Start-up Plan</td>
<td>Design, Construction, Start-up Plan does not show strong understanding of key design, construction and start-up elements and issues, nor does it describe a well thought out approach for addressing said elements and issues. <strong>Plan does not demonstrate strong consideration of integration with landfill capping and reducing visual/aesthetic impacts on surrounding land uses, including effective use of buffer areas.</strong></td>
<td>Design, Construction and Start-up Plan demonstrates strong understanding of key design, construction, and start-up elements and issues, and presents reasonable approach for addressing said elements and issues. <strong>Plan demonstrates strong consideration of integration with landfill capping and reducing visual/aesthetic impacts on surrounding land uses, including effective use of buffer areas.</strong></td>
<td>In addition to meeting the Mid Value Criterion, Design, Construction and Start-up Plan is based on Proposer's demonstrated ability to achieve similar results on similar projects using proposed approach. <strong>Plan demonstrates exceptional consideration of integration with landfill capping and reducing visual/aesthetic impacts on surrounding land uses, including effective use of buffer areas.</strong></td>
</tr>
<tr>
<td>5.5 Operation and Maintenance Plan</td>
<td>Operation and Maintenance Plan does not demonstrate strong understanding of key operation and maintenance issues, nor does it describe a well thought out approach for addressing said issues.</td>
<td>Operation and Maintenance Plan demonstrates strong understanding of issues and presents reasonable approach for addressing said issues.</td>
<td>In addition to meeting the Mid Value Criterion, Operation and Maintenance Plan is based on Proposer's demonstrated ability to achieve similar results on similar projects using proposed approach.</td>
</tr>
<tr>
<td>5.6 Spot Market and/or Regional Acceptable Feedstock Acquisition Plan (as applicable)</td>
<td>Proposal does not include a meaningful plan for acquisition of Spot Market and/or Regional Acceptable Feedstock, as applicable.</td>
<td>Proposal includes a comprehensive plan for acquisition of Spot Market and/or Regional Acceptable Feedstock, as applicable.</td>
<td>In addition to meeting the Mid Value Criterion, Proposer has demonstrated it has already taken steps towards acquiring Spot Market and/or Regional Feedstock, as applicable.</td>
</tr>
<tr>
<td>5.7 Product Marketing Plan</td>
<td>Product Marketing Plan shows understanding of marketing issues and presents a plan for acquiring product markets, but Proposer has not been able to obtain Letters of Interest for purchase of key products.</td>
<td>In addition to showing an understanding of marketing issues and presenting a plan for acquiring product markets, Proposer has provided Letters of Interest for purchase of key products.</td>
<td>In addition to meeting the Advantageous Criterion, Proposer has provided Letters of Intent for purchase of key products.</td>
</tr>
<tr>
<td>CRITERIA</td>
<td>LOWEST VALUE</td>
<td>MID VALUE</td>
<td>HIGHEST VALUE</td>
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<td>--------------------------------</td>
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<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>5.8 Community Relations Plan</td>
<td>Community Relations Plan does not demonstrate a strong understanding of the need to develop and maintain professional, responsible, and responsive working relationships.</td>
<td>Community Relations Plan demonstrates a strong understanding of the need to develop and maintain professional, responsible, and responsive working relationships.</td>
<td>Community Relations Plan demonstrates a superior understanding of the need to develop and maintain professional, responsible, and responsive working relationships.</td>
</tr>
<tr>
<td>5.9 Proposed Project Schedule</td>
<td>Proposal includes a Project Schedule showing the E/C Facility or export option will be operational by dates specified in the RFP.</td>
<td>Proposal includes a Project Schedule showing the E/C Facility or export option will be operational before dates specified in the RFP.</td>
<td>Proposal includes a Project Schedule showing the E/C Facility or export option will be operational before dates specified in the RFP, with such schedule supported with clearly identified key milestones and critical path items.</td>
</tr>
<tr>
<td>6. Business Proposal (15%, 15 points)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.1 Proposer's Organization</td>
<td>Proposer has provided a description of project organization, but roles of all Participating Firms are not clearly/fully established.</td>
<td>Proposer has provided a description of project organization, with roles of all Participating Firms clearly established.</td>
<td>In addition to meeting the Mid Value Criterion, Proposer's project organization and corresponding description demonstrate a superior determination of defined roles and relationships.</td>
</tr>
<tr>
<td>6.2 Conformance to Business and Contractual Terms</td>
<td>Proposer takes exception to key terms and conditions as set forth in the RFP but does not shift substantial risk to the City.</td>
<td>Proposal conforms to key terms and conditions as set forth in the RFP. Exceptions to non-key terms and conditions are not significant and/or do not affect pricing or service quality or impose significant risk on the City. Proposal provides satisfactory discussion of reasons for exceptions.</td>
<td>Proposal fully conforms to all terms and conditions in the RFP; no exceptions taken.</td>
</tr>
<tr>
<td>6.3 Strength of Financial Security</td>
<td>Proposes project security measures including required bonds, letter of credit, insurance, and corporate guarantee, but caps liability to full construction cost and one year of O&amp;M cost, or less.</td>
<td>Proposes corporate guarantee(s), RFP-required bonds, insurance, and letter of credit and, while proposing a financial limit or cap on the guarantor's(s’) liabilities, will be greater than amounts to cover full construction costs and greater than one year of O&amp;M costs.</td>
<td>Proposes corporate guarantee(s) in addition to RFP-required bonds, insurance and letter of credit. Does not place any financial limit or cap on the value of the guarantee or on the guarantor's liability.</td>
</tr>
<tr>
<td>CRITERIA</td>
<td>LOWEST VALUE</td>
<td>MID VALUE</td>
<td>HIGHEST VALUE</td>
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<tr>
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<td>------------------------------------------------------------------------------</td>
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<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>6.4 Financing Plan</td>
<td>Financing Plan demonstrates minimal understanding of key financing issues or present a detailed approach for obtaining financing.</td>
<td>Financing Plan demonstrates a strong understanding of key financing issues and presents a comprehensive and well thought out approach for obtaining financing, including principal terms and conditions of financing, equity and debt positions.</td>
<td>In addition to meeting the Mid Value, Financing Plan includes appropriate levels of financing commitments from appropriately experienced investors and bankers/lenders.</td>
</tr>
<tr>
<td>6.5 Use of local labor, goods and services</td>
<td>Meets requirements of RFP.</td>
<td>Exceeds requirements of RFP.</td>
<td>Significantly exceeds requirements of RFP.</td>
</tr>
</tbody>
</table>
8.0 PROPOSAL REQUIREMENTS

8.1 Proposal Submission

A Proposal submitted in response to this RFP must conform with and satisfy the submission requirements described in this Section 8 of the RFP.

8.1.1 Proposal Deadline and Submission Address

All Proposals, including all attachments, must be received by the City, as described in this Section, in a sealed package no later than 3:00 p.m. (local time) on July 31, 2013 (Proposal Submission Due Date). All Proposals submitted after the Proposal Submission Due Date will be marked "Received Late" and will be returned unopened to the Proposer along with an explanation of the reason for rejection.

Each Proposal shall be comprised of a Non-Cost Proposal (Volumes I-IV, as described herein) and a Price Proposal (Volume V, as described herein). The Price Proposal shall be submitted with the Non-Cost Proposal, but shall be enclosed in a separate, sealed, opaque envelope or package and shall be clearly labeled “Price Proposal”. Cost information shall be presented only in the Price Proposal, and shall not be included in the other volumes that comprise the Non-Cost Proposal.

The original Proposal (clearly marked as the original and containing the original signature forms and other original documents) and ten (10) copies of the Proposal shall be sent to the City at the following address:

Mr. Matthew Krupp, AICP
Zero Waste Administrator
City of Palo Alto
MSC, Building C
3201 E. Bayshore Road
Palo Alto, California 94303

In addition, four (4) copies of the Proposal shall be sent to:

Alternative Resources, Inc.
1732 Main Street
Concord, MA 01742
Attention: James Osborn, Project Manager

8.1.2 Proposers Must Submit Base Case Proposal and Alternative Proposal for Food Scraps and Yard Trimmings Only

Proposers are required to submit a Base Case Proposal as further described in this RFP and an Alternative Proposal for Food Scraps and Yard Trimmings only.
Proposers who do not provide a Base Case Proposal and an Alternative Proposal for Food Scraps and Yard Trimmings only, will not have an additional Alternative Proposal submittal considered.

As noted above, an Alternative Proposal must be submitted for an E/C Facility or Export for Food Scraps and Yard Trimmings only.

Additional Alternative Proposals that can be provided at the option of the Proposer include the following:

- Proposals for accepting Food Scraps and Biosolids only, Food Scraps only, Yard Trimmings only, or Biosolids only;
- a larger E/C Facility size (Regional Facility), to receive and process Acceptable Feedstock beyond that available from the City, if (i) related site and environmental issues can be successfully addressed to the City’s satisfaction, (ii) financial benefits such as host community payments to the City are considered sufficiently advantageous, (iii) such supplemental feedstock results in no or limited Bypassed Feedstock and no or limited Unacceptable Feedstock being landfilled; and (iv) Contractor is responsible for providing all Acceptable Feedstock not available from the City without recourse to the City if there is a shortfall in such feedstock;
- for the E/C Facility or Export, a term for the operating period to be 30 years, plus two, five-year renewal options; and
- for Export, a term of 5 years.

The City will consider Alternative Proposals only for those cases identified in this RFP or by Addenda to this RFP. Prior to the deadline for submitting written questions, a Proposer may request approval from the City to submit Alternative Proposals based on technical or business options not listed in this RFP or Addenda. Such requests must be made in writing to the designated Contact Person. If the City agrees to consider additional Alternative Proposals, all Proposers will be informed by an Addendum to this RFP.

Alternative Proposals shall be presented in separately bound volumes from and in the same format as the Base Case Proposal set forth below and in sufficient detail to allow the City to make a thorough evaluation of the merits of such Alternative Proposals. Alternative Proposals need only include those volumes that are impacted by the alternative aspects of the Proposal. Proposers may refer to the Base Case Proposal volumes for information that does not change.

Alternative Proposals will be evaluated using the same procedures and evaluation criteria for the Base Case Proposal, as appropriate.
8.1.3 Number of Copies, Format and Electronic Version

The Proposer shall submit ten (10) copies of the Proposal to the City and four (4) copies of the Proposal to ARI, as specified in Section 8.1.1. One (1) copy shall be bound and clearly marked as the original and contain the original signature forms and other original documents. The remaining copies can be reproductions. Proposers shall number each set of documents in sequential order on the upper right corner of each cover. The Proposer shall also submit a CD for Volumes I-IV of the Proposal with each copy of the Proposal, and a separate CD for Volume V, the Price Proposal with each copy of the Proposal. The CD for Volumes I-IV shall be submitted with the Executive Summary of each printed copy of the Proposal, providing an electronic version of such Proposal. The CD for the Price Proposal, Volume V, shall be submitted with each Price Proposal.

The Proposal documents shall be typed or printed (1-1/2 spacing) on 8-1/2 inch by 11 inch paper, except for figures or maps at such a scale to require preparation at a larger size in order to be legible. Oversize maps and figures greater than 11 inches by 17 inches shall be organized in Appendices whenever possible. Each volume and all related information shall be bound as a single document (loose-leaf binders are acceptable), unless that is impractical, in which case an appendix document accompanying the volume may be submitted.

The responses shall be clear, concise, factual, and complete with a minimum of extraneous material and the information provided shall reference, to the extent practicable, the section of the RFP being addressed.

The Proposal volumes shall be indexed and sectioned and shall be prefaced with a table of contents. To the extent possible, cross-referencing to other Proposal volumes should be avoided.

The Proposer should thoroughly review Section 6 and the evaluation criteria in Section 7 to ensure that the Proposal addresses each of the requirements and evaluation criteria.

The delivery of the Proposal by the Proposal Submission Due Date (and time) is solely and strictly the responsibility of the Proposer. The City shall not, under any circumstances, be responsible for delays caused by the United States Postal Service or any private delivery service, or for delays caused by any other occurrence.

8.2 Transmittal Letter, Proposal Security

8.2.1 Proposal Transmittal Letter and Signature Requirements

Together with each Proposal, the City must receive one fully executed Proposal Transmittal Letter (Proposal Form 1) from the Proposer acknowledging, among other things, that the Proposer has completely reviewed and understands and agrees to be bound by the requirements of this RFP. The Proposal Transmittal Letter commits
the Proposer, if selected, to carry out the provisions of the Proposal and shall further state that: (a) all information submitted in support of the Proposal is accurate and factual; (b) all representations made regarding the Proposer's willingness to meet the required Performance Guarantees, and the Proposer's concurrence with the proposed business arrangement and terms and conditions of contract, are true; (c) the Proposal is provided fairly, without collusion or fraud; and (d) the Proposer will, if chosen as the Contractor, perform the Scope of Services set forth in the Proposal.

Finally, the Proposal Transmittal Letter must designate a contact person for all communications to and from the City with respect to this procurement. The Proposal Transmittal Letter must also designate the individuals who will be the Proposer’s key technical and business negotiators and who shall be available to respond, in a timely fashion, to inquiries submitted by the City, its designated Contact Person, or its consultants.

The Proposal Transmittal Letter must be signed by an officer of the Proposer who is empowered to sign such material and to commit the Proposer to the obligations contained in the Proposal (the "Designated Signatory"). The Certificate of Authorization (Proposal Form 2) attesting to such authorization must also be submitted with the Proposal. If the Proposer is a partnership, the Proposal shall be signed by one or more of the general partners. If the Proposer is a corporation, the authorized officer shall sign his or her name and indicate his or her title beneath the full corporate name. Anyone signing the Proposal as agent must file with it legal evidence of his or her authority to execute such Proposal. All forms which require the signature of the Proposer shall be signed by the Designated Signatory.

### 8.2.2 Proposal Bond or Alternative Security

A Proposal Bond or Alternative Proposal security shall accompany the Proposal Transmittal Letter.

The Proposer must provide a Proposal Bond, in the amount of $100,000 payable to the City, upon submittal of its Proposal, or shall provide one of the following forms of alternative security:

1. a certified bank check payable to the City in the amount of $100,000;
2. a direct-pay irrevocable letter of credit to the City with a bank chartered to do business in California; or
3. a certificate of deposit with the City as a beneficiary in the amount of $100,000 with a bank licensed to do business in California.

A Proposer who withdraws its Proposal, except as allowed by this RFP, and a Preferred Proposer who fails to negotiate a Contract in good faith shall forfeit its Proposal Bond or alternative security to the City. If the Preferred Proposer fails to do so, the Surety will pay to the City, as liquidated damages, the full amount of the Proposal Bond, or for alternative securities, the City shall have rights to the applicable securities.
The Proposal Bond or alternative security must be valid for a period of at least 940 days from the Proposal Submission Due Date. If the Contract has not been executed prior to that time, the City may require the renewal of the Proposal Bond or retain the alternative security for an additional 180 days. No Proposal shall be considered unless accompanied by the required Proposal Bond or alternative security. The form of the Proposal Bond which must be submitted is included in Proposal Form 3 of this RFP.

The surety which issues the Proposal Bond must be properly licensed to do business in the State of California. Alternative security measures should be from a bank chartered under the laws of the United States and authorized to conduct business in the State of California.

Additional security beyond the Proposal Bond or alternative security requirements specified herein may be required from the Preferred Proposer if the City elects to negotiate a contract with the Preferred Proposer based on an Alternative Proposal.

8.3 General Format, Organization and Content of Proposal

In general, each Proposal shall contain all information which may be of importance to the Evaluation Committee in selecting a Preferred Proposer. The information submitted shall include all information specifically requested by this RFP, and any information not specifically requested by this RFP, including favorable and/or unfavorable information, which may have a reasonable bearing on the Evaluation Committee's selection. Unless otherwise noted in this Section 8, Proposers shall provide all requested information for either the E/C Facility or Export, whichever is proposed.

Proposals submitted in response to this RFP shall consist of the following volumes with the following section headings.

**Volume I: Executive Summary**

1. Table of Contents
2. Introduction and Overview
3. Summary of Technical Qualifications Proposal
4. Summary of Technical Approach Proposal
5. Summary of Business Proposal
6. Summary of Key Information in Proposal Forms
7. Confirmation of Compliance with Minimum Evaluation Criteria
8. Proposal Forms 1, 1A, 2 and 3
9. CD providing an electronic copy of the Proposal, Volumes I-IV. (Note: A separate CD shall be provided for Volume V, the Price Proposal, with each copy of the Price Proposal.)

**Volume II: Technical Qualifications Proposal**

1. Table of Contents
2. Experience of Proposer in Permitting, Financing, Design, Construction and Operation of Similar Solid Waste Management Facilities
3. Regulatory and Permitting Experience
4. Regulatory Compliance
5. Product Sales Experience
6. Record of Contract Performance
7. Labor Relations
8. Safety Record
9. References and Reference Project Descriptions
10. Additional Qualifications Information
11. Proposal Forms 4, 5, 6, 7, 8 and 9

Volume III: Technical Approach Proposal

1. Table of Contents
2. Project Management and Staffing Plan
3. Record of Performance and Reliability of Technology Proposed
4. Permitting Plan
5. Design, Construction and Start-up Plan
6. Operations and Maintenance Plan
7. Product Marketing Plan
8. Community Relations Plan
9. Proposed Project Schedule
10. Additional Technical Information
11. Proposal Form 10

Volume IV: Business Proposal

1. Table of Contents
2. Proposer's Organization
3. Business and Contractual Terms and Risk Assumed by Proposer
4. Limits on Guarantor Liability, if any
5. Financial Resources and Strength of Proposer/Guarantor
6. Experience as Guarantor
7. Financing Plan
8. Additional Business Information – Use of Local Labor, Goods and Services
9. Proposal Form 11

Volume V: Price Proposal

1. Pricing Proposal Forms, as required in Section 8.8 as well as related cost discussion and information, as applicable, including a CD for the Price Proposal.

8.4 Volume I: Executive Summary

The Executive Summary must be presented as a separate document. It shall summarize, in clear and concise language, the information contained in the Technical Qualifications,
Technical Approach, and Business Proposals and shall include an Introduction and Overview section. Proposal Forms 1, 1A, 2 and 3 shall be included with the Executive Summary. In addition, the Executive Summary shall contain a CD providing an electronic copy of the Proposal, Volumes I-IV.

The Executive Summary shall also summarize the information contained in the Proposal Forms. This shall include, for each Participating Firm, the form of business organization, ownership and firm description; proposed role in the transaction; and information as to criminal conviction, debarment from entering into contracts, regulatory violations, bankruptcies, lawsuits and contract disputes.

The Executive Summary shall identify any Alternative Proposals and briefly summarize the benefits of such alternatives (excluding price).

The Executive Summary shall include confirmation by the Proposer of its compliance with each of the Minimum Evaluation Criteria (see Section 7.2, Table 7-1).

The Executive Summary should be drafted so that it may be easily understood by persons not having a technical background. The Executive Summary shall be no longer than necessary to convey a meaningful summary of the Proposal. It is suggested that the Executive Summary be limited to approximately 25 pages of text, plus any renderings, tables, drawings and graphs, and Proposal Forms.

8.5 Volume II: Technical Qualifications Proposal

A Proposal submitted in response to this RFP must contain a Technical Qualifications Proposal that fully conforms with and satisfies the format and content requirements of this RFP, and sets forth the Proposer's qualifications, experience and capability to perform the Services. The Technical Qualifications Proposal shall contain only information pertaining to the Proposer's past performance unrelated to this project. (Note, the Proposer's technical approach to this project shall be presented in Volume III (Technical Approach Proposal), not Volume II).

A Proposer is requested to include in its Technical Qualifications Proposal all information necessary to permit the City to make an informed evaluation under each appropriate criterion, stated in Section 7 and Tables 7-1 and 7-2. The Proposer shall provide the information necessary for the City to determine the experience, capabilities, and resources of the Proposer and all Participating Firms.

Failure to provide any of the requested information that is available to the Proposer may be grounds for disqualification. If the requested information does not exist or cannot be provided, the Proposer shall state so with an explanation as to why such information has not been provided.

By submission of its Proposal, the Proposer grants the City and its representatives the right to contact and visit any of the named projects, as well as any projects not named, for the purpose of evaluating the Proposer's performance or for validation of information provided.
in the Proposer’s Proposal. This includes contacting any person who is or was associated with each project.

8.5.1 Experience of Proposer in Permitting, Financing, Design, Construction and Operation of Similar Solid Waste Facilities and Services

The Proposer shall provide a list of representative projects for which it has provided permitting, financing, design, construction and operational services in the past 10 years. The list shall include the name, location, address, size, and commencement date of each facility or service. The nature of the services provided and the name, address, phone number and email address of a contact person representing the service recipient shall be provided. Information to be provided in Section 8.5.8 further describes Reference Projects.

The Proposer shall also highlight where its team of companies has worked together before on similar contracts, particularly if an E/C Facility is proposed for those with a design, construction and operating contract.

Information should also be provided regarding the depth of resources available to support permitting, financing, design, construction and operating contracts, and product marketing.

The Proposer shall describe the nature and depth of corporate professional resources and those available at other facilities which it operates which will be available to it and provide support as needed in performing the Contract. The description shall include a discussion of the accessibility of such resources, including whether the resources are under common and affiliated management or are available by contract, license or other means. The Proposer shall also describe the nature of the Proposer’s historical and planned long-term commitment to solid waste management.

8.5.2 Regulatory, Permitting Experience

The Proposer shall describe its experience and effectiveness in dealing with governmental agencies regulating solid waste and biosolids facilities. This description should highlight experience working with environmental regulatory agencies, including the USEPA, USEPA Region 9, and local and State agencies. Experience in permitting similar solid waste and biosolids facilities should be highlighted, particularly that within California.

8.5.3 Regulatory Compliance

The Proposer shall describe its experience and record of compliance with permits, licenses, approvals, consent decrees or agreements, and other regulatory actions applicable to solid waste and biosolids facilities. The Proposer shall identify any major incidents of noncompliance within the past three (3) years, and shall include a description of the speed and efficacy of corrective actions taken for such incidents,
the present status of compliance, and whether regulatory agency sanctions were imposed. This description should highlight such records with USEPA, including Region 9, and State and local agencies. For Proposal purposes, a major incident of noncompliance is defined as one that resulted in a court order, a regulatory consent order, fines totaling over $5,000 in any calendar year, or noncompliance instances that persisted for more than one year without full resolution.

8.5.4 Product Sales Experience

The Proposer shall describe its experience in negotiating agreements for and selling marketable products, to include electricity, fuel, compost, aggregate and other products, as applicable.

8.5.5 Record of Contract Performance

The Proposer shall identify any cases where the Proposer or any Participating Firm failed to complete any work which it was contracted to perform or had a contract terminated by a government agency due to the quality of its work. If this has occurred, indicate when, where, and the reasons for such termination. If the Proposer or any other Participating Firm has paid any liquidated damages, fines or penalties in connection with the design, construction or contract operation of any solid waste or biosolids facility or for a service contract with transportation and processing of solid waste or Biosolids, the Proposer shall indicate when, where, and under what circumstances such payment was made.

8.5.6 Labor Relations

The Proposer shall describe its experience with and approach to labor relations. A clear mission statement with examples of human resource and training programs to reduce the potential for turnover and grievances shall be included. The Proposer shall identify the turnover rate and number of grievances per year, as well as the speed and efficacy of resolution of such grievances, for each Reference Project.

8.5.7 Safety Record

The Proposer shall discuss its overall safety program including any violations cited by governmental safety agencies or OSHA, recognized safety awards, and the Proposer's lost-time accident record compared with industry standards, all within the past three (3) years.

8.5.8 References and Reference Project Descriptions

The Proposer shall describe relevant solid waste and biosolids facilities and services, including facilities and services similar to that proposed, not exceeding ten in number that the Proposer has been involved with as a service provider (the Reference Projects”). A brief description of each Reference Project shall be provided, including a description of the Proposer's specific involvement with these
projects. For each of the Reference Projects identified, provide the following information, as applicable:

- the name and location;
- the owner and operator of the facility;
- a description of the services performed;
- relevance of the Reference Project to the requested Services;
- description of facilities, equipment and processes, including design concept, size and capacity of the facilities, types of feedstock processed, recyclables recovered and products of conversion;
- history of construction, including number of months for design, construction, facility acceptance;
- history of operations, including start-up date and years of service as well as quantity and types of feedstock processed;
- history of permitting and regulatory compliance;
- safety record;
- a record of contract performance;
- a description of the record of labor relations;
- if the Proposer is or was a single-source guarantor of the contract or if other arrangements were made to provide the project guarantees;
- a description of experience with providing operation and maintenance services;
- a description of experience with odor and noise control;
- a description of experience with recovery and marketing of products;
- a description of experience providing repair and replacement services, including major repair and replacement services;
- a description of any services provided for design and construction of capital modifications;
- the cost of designing and constructing the facility, the size of the financing and method of financing;
- operating and maintenance costs;
- contract value;
- name of the division or legally affiliated company which is responsible for the project if different from the Proposer;
- a summary of significant accomplishments (e.g., cost savings results, actions taken to ensure environmental compliance, neighborhood programs to
enhance facility acceptance and reduce odor, noise or other complaints, private financing);

- the names, titles, telephone, fax numbers and e-mail addresses of key managerial-level contact persons of the community or agency served for each facility identified;
- the names, titles, telephone, fax numbers and e-mail addresses of key managerial-level contact persons of the Proposer for each facility identified; and
- the names, titles, telephone, fax numbers and e-mail addresses of key environmental regulatory agency staff contact persons for each facility identified.

8.5.9 Additional Qualifications Information

Provide any additional qualifications information that would further help the City fully evaluate Proposer Qualifications.

8.5.10 Proposal Forms

Complete and provide Proposal Forms 4, 5, 6, 7, 8 and 9.

8.6 Volume III: Technical Approach Proposal

A Proposal submitted in response to this RFP must contain a Technical Approach Proposal that fully conforms with and satisfies the format and content requirements described herein, and sets forth the Proposer's technical approach to performing the Services for this project. Experience that the Participating Firms and key staff have with U.S. and overseas projects should be identified. Any experience in California should be noted.

In evaluating the Technical Approach Proposal, the Evaluation Committee will apply the appropriate Evaluation Criteria set forth in Section 7 and Tables 7-1 and 7-2. Accordingly, the Proposer is requested to include in its Technical Approach Proposal all information necessary to permit the Evaluation Committee to make an informed evaluation under each appropriate evaluation criteria. The Proposer shall provide the information necessary for the Evaluation Committee to determine the technical merit of the Proposer's Technical Approach Proposal.

8.6.1 Project Management and Staffing Plan

The Proposer shall provide a Project Management Plan which presents the Proposer's project organization, identifying all Participating Firms and their role and responsibilities. Also, key management staff should be identified by name and full resumes provided. The Proposer should clearly state the amount of time that each key staff person will be assigned to the project.

8.6.2 Record of Performance and Reliability of Technology Proposed
The Proposer shall describe where the proposed technology for the E/C Facility has been used to process municipal solid waste, the size of the facility (tons per day), the number of units at the facility, the number of years the facility has been in commercial operation, its record of performance (including annual availability, ability to meet performance guarantees and environmental permit limits, its maintenance record and need for repairs or equipment replacement) and its acceptability in the host community, particularly in regard to traffic, noise and odor issues.

If Export is proposed, the Proposer shall provide similar information, and the capacity available at such facility(ies) to take Acceptable Feedstock.

### 8.6.3 Permitting Plan

The Proposer shall prepare a Permitting Plan identifying Federal, State and local permits and approvals needed to construct and operate the proposed E/C Facility, the permitting authority, the time required for permitting, and key issues that would need to be addressed and the approach that will be taken to do so.

For an Export Proposal, the Proposer shall describe any permit modifications necessary to accept Acceptable Feedstock from Palo Alto and related information as described above.

### 8.6.4 Design, Construction and Start-Up Plan

The Proposer shall submit a Proposed Design, Construction and Start-up Plan that will contain adequate information, data, specifications, equipment descriptions and design drawings to clearly and completely demonstrate that the E/C Facility will, at a minimum, achieve all of the required Performance Guarantees. This plan must describe, in detail, the proposed technical concept for the E/C Facility, including a description of how the Facility will work from receipt of Acceptable Feedstock to processing of such feedstock through the E/C Facility and production of products.

In order to facilitate the review of the design portion of the E/C Facility, the Proposer is required to explain, in detail, its design concepts for the E/C Facility. Any additional information that will assist the City in understanding the Proposer’s approach should be included. In addition, Proposers shall outline their proposed approach to preparing detailed design plans and specifications, construction, start-up and acceptance testing. Measures that will be taken by the Contractor to assure quality control during design and construction should be discussed as should the Contractor’s plan to interact with the City and its engineers during the design and construction phases of the project. This includes a plan for and discussion of proposed project documentation and reports to be made available to the City.

In addition to the above, the Proposer shall, at a minimum, provide:
• a description of the E/C Facility design throughput capacity (Rated Capacity) and annual availability (including, Annual Waste Throughput Guarantee);

• a description of the type of feedstocks to be received and processed;

• a description of the size and number of process lines (including preprocessing, conversion and post-processing);

• a description of recyclables to be recovered and marketable products to be produced;

• an architect’s rendering of the proposed E/C Facility, showing integration with Byxbee Park and the RWQCP, and a description of the architectural treatment;

• a plan view, showing site access from the roadway, scale house, scales, all buildings, outside equipment, road and traffic flow, electrical and fuel interconnections, utility connections, security fencing, stormwater management basins, site buffer areas, landscaping plans;

• elevation drawings – four sides;

• a cross section drawing of the site, showing site terracing, if any, and headwall requirements;

• foundation plan;

• schematic process flow diagram and description of the process for receiving and storing feedstock, recovering recyclables, preprocessing of the feedstock for conversion, the conversion process and product production and storage;

• equipment and general arrangement drawings;

• P & ID drawings;

• assumptions made on incoming feedstock, including HHV and BMP, as applicable;

• mass, energy (to include use of landfill gas) and water balances;

• a description of the storage requirements on-site for products;

• a description of interconnection requirements for sale of electricity, natural gas or other products;

• a description of the post-conversion process on-site to manufacture or clean products, including gas, fuels, compost, aggregate, etc.;

• a description of noise mitigation, odor control and air pollution control measures;

• a calculation of annual greenhouse gas emissions (CO₂ equivalents for emissions of carbon dioxide, methane, nitrous oxide, others, if applicable, considering both biogenic and anthropogenic emissions for construction and operation of facilities) from stationary sources, mobile equipment and vehicles. Emissions estimates should be prepared consistent with methodologies established by the California Air Resources Board.
• a description of means to minimize consumptive water use and process wastewater discharge;
• a description of proposed utility connections for potable water, recycled water, sanitary sewer, stormwater, electricity, natural gas;
• a description of the proposed stormwater management plan, describing collection, control, treatment, including catch basin design for sediment, oil and grease collection, and inclusion of any stormwater retention ponds and use of the City stormwater system;
• a description of design features to qualify for LEED certification;
• a description of proposed Performance Guarantees; and
• a description of Acceptance Tests that will be performed to demonstrate compliance with Acceptable Standards.

For those proposing Export, similar information is required to show the interface with City facilities, transportation to the processing facility(ies), and a description of the facility(ies) to which the Acceptable Feedstock will be taken and processed. Capacity available to take Acceptable Feedstock from the City should be identified, as well as a description of the other waste materials processed by that facility.

8.6.5 Operation and Maintenance Plan

Each Proposer shall submit, as part of its Technical Approach Proposal, each of the following technical plans and narratives to demonstrate its ability to provide the Scope of Services. All of the items presented in Section 4, Scope of Services, and Appendix F shall be addressed for the E/C Facility or the Export service, as appropriate.

8.7.5.1 Operation and Maintenance

Prepare an Operation and Maintenance Plan to outline the Proposer’s overall approach to performing the operation and maintenance responsibilities, as set forth in this RFP. The outline should include the management philosophy of the Proposer and any management procedures or policies that will be followed:

• Explain the Proposer’s approach to and the instrumentation that will be used for inspecting Acceptable Feedstock at delivery and for diverting, separating and properly handling and disposing of Unacceptable Feedstock, as specifically required by State and local regulations.
• Explain the Proposer’s technical approach to performing such operation and maintenance responsibilities, including training and inspection procedures, monitoring measures and preventative, corrective and predictive maintenance programs.
- Describe the frequency of sampling and the laboratory procedures to be undertaken by the Proposer, including compliance sampling and analysis in order to ensure compliance with permits and the Performance Guarantees.

- Describe, generally, the manner by which the Proposer will produce all reports required in the Contract.

- Describe the procedures for monthly and annual reviews with the City of operations, reports, ongoing cost information, and key upcoming projects and operations, which may impact any Services.

- Describe proposed Preventative, Predictive and Corrective Maintenance activities, including related record-keeping activities.

- Discuss what quality assurance and quality control procedures will be used to monitor any aspect of the operation and maintenance of the E/C Facility or Export facilities. Describe the frequency of calibration of weigh scales and the procedures to be used in the event scales are found to be out of calibration.

- Identify and describe the Proposer's planned computerized management system, including the maintenance system and the operating system and the tie in to continuous, real time monitoring of process and environmental performance data.

- Provide estimates for the expected annual usage of electricity, chemicals, fuel, water and other consumables required for operation of the E/C Facility.

- Describe how the Proposer will maintain the E/C Facility or Export facility in a neat, clean, and litter-free manner at all times, ensuring the operation of these assets does not create impermissible odor, litter, noise, fugitive dust, vector or other adverse environmental effects.

- Describe how the Proposer will manage emergencies that may arise at the E/C Facility or Export facility and interact with the City and the applicable fire, police, and emergency management personnel during such emergency.

- Briefly describe the Proposer's general safety program, including staff training, preventative maintenance, and safety procedures for OSHA compliance program requirements. Essential elements of such program shall include regularly scheduled safety training sessions for all personnel, standard operating procedures for chemical storage and handling, confined space entry and emergency response, lockout/tagout, right-to-know, and the care and use of proper safety equipment.

- Provide a complete staffing plan, identifying job title, function and number of personnel. Describe how the Proposer will utilize the local and regional labor pool to satisfy labor needs as part of the staffing plan.
8.6.5.2 Repair and Replacement

- Outline the Proposer's approach to performing repair and replacement, including major repair and replacement for the E/C Facility.
- Discuss what quality assurance and quality control procedures will be used to monitor any and all aspects of the repair and replacement, including major repair and replacement, of the E/C Facility.
- Provide a specific, itemized list of all major maintenance, repair and replacement activities that the Proposer plans to perform throughout the life of the Contract for the E/C Facility, and state the dollar amount budgeted and the implementation schedule for each item, activity and piece of equipment. Note that this list, as negotiated, will be incorporated into the Contract so as to assure that proper maintenance, repair and replacement is performed, and that the City is not left with depleted assets requiring a major overhaul when the Contract expires.

8.6.5.3 Residuals Management

- Describe how Residuals will be handled (Residuals Management Plan).
- Describe how Residuals will be tested.

8.6.5.4 Odor Control

- Describe the odor control measures proposed by the Proposer (Odor Control Plan) to prevent odors beyond the Site boundary for the E/C Facility or for Export, for transportation and processing of Acceptable Feedstock. Describe guarantees for odor control (Odor Guarantee) to be made by the Contractor and the Guarantor and penalties to be paid for nonperformance (to be incorporated in the Environmental Performance Guarantee).
- Identify other facilities operated by the Proposer using methods and technologies similar to the proposed Odor Guarantee, as well as their performance record and overall effectiveness in odor reduction.

8.6.5.5 Noise Control

- Describe noise control measures proposed (Noise Control Plan) at the E/C Facility or for Export, for transportation and processing of Acceptable Feedstock, to comply with the City’s Comprehensive Plan and to prevent off-site noise complaints. Describe guarantees for noise control (Noise Guarantee) to be made by the Contractor and the Guarantor and penalties to be paid for nonperformance (to be incorporated in the Environmental Performance Guarantee).
- Identify other facilities operated by the Proposer using similar methods and technologies similar to the proposed Noise Guarantee, as well as their performance record and overall effectiveness in noise reduction.
8.6.5.6 Light Impact Mitigation

- Describe measures to be taken to reduce lighting impacts on the Site and surrounding land uses.

8.6.6 Product Marketing Plan

For the E/C Facility or Export, if proposed, describe the recyclables to be recovered and the marketable products to be produced (including digestate, compost, electricity and fuels), quantities and characteristics of such recyclables and products, regulatory, environmental and market hurdles for sale of products, potential markets – the terms, current pricing and future viability and pricing, and contingency plans if products cannot be marketed. Provide copies of any letters of intent to purchase products.

8.6.7 Community Relations Plan

For the E/C Facility or Export, describe how the Proposer will develop and maintain professional, responsible, and responsive working relationships with its neighbors, service recipients, the general public, the media, the City, municipal and other government representatives, public sector advisors or consultants, regulatory agencies, and other entities that have relationships with the City.

Include an outline of the approach and specific tasks to be implemented to ensure that good relations are developed and maintained with such customers, departments, representatives, advisors, consultants, or agencies such as: (1) periodic communications and meetings with the City and/or their advisory board, regulatory agencies, and the public; (2) monthly progress reports to the City; (3) access to information and site tours for interested public groups; (4) other public outreach activities such as public education on recycling and proper solid waste management; (5) participation in community affairs, as a community member; and (6) how nuisance complaints, such as noise and odor, or other performance issues will be resolved with the community.

Describe how the Proposer will assist the City with their public information programs, including, but not limited to, the activities specified in Appendix F.

8.6.8 Proposed Project Schedule

The Proposer shall provide a detailed project schedule from receipt of Notice to Proceed to the Acceptance Date for commercial E/C Facility operation, or for Export, whichever is proposed. Key milestones should be shown on the schedule and critical path items should be identified.

8.6.9 Additional Technical Information

Provide any additional technical information that will assist the City more fully understand the technical approach.
8.6.10 Proposal Forms

Complete and provide Proposal Form 10 regarding Performance Guarantees.

8.7 Volume IV: Business Proposal

A Proposal submitted in response to this RFP must contain a Business Proposal that fully conforms with and satisfies the format and content requirements described herein, and sets forth the Proposer's business terms and price to perform the Services. In evaluating the Business Proposal, the Evaluation Committee will apply the evaluation criteria set forth in Section 7, and Tables 7-1 and 7-2. Accordingly, Proposers are requested to include in their Business Proposal all information necessary to permit the Evaluation Committee to make an informed evaluation under each evaluation criterion. The Proposer shall provide the information necessary for the Evaluation Committee to determine the business merit of the Proposer's Business Proposal.

8.7.1 Proposer's Organization

Describe the Proposer’s project organization, identifying the Proposer, the Guarantor and all Participating Firms. Describe the roles of each party, to include project development, permitting, financing, design, construction, operations, product marketing and public outreach, as appropriate for the E/C Facility or Export.

The Proposer shall: 1) describe whether it is a corporation, joint venture, L.L.C., special purpose corporation, or some other entity; 2) identify the Guarantor, if it is a party other than the Proposer; 3) describe, as appropriate, the relationship of the Proposer to its parent company and the Guarantor; and 4) identify if the parent company will also provide the Guarantee, or provide a Guarantee in addition to the Guarantee provided by the Proposer.

8.7.2 Conformance to Business and Contractual Terms and Risk Assumed by Proposer

The Proposer shall indicate its willingness to enter into the Contract which will be developed based upon the terms and conditions described in Section 5. The Proposer shall indicate its willingness to accept the terms and conditions as stated, or indicate specific provisions to which it takes exception and offer alternative contract language which it would accept in the form of a markup.

The Proposer shall provide a markup of or comment memorandum as to the Contract Principles (Section 5 of RFP). Proposers shall clearly indicate their acceptance or requested modification of each provision of the Contract Principles. To the extent that any Proposer wishes to add to or modify any such provision, the specific text of the proposed addition or requested modification shall either be clearly marked on the document or appended to the document in clearly typed riders. Proposers shall provide justification for taking exceptions. Any matter of significance to Proposers that is not addressed by the Contract Principles must be raised clearly.
and separately in the Business Proposal. The Proposer’s response to the Contract Principles will be used in evaluating the advantageousness of the Proposal in the Business Proposal evaluation.

In discussing exceptions taken to the Contract Principles, the Proposer shall describe the degree of risk which it is willing to assume and that which it believes the City is better able to assume and to what benefit.

8.7.3 Limits on Guarantor Liability, if Any

The Proposer shall submit a Guarantor Acknowledgment signed by an officer of its parent or third party Guarantor, if applicable, in the form of Proposal Form 4. The Guarantor will be required to sign a Guaranty Agreement with the City in which it will guarantee all of the financial and performance obligations of the Contractor under the Contract. The Proposer shall clearly state the financial limit, if any, of its Guarantor’s liability under the Guarantee Agreement.

The Proposer shall provide a markup of or comment memorandum as to the Form of Guarantee (see Appendix J). The Proposer’s response will be used in evaluating the advantageousness of the Proposal in the Business Proposal Evaluation.

8.7.4 Financial Resources and Strength of Proposer/Guarantor

For the Proposer, the Guarantor, and Participating Firms, the Proposal shall include completed Proposal Form 11 – Financial Resources Data. In addition, the Proposer, the Guarantor, and all other key Participating Firms shall provide the financial information referenced below. If the Proposer, Guarantor or Participating Firm is not a public company, it can provide independently audited financial statements and may request that the information be treated confidentially by the City. If the Proposer, Guarantor or Participating Firm has been in existence less than the three years indicated on Proposal Form 11 – Financial Resources Data, the information shall be provided for the period of its existence:

1. Evidence of the ability of the Proposer(s) (e.g., letters from surety licensed to conduct business in California) to provide the required payment and performance bond in an amount equal to the estimated cost for E/C Facility construction, an operations bond in the amount of the estimated annual cost of the E/C Facility operation and maintenance, financial assurance regarding E/C Facility removal and restoration of the Landfill Site and the RWQCP Site, and a letter of credit as specified in Section 5 of this RFP. Information shall be provided for Export service to satisfy the requirements above for operations bonding and for a letter of credit as specified in Section 5 of this RFP;
2. Annual audited financial statements (annual report) for the most recent fiscal year, prepared in accordance with Generally Accepted Accounting Practices, and all relevant notes;

3. Description of any material adverse changes in financial position within the past three years; any material changes in the mode of conducting business; and any bankruptcy proceedings, mergers, acquisitions, takeovers, joint ventures, and/or divestitures within the past three years. In addition, provide a clear and definitive statement of whether or not the Proposer, and any predecessor organization and/or Guarantor has declared bankruptcy within the last three years;

4. Description of the financial impact of any past or pending legal proceedings and judgments that could materially affect the Proposer’s financial position or ability to provide services to the City;

5. The prospectus or offering statement for any security or equity offering by the Proposer in the past three years;

6. A statement of contingent liabilities, financial commitments, contractual commitments, and/or guarantees to other projects that will affect the Proposers and the Guarantor’s ability to meet its obligations to the City;

7. An enumeration of all liabilities for similar projects (such as guaranties or letters of credit), and a list of equity contributions due to, but not yet disbursed to, any similar project; and

8. Any additional information which the Proposer believes is appropriate to fully reflect the financial strength of the Proposer.

All information shall be provided in the English language, and all financial information shall be expressed in U.S. dollars, with identification of the currency exchange rate assumed. If the audited financial statements and other information of the Proposer, Guarantor and Participating Firms are not in the English language, then a certified English translation shall be provided (including numeric conversion of amounts into U.S. dollars).

Under a joint venture or other partnership arrangement, all of the above information shall be provided for all parties to the arrangement. The Proposer shall provide binding letters from each party in the joint venture or other partnership arrangement stating its role and its willingness to meet the requirements of this RFP and any contract that will be executed. The partners shall be jointly and severally liable to meet the Proposer's obligations.

**8.7.5 Experience as Guarantor**

The Proposer and Guarantor shall describe its experience in providing guarantees for projects, including any such role for each of the Reference Projects. Describe if there was a limit of the Guarantor’s liability, and if so, what it was. Describe if the Guarantor has been asked to step up to perform for any such contract.
8.7.6 Financing Plan

For an E/C Facility implemented under a design, build, own, operate approach, the Proposer shall prepare a Financing Plan. The Financing Plan must include the following:

1. The Proposer must provide a general statement of approach to the E/C Facility financing. This general statement must provide an overview and explanation of the intent and strategy of the Financing Plan.

2. The City recognizes that the Financing Plan may include both tax-exempt and taxable debt. The Proposer must clearly describe its assumptions in that regard, or provide an explanation as to type of bonding the Proposer has assumed.

3. The Proposer must explicitly state what financing representations, if any, it is making to the City relating to the Proposer’s ability to acquire cap allocation for the tax-exempt series of bonds, if proposed.

4. The Proposer must clearly define the amount of equity investment it intends to make and/or arrange for.

5. The Proposer is encouraged to consider and should discuss the potential for State or Federal grants or other financial assistance, and the potential impact on the financing. However, for purposes of pricing Services to the City, the Proposer should not assume the availability of any such assistance.

6. The Financing Plan must demonstrate that it includes the funding of all cash needs associated with the implementation of the E/C Facility. Such needs may include, but are not limited to, the following:
   - Contractor Project Development Costs
   - Permitting, design, construction and acceptance testing costs;
   - Debt Service Reserve Fund, if any;
   - An Operating Reserve Fund, if any;
   - Issuance costs;
   - Credit enhancement costs, if any, and
   - Capitalized interest, if any.

   The Proposer may identify and include other funding needs.

7. To the extent practicable, the Proposer must provide a detailed description as to the structure of the bonds to be issued/debt to be incurred (e.g., term, capitalized interest, reserve funds, amortization approach, use of credit enhancement, interest rates, etc.).

8. The Proposer must provide a pro forma for the operating term of the E/C Facility, showing the payment of debt service and the reimbursement of the equity contribution, and the projected tipping fees.
9. The Proposer shall include a letter of intent from its financial advisor or lender stating its willingness to arrange or provide financing in accordance with the Financing Plan, including a discussion of the material requirements, terms and conditions (including the commitments and obligations that would be expected of the City) associated with the ability to finance the E/C Facility, as proposed.

8.7.7 Additional Business Information – Use of Local Labor, Goods and Services

The Proposer is to describe the use of local labor, goods and services during E/C Facility construction and operation, including efforts to be made to meet labor needs from local and regional labor pools. For both the E/C Facility and Export, efforts to utilize local and regional labor, goods and services during operations should be described. In addition, for both the E/C Facility or Export, describe use of materials, goods, equipment, products and services originating in or manufactured in the United States.

8.7.8 Proposal Forms – General

Proposal Form 11, Financial Resources Data, is to be completed and provided.

8.8 Volume V: Pricing Proposal Forms

Appendix B of this RFP provides Pricing Proposal Forms (PPFs), as follows:

Part 1 – E/C Facility Pricing Proposal Forms
Part 2 – Export Pricing Proposal Forms
Part 3 – Other Pricing Proposal Forms

In completing the Pricing Proposal Forms, Proposers should note:

1. Proposers for the E/C Facility must complete all Pricing Proposal Forms included in Parts 1 and 3 for the Base Case Proposal (all feedstocks) and required Alternative Proposal (food scraps and yard trimmings only).

2. For Export, Proposers must complete the Pricing Proposal Forms in Part 2 and Part 3 (Pricing Proposal Form 3.1 only), for the Base Case Proposal (all feedstocks) and the required Alternative Proposal (food scraps and yard trimmings only).

3. With respect to proposed per ton tipping fees, for Proposal evaluation purposes the City will escalate the tipping fees by the assumed annual escalation rate of 2.50% (see RFP Section 7) from the date of Proposal submission to the Commercial Operation Date (to establish a “Year 1” price), then will escalate the
tipping fees each year of the proposed operating period by 2.5% in order to conduct a net present value analysis (see RFP Section 7).

4. Pricing must take into account payments to the City for the Site Lease Payments commencing with project financing.

5. The City expects that the Proposer will include in its Business Proposal (Volume IV) any comments, exceptions or requested modifications regarding the Contract Principles, and shall assume that the Proposer’s pricing in Volume V is based on the Contract Principles, as the Proposer may request to modify. The Proposer shall enumerate the cost impacts of any Contract Principles to which it takes exception and/or offers amendments, alternatives or modifications. Each Pricing Proposal Form must be signed by the party so designated on the form.

6. As stated in Section 7.1 of this RFP, the costs to be incurred by the City in the preparation of the Site and operation of biosolids dewatering equipment, if required by the Proposer (as described in Section 7.1, and enumerated in Appendix C, Table 1), will be calculated and included by the City in the comparative analysis of price Proposals. Proposers are not to include such costs in their Pricing Proposal Forms.

7. In addition to the Proposals provided for on the Pricing Proposal Forms as described above, Proposers may also offer additional alternative E/C Facility and/or Export Proposals for food scraps and Biosolids only, Food Scraps only, Yard Trimmings only or Biosolids only. If such Proposals are offered, Proposers should complete the appropriate Pricing Proposal Forms (for example, PPF 1.1 First Year $/Ton), clearly noting on the form that the prices are for Food Scraps and Biosolids only, Food Scraps only, Yard Trimmings only or Biosolids only, as appropriate.

Proposers are reminded that Volume V: Price and Pricing Proposal Forms shall be submitted with the other Proposal Volumes, but in a separate, sealed, opaque envelope or package. Price and related cost information must not be included in Volumes I, II, III or IV.
9.0 APPENDICES

Appendix A: Proposal Forms
Appendix B: Pricing Proposal Forms
Appendix C: Landfill Site Information, Capping Plans, Preliminary Site Preparation and Anticipated Cost, Landfill Gas Projections
Appendix D: RWQCP Site Information, RWQCP Energy Needs
Appendix E: Quantity and Characteristics of City Food Scraps, Yard Trimmings and Biosolids
Appendix F:
  Appendix F-1: E/C Facility and Export Requirements
  Appendix F-2: Utility Information
Appendix G: Preliminary CEQA Checklist
Appendix H: Reserved for Future Use
Appendix I: Assignment Provisions
Appendix J:
  Appendix J-1: Form of Guaranty Agreement (Example for E/C Facility)
  Appendix J-2: Form of Guaranty Agreement (Example for Export)
APPENDIX A

PROPOSAL FORMS

Proposal Form 1: Proposal Transmittal Letter
Proposal Form 1A: Acknowledgement of Conflicts of Interest and Lobbying Prohibition
Proposal Form 2: Certificate of Authorization
Proposal Form 3: Form of Proposal Bond
Proposal Form 4: Guarantor Acknowledgement
Proposal Form 5: Surety Letter of Intent
Proposal Form 6: Insurance Company Letter of Intent
Proposal Form 7: Participating Firms
Proposal Form 8: Participating Firm Information
Proposal Form 9: Disclosure
Proposal Form 10: Facility Performance Guarantees
Proposal Form 11: Financial Resources Data
City of Palo Alto  
MSC, Building C  
3201 East Bayshore Road  
Palo Alto, CA  94303  
Attn:  Mr. Matthew Krupp

Dear Mr. Krupp:

____________________ (the "Proposer") hereby submits its proposal (the "Proposal") in response to the Request Proposals to Establish an Energy/Compost Facility or Export for Food Scraps, Yard Trimmings and Biosolids, issued by the City of Palo Alto, California, February 2013.

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

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

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

3. Proposal Form 3 is a proposal bond submitted by _____________ as Surety for the Proposer assuring that the Proposer will conduct good faith negotiations with the City of Palo Alto, California based on this RFP and the Proposal.

4. The Proposer's obligations under this Contract will be guaranteed absolutely and unconditionally by _____________, as evidenced by the Guarantor's acknowledgment certificate submitted as Proposal Form 4.

5. The Performance Bonds as required by this RFP as security for performance of the Contract will be provided by _____________, a surety licensed to conduct business in California, as evidenced by such surety’s letter of intent submitted as Proposal Form 5.
6. The insurance coverage required by this RFP will be provided or brokered by __________, as evidenced by such firm's letter of intent submitted as Proposal Form 6.

7. All firms that will be significant participants in providing services under the Proposal (the "Participating Firms") are identified in Proposal Form 7.

8. The Proposer, the Guarantor and each other Participating Firm have submitted certain information required by this RFP by completing Proposal Form 8. To the best knowledge of the Proposer, all such information is correct and complete.

9. All information and statements contained in the Proposal are current, correct and complete, and are made with full knowledge that the City will rely on such information and statements in selecting the Preferred Proposer and executing the Contract.

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

11. The Proposer has reviewed the requirements of this RFP regarding conflicts of interest and lobbying prohibition, as evidenced by submittal of Proposal Form 1A.

12. Neither the Proposer, the Guarantor nor any Participating Firm is currently suspended or debarred from doing business with any governmental entity.

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

14. No person or selling agency has been employed or retained to solicit the award of the Contract 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.

15. The individuals who will be the Proposer's key technical and business negotiators are set forth below:

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16. The contact person who will serve as the interface between the City and the Proposer is:

NAME: ________________________________
TITLE: ________________________________
ADDRESS: ________________________________
PHONE: ________________________________
FAX: ________________________________
E-MAIL: ________________________________

17. The Proposer has carefully examined all documents comprising this RFP and the addenda thereto and, being familiar with the work and the conditions affecting the work contemplated by this RFP and such addenda, offers to furnish all plant, labor, materials, supplies, equipment, facilities and services which are necessary, proper or incidental to carry out such work as required by and in strict accordance with this RFP and the Proposal, all for the prices and terms set forth in the Pricing Proposal Forms.

18. The Proposer has reviewed and understands the requirements of this RFP (including the Performance Guarantees and the Contract Principles) and all addenda thereto and, if selected as the Preferred Proposer, agrees to negotiate in good faith to enter into a Contract which reflects all substantive terms and conditions of this RFP and the Proposal.

Name of Proposer

__________________________

Name of Designated Signatory

__________________________

Signature

__________________________

Title

__________________________

Date
State of ____________________
County of ____________________

On this _________ day of _______________, 2013, before me appeared
_______________, personally known to me to be the person described in and who executed
this Proposal, including the Proposal 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

__________________________

My commission expires _________________
PROPOSAL FORM 1A

ACKNOWLEDGEMENT OF CONFLICTS OF INTEREST AND LOBBYING PROHIBITION

As a duly authorized representative of the Proposer, I hereby certify, represent and warrant review of and compliance with the following requirements regarding conflicts of interest and lobbying prohibition:

The proposed project is an important public project subject to significant political and public scrutiny. Transparency in the selection of the Contractor for this important public project is essential. In view of the potential conflicts of interest pursuant to California Government Code §1090 et seq., the inherent potential for lobbying and undue influence, and the need to preserve and protect confidential and trade secret information submitted in connection with the proposals for the RFP, it is imperative that the RFP process be managed through a centrally managed communication process. Consequently, all communications from vendors and Proposers shall only be directed to the designated project point of contact or the City’s designated representatives. The designated representative for purposes of all communication from vendors and Proposers shall be the Contact Person identified in Section 6.2.3.

Name of Proposer

Name of Designated Signatory

Signature

Title

Date
PROPOSAL FORM 2

CERTIFICATE OF AUTHORIZATION*

I, ____________________, a resident of _____________________ in the State of __________________, DO HEREBY CERTIFY that I am the Clerk/Secretary of ________________________________, a corporation duly organized and existing under and by virtue of the laws of the State of _______________________; that I have custody of the records of the corporation; and that as of the date of this certification, ____________________ holds the title of ___________________ 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 to Establish an Energy/Compost Facility or Export Food Scraps, Yard Trimmings and Biosolids, issued by the City of Palo Alto, California, February 2013, 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 __________, 2013.

(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.
PROPOSAL FORM 3

FORM OF PROPOSAL BOND

KNOW ALL MEN BY THESE PRESENT, that we [NAME OF PROPOSER], as Principal (hereinafter the "Proposer") and [NAME OF SURETY], a [Corporation], [Partnership] duly organized under the laws of the State of __________________, as Surety, are held and firmly bound unto the City, as Obligee, in the sum of One Hundred Thousand Dollars ($100,000) lawful money of the United States of America to be paid to the City of Palo Alto, California (the “City”), its successors or assigns, for which payment, well and truly to be made, we bind ourselves, our successors and assigns, jointly and severally, firmly by these present; and

WHEREAS, the above-named Proposer has submitted or is about to submit to the City a Proposal to provide services, all as defined and described in the Request for Proposals to Establish an Energy/Compost Facility or Export Food Scraps, Yard Trimings and Biosolids, issued by the City in February 2013 and covered by the Proposal submitted by the Proposer in response thereto, which Proposal is made a part hereof.

NOW, THEREFORE, the Surety hereby understands that if the above-referenced Proposer is selected by the City as the most advantageous Proposer, then the Proposer will negotiate in good faith to enter into a Contract based on its Proposal and, if the Proposer's Proposal is selected as the most advantageous Proposal, the Proposer will enter into a Contract in writing and the Guarantor (as set forth in the Proposal) will enter into the Guaranty of the Contract within the time specified in this RFP, or any extension thereof agreed to in writing by the City. Surety hereby agrees that if the Proposer shall fail to do so, Surety will pay to the City, as liquidated damages, the full amount of this Bond within 30 calendar days after receipt by Proposer and Surety of written notice of such failure from the City, which notice shall be given with reasonable promptness, identifying this Bond and including a statement of the amount due. Upon execution of the Contract and delivery of the Guaranty this Bond shall thereafter become null and void, otherwise to remain in full force and effect unless terminated as hereinafter provided.

It is agreed that this Bond shall become effective on the date the Proposal is submitted and will continue in full force and effect for 940 days from the Proposal Submission Date (unless extended for up to an additional one hundred and eighty (180) days) or until terminated as hereinafter provided.

If the Proposal is not accepted within the period stipulated immediately above, or any extension thereof agreed to in writing by the City, then after written notice by the City of such non-acceptance, this Bond may be terminated by the Surety or Proposer upon written notice to each other and to the City by registered mail at least 10 days prior to the termination date specified in such notice. Upon the giving of such notice, Surety shall be discharged from all liability under this Bond for any act or omission of the Proposer occurring after the date of the notice of non-acceptance.
Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the State of California.

All capitalized terms used herein and not otherwise defined shall have the meaning set forth in this RFP.

IN WITNESS WHEREOF, Surety and Proposer, intending to be legally bound hereby, do each cause this Proposal Bond to be duly executed on its behalf by its authorized officers, agent or representative.

Signed and sealed this ________ day of ______________________, 2013.

SURETY  PROPOSER
[NAME OF SURETY]  [NAME OF PROPOSER]

__________________________________________  ______________________________________
Name  Name

__________________________________________  ______________________________________
Name of Authorized Signatory  Name of Designated Signatory

__________________________________________  ______________________________________
Signature  Signature

__________________________________________  ______________________________________
Title  Title
GUARANTOR ACKNOWLEDGEMENT

(to be typed on Guarantor's Letterhead)

___________ (the "Proposer") has submitted herewith a Proposal in response to the Request for Proposals to Establish an Energy/Compost Facility or Export Food Scraps, Yard Trimings and Biosolids, issued by the City of Palo Alto, California, February 2013.

The Guarantor has reviewed the Proposer's Proposal which will form the basis of the Contract. The Guarantor hereby certifies that it will guarantee the performance of all of the obligations of the Proposer set forth in the Proposal in the event the Proposer is selected for final negotiations and execution of the Contract, and that it will execute a separate Guaranty Agreement substantially in the form described in Appendix J.

Name of Guarantor

Name of Authorized Signatory

Signature

Title

Date
PROPOSAL FORM 5
SURETY LETTER OF INTENT
(to be typed on Surety’s Letterhead)

City of Palo Alto
MSC, Building C
3201 East Bayshore Road
Palo Alto, CA  94303
Attn:  Mr. Matthew Krupp

Dear Mr. Krupp:

________________ (the “Proposer”) has submitted herewith a Proposal in response to the Request for Proposals to Establish an Energy/Compost Facility or Export Food Scraps, Yard Trimmings and Biosolids, issued by the City of Palo Alto, California, February, 2013.

Surety hereby certifies that in the event that Proposer is awarded the Contract it intends to provide bond(s) in amounts required in this RFP for construction and for operation of the E/C Facility or for Export, whichever is proposed. In addition, it intends to provide bonds in the amounts required in this RFP for removal of the E/C Facility from the Site and restoration of the Site to a reasonably equivalent condition as existed prior to start of construction of the E/C Facility. [Proposer may provide an alternate form of financial security for Facility removal/Potential Site restoration; see RFP Section 5.10.6].

Name of Surety

Name of Authorized Signatory

Signature

Title

Date

In the event that individual Sureties are proposed for the separate construction and operations Performance Bonds, and for financial security for E/C Facility removal and restoration of the Site, individual letters shall be provided by each such Surety.

(Authority of Surety(s) to execute bonds to be inserted here or attached hereto).
City of Palo Alto  
MSC, Building C  
3201 East Bayshore Road  
Palo Alto, CA  94303  
Attn:  Mr. Matthew Krupp

Dear Mr. Krupp:

________________ (the "Proposer") has submitted herewith a Proposal in response to the Request for Proposals to Establish an Energy/Compost Facility or Export Food Scraps, Yard Trimmings and Biosolids, issued by the City of Palo Alto, California, February 2013.

The Insurance Company hereby certifies that it is duly authorized to conduct business in California and intends to provide all required insurance set forth in this RFP in the event the Proposer is awarded the Contract.

Name of Insurance Company

Name of Authorized Signatory

Signature

Title

Date
PROPOSAL FORM 7

PARTICIPATING FIRMS

All firms that will be significant participants in providing services pursuant to the Proposal (the "Participating Firms") are identified below.

For the E/C Facility, such firms shall include, as applicable (1) the Proposer; (2) the Guarantor, (3) the new company, if any, to be formed for the sole purpose of executing and performing the Contract; (4) the firm that will permit the E/C Facility, (5) the party providing financing, (6) the firm that will design the E/C Facility; (7) the firm that will construct the E/C Facility; (8) the firm that will operate the E/C Facility; (9) the firm that will market products, and (10) any other significant participant.

(1) ______________________________________________
(2) ______________________________________________
(3) ______________________________________________
(4) ______________________________________________
(5) ______________________________________________
(6) ______________________________________________
(7) ______________________________________________
(8) ______________________________________________
(9) ______________________________________________
(10) ______________________________________________

For Export, such firms shall include, as applicable: (1) the Proposer; (2) the Guarantor; (3) the new company, if any, to be formed for the sole purpose of executing and performing the Contract; (4) the firm that will pick up and provide transportation services for the Acceptable Feedstock; (5) the firm that will manage/ process Acceptable Feedstock; (6) the firm that will market products; and (7) any other significant participant.

(1) ______________________________________________
(2) ______________________________________________
Include a summary of the services and responsibilities of each Participating Firm, limited to one page or less in length for each firm.

______________________________________________
Name of Proposer

______________________________________________
Name of Designated Signatory

______________________________________________
Signature

______________________________________________
Title

______________________________________________
Date
PROPOSAL FORM 8

PARTICIPATING FIRM INFORMATION

This Proposal Form shall be completed separately for the Proposer, the Guarantor and each other Participating Firm.

1. Name in Full of Participating Firm:

___________________________________________________________________

Principal Business Address:

___________________________________________________________________

2. Principal Contact Person(s), and phone, fax and E-mail contact information:

___________________________________________________________________

___________________________________________________________________

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

___________________________________________________________________

___________________________________________________________________

4. State in which organized, and date of organization:

___________________________________________________________________

5. If a partnership, give names of partners; if a corporation, give names of officers with authority to sign in name of corporation (or identify the location in any pre-printed materials submitted with the Proposal where such officers are identified):

NAME       TITLE       ADDRESS
6. All information and statements contained in the Proposal made by or concerning the Participating Firm are current, correct and complete, and are made with full knowledge that the City will rely on such information and statements in selecting the Preferred Proposer and executing the Contract.

7. The Participating Firm is committed to performing the services and undertaking the responsibilities which the Proposer has described as to be performed by the Participating Firm on Proposal Form 7.

8. To the best knowledge of the Participating Firm, the Proposal has been prepared and is submitted without collusion, fraud or any other action taken in restraint of free and open competition for services contemplated by this RFP.

9. The Participating Firm is not currently suspended or debarred from doing business with any governmental entity.

10. The Participating Firm has reviewed all of its engagements and pending engagements, and no potential exists for any conflict of interest or unfair advantage.

11. To the best knowledge of the Participating Firm, no person or selling agency has been employed or retained to solicit the award of the Contract 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.

12. The Participating Firm is authorized to do business in the State of California.

13. The Participating Firm has filed all State of California and federal tax returns and paid all other taxes required by law.

   California Taxpayer Identification Number: ________________________

   Federal Taxpayer Identification Number: ________________________

14. The Participating Firm is duly organized and validly existing in good standing and is duly qualified to transact business in each and every jurisdiction where such qualification is required to enable the Participating Firm to perform its obligations contemplated by the Proposal.

15. The performance of all obligations of the Participating Firm contemplated by the Proposal has been authorized by all required action of the Proposer, including any action required by any charter, by-laws, and partnership agreement, as the case may be, and any Applicable Laws which regulate the conduct of the Participating Firm's affairs.
16. The performance of all obligations of the Participating Firm contemplated by the Proposal does not conflict with and will not constitute a breach of or event of default under any charter, by-laws or partnership agreement, as the case may be, of the Participating Firm or any agreement, indenture, mortgage, contract or instrument to which the Participating Firm is a party or by which it is bound.

17. There is no action, suit or proceeding, at law or in equity, before or by any court or similar governmental body against the Participating Firm wherein an unfavorable decision, ruling or finding would materially adversely affect the performance by the Participating Firm of its obligations hereunder or the other transactions contemplated by the Proposal, or which, in any way, would materially adversely affect the validity or enforceability of the obligations proposed to be undertaken by the Participating Firm, or any agreement or instrument entered into by the Participating Firm in connection with the transaction contemplated hereby.

18. No corporation, partnership, individual or association, officer, director, employee, manager, parent, subsidiary, affiliate or principal shareholder of the Participating Firm has been adjudicated to be in violation of any State of California, State or Federal environmental law, or charged with or convicted of bribery, fraud, collusion, or any violation of any State of California, State or Federal anti-trust or similar statute within the preceding five years, or previously adjudged in contempt of any court order enforcing such laws.

19. [Participating Firm] acknowledges and agrees that neither the City nor any of its affiliates, employees, agents, consultants, attorneys, representatives or contractors makes any representation or warranty as to the accuracy or reliability of any information or statements contained in this RFP, and releases and discharges the City and each such person from any and all claims which it has or may have arising out of any such information or statements.

Name of Participating Firm

Name of Authorized Signatory

Signature

Title

Date
City of Palo Alto
MSC, Building C
3201 East Bayshore Road
Palo Alto, CA 94303
Attn: Mr. Matthew Krupp

Re: Disclosure

Dear Mr. Krupp:

Neither [Proposer] nor its officers, principals, stockholders and affiliates are debarred by the State of California, which would prevent the company from entering into a contract with the City. In addition, neither [Proposer] nor its officers, principals, stockholders and affiliates are debarred by any state in the United States or its political subdivisions from entering into contracts with such government entity. Furthermore, [Proposer] will not use any contractors or subcontractors who are so debarred.

_____________________________
Name of Proposer

_____________________________
Name of Designated Signatory

_____________________________
Signature

_____________________________
Title

_____________________________
Date
PROPOSAL FORM 10

E/C FACILITY PERFORMANCE GUARANTEES

**Feedstock Throughput Guarantee (Rated Capacity)**

The Contractor and Guarantor guarantee that the E/C Facility shall be capable of processing [_____] TPD of Acceptable Feedstock (Rated Capacity). [PROPOSER TO COMPLETE AS APPROPRIATE FOR PROPOSED TECHNOLOGY]

**Availability Guarantee**

The Contractor and Guarantor guarantee that the percentage of Rated Capacity of the E/C Facility available during any Contract Year shall be at least [___] % [PROPOSER TO COMPLETE AS APPROPRIATE FOR PROPOSED TECHNOLOGY, BUT SHALL BE NO LESS THAN 85%].

**Annual Feedstock Throughput Guarantee**

The Contractor and Guarantor guarantee that at the Availability Guarantee the E/C Facility shall process [___] tons of Acceptable Feedstock per year. [PROPOSER TO COMPLETE AS APPROPRIATE FOR PROPOSED TECHNOLOGY].

**Electric Generating Guarantee**

For E/C Facilities that generate electricity for sale to the City (including offset of the electric needs of the RWQCP) or export to another utility, the Contractor and Guarantor guarantee that the E/C Facility shall be capable of generating for export, on average, [___] kWh of electricity per ton of as-received Acceptable Feedstock processed. [PROPOSER TO COMPLETE AS APPROPRIATE FOR PROPOSED TECHNOLOGY]

**Annual Electric Output Guarantee**

For E/C Facilities that generate electricity for sale to the City (including offset of the electric needs of the RWQCP) or export to another utility, the Contractor and Guarantor guarantee that the E/C Facility shall deliver annually for sale [___] kWh of electricity. [TO BE COMPLETED BY PROPOSER, AS APPLICABLE, BY MULTIPLYING THE ANNUAL FEEDSTOCK THROUGHPUT GUARANTEE BY THE ELECTRIC GENERATING GUARANTEE.]

**Fuel Generating Guarantee**

For E/C Facilities that generate fuel for sale, the Contractor and Guarantor guarantee that the E/C Facility shall be capable of generating for export, on average, [___] of fuel per ton of as-received Acceptable Feedstock processed. [PROPOSER TO COMPLETE AS APPROPRIATE FOR PROPOSED TECHNOLOGY, SPECIFYING BOTH QUANTITY AND UNITS.]
Annual Fuel Output Guarantee

For E/C Facilities that generate fuel for sale, the Contractor and Guarantor guarantee that the E/C Facility shall deliver annually for sale [___] of fuel. [TO BE COMPLETED BY PROPOSER, AS APPLICABLE, BY MULTIPLYING THE ANNUAL FEEDSTOCK THROUGHPUT GUARANTEE BY THE FUEL GENERATING GUARANTEE, SPECIFYING BOTH QUANTITY AND UNITS.]

Material Recovery Guarantee

For E/C Facilities that recover materials and/or generate products for sale, the Contractor and Guarantor guarantee that the E/C Facility will produce or otherwise recover for sale or beneficial use the following materials and/or products per ton of as-received Acceptable Feedstock processed:

[PROPOSER TO PROVIDE LISTING OF MATERIALS TO BE RECOVERED AND/OR PRODUCTS TO BE GENERATED, SPECIFYING BOTH QUANTITY AND UNITS AT RATED CAPACITY AND AT ANNUAL THROUGHPUT GUARANTEE.]

Diversion Guarantee

The Contractor and Guarantor guarantee that the E/C Facility shall achieve an annual diversion rate of [___]%. The diversion rate shall be calculated annually as the total tons of Acceptable Feedstock processed less the tons of Residue disposed, divided by the tons of Acceptable Feedstock processed. [PROPOSER TO COMPLETE AS APPROPRIATE FOR PROPOSED TECHNOLOGY.]

Environmental Performance Guarantee

The Contractor and Guarantor guarantee that the E/C Facility will be operated and maintained in compliance with Applicable Law and all Environmental Performance Requirements included in the Contract. The Environmental Performance Guarantee shall include noise, odor and other environmental performance requirements as specified in this RFP

Scheduled Acceptance Date Guarantee

The Contractor and Guarantor guarantee the successful completion and Acceptance of the E/C Facility by the Acceptance Date of [__________]. [PROPOSER TO IDENTIFY PROPOSED ACCEPTANCE DATE. ACCEPTANCE DATE TO BE BASED ON SCHEDULE TO PERMIT, DESIGN AND CONSTRUCT THE E/C FACILITY AS PROVIDED BY PROPOSER AND AGREED TO BY THE CITY, BUT SHALL BE NO LATER THAN JANUARY 1, 2019.]
Service Fee Prices

The Contractor and Guarantor shall guarantee the Prices as provided in its Proposal.

_________________________________
Name of Proposer

_________________________________
Name of Authorized Signatory

_________________________________
Signature

_________________________________
Date
PROPOSAL FORM 11

FINANCIAL RESOURCES DATA

(To be completed for Proposer, Guarantor and Major Participating Firms*)

Name of company completing form __________________________

Name of individual completing form __________________________

Signature __________________________

1. Bond/Debt Information

Current bond ratings on two most recent senior debt issues, if applicable.

<table>
<thead>
<tr>
<th>Issue Description</th>
<th>Moody’s Rating</th>
<th>S&amp;P’s Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Issue 2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Financial Indicators

Please complete the following table.

Fiscal Year End: ______________

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2010</td>
<td>2011</td>
<td>2012</td>
</tr>
<tr>
<td>A. Total Revenues</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>B. Net Income</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>C. Total Assets</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>D. Current Assets</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>E. Total Liabilities</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>F. Current Liabilities</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>G. Equity (C-E)</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
</tbody>
</table>

* Major Participating Firms include those whose participation amounts for 15% or more of the Construction Cost or the Annual Operations and Maintenance Cost.
Using the information provided in the table, calculate:

A. Revenue Growth Percentages.

\[
\begin{align*}
2011: & \quad \frac{(A2-A1)}{A1} \quad \% \\
2012: & \quad \frac{(A3-A2)}{A2} \quad \%
\end{align*}
\]

B. Profitability Percentages.

Return on Revenue

\[
\begin{align*}
2010: & \quad \frac{B1}{A1} \quad \% \\
2011: & \quad \frac{B2}{A2} \quad \% \\
2012: & \quad \frac{B3}{A3} \quad \%
\end{align*}
\]

Return on Assets

\[
\begin{align*}
2010: & \quad \frac{B1}{C1} \quad \% \\
2011: & \quad \frac{B2}{C2} \quad \% \\
2012: & \quad \frac{B3}{C3} \quad \%
\end{align*}
\]

C. Net Worth

\[
\begin{align*}
2010: & \quad C1-E1 \quad \$ \\
2011: & \quad C2-E2 \quad \$ \\
2012: & \quad C3-E3 \quad \$
\end{align*}
\]

D. Liquidity Ratio

\[
\begin{align*}
2010: & \quad \frac{D1}{F1} \\
2011: & \quad \frac{D2}{F2} \\
2012: & \quad \frac{D3}{F3}
\end{align*}
\]
APPENDIX B

PRICING PROPOSAL FORMS

Appendix B provides Pricing Proposal Forms (PPFs), as follows:

Part 1 – E/C Facility Pricing Proposal Forms
Part 2 – Export Pricing Proposal Forms
Part 3 – Other Pricing Proposal Forms

In completing the Pricing Proposal Forms, Proposers should note:

1. Proposers for the E/C Facility must complete all Pricing Proposal Forms included in Parts 1 and 3 for the Base Case Proposal (all feedstocks) and required Alternative Proposal (Food Scraps and Yard Trimmings only).

2. For Export, Proposers must complete the Pricing Proposal Forms in Part 2 and Part 3 (Pricing Proposal Form 3.1 only) for the Base Case Proposal (all feedstocks) and the required Alternative Proposal (Food Scraps and Yard Trimmings only).

3. With respect to proposed per ton tipping fees, for Proposal evaluation purposes the City will escalate the tipping fees by the assumed annual escalation rate of 2.50% (see RFP Section 7) from the date of Proposal submission to the Commercial Operation Date (to establish a “Year 1” price), then will escalate the tipping fees each year of the proposed operating period by 2.5% in order to conduct a net present value analysis (see RFP Section 7).

4. Pricing must take into account payments to the City for the Site Lease Payments commencing with project financing.

5. The City expects that the Proposer will include in its Business Proposal (Volume IV) any comments, exceptions or requested modifications regarding the Contract Principles, and shall assume that the Proposer’s pricing in Volume V is based on the Contract Principles, as the Proposer may request to modify. The Proposer shall enumerate the cost impacts of any Contract Principles to which it takes exception and/or offers amendments, alternatives or modifications. Each Pricing Proposal Form must be signed by the party so designated on the form.

6. As stated in Section 7.1 of this RFP, the costs to be incurred by the City in the preparation of the Site and operation of biosolids dewatering equipment, if required by the Proposer (as described in Section 7.1, and enumerated in Appendix C, Table 1), will be calculated and included by the City in the comparative analysis of price Proposals. Proposers are not to include such costs in their Pricing Proposal Forms.

7. In addition to the Proposals provided for on the Pricing Proposal Forms as described above, Proposers may also offer additional alternative E/C Facility and/or Export Proposals for Food Scraps and Biosolids only, Food Scraps only, Yard Trimmings
only or Biosolids only. If such Proposals are offered, Proposers should complete the appropriate Pricing Proposal Forms (for example, PPF 1.1 First Year $/Ton), clearly noting on the form that the prices are for Food Scraps and Biosolids only, Food Scraps only, Yard Trimmings only or Biosolids only, as appropriate.

Proposers are reminded that Volume V: Price and Pricing Proposal Forms shall be submitted with the other Proposal Volumes, but in a separate, sealed, opaque envelope or package. Price and related cost information must not be included in Volumes I, II, III or IV.
APPENDIX B – PART 1
E/C FACILITY PRICING PROPOSAL FORMS
PRICING PROPOSAL FORM 1.1

E/C FACILITY BASE CASE
$/TON PRICES FOR SERVICES
ALL FEEDSTOCKS

The undersigned hereby proposes to furnish the City with Acceptable Feedstock management services (the “Services”) in accordance with the RFP dated February 2013 and the undersigned’s Proposal dated ______ __, 2013, for the prices presented below.

Guaranteed Fixed Prices, expressed in 2013 dollars*:

<table>
<thead>
<tr>
<th>Fee</th>
<th>Food Scraps Proposed Price $/Ton</th>
<th>Yard Trimmings Proposed Price $/Ton</th>
<th>Biosolids Proposed Price $/Ton</th>
<th>If Appropriate, Proposed Combined Price All Feedstocks ($/Ton)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptable Feedstock Tipping Fee</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excess Tonnage Fee</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shortfall Charge</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: For the purposes of Proposal evaluation, the guaranteed prices proposed on this form will be adjusted by the assumed annual inflation rate of 2.50% (see Section 7) up to the Commercial Operation Date to establish Year 1 prices. Then the prices will be adjusted by the assumed annual inflation rate of 2.50% for each year of the proposed operating period.

**Fixed Prices Adjustment(s)**

During the Initial Term of the Contract, each Guaranteed Fixed Price presented above shall be subject to annual adjustment by the Adjustment Factor, as defined and provided for in the Contract, as well as to other adjustments as may be provided for in the Contract.

**Electricity Sale to City – Effect of Changes in Electricity Sale Price**

For each one cent increase in the sale price of electricity above the floor price of $0.077/kWh established by the City in this RFP, each Guaranteed Fixed Price provided above shall be reduced by $____ per ton.

**Electricity Sale to RWQCP – Discounted Sale Price**

If applicable, Proposer proposes to sell electric power directly to the RWQCP at a discount of _____% from the rate provided for in Utility Rate Schedule E-7.
PRICING PROPOSAL FORM 1.1 (CONT.)

Authorized Signature

Company

Date
The undersigned hereby proposes to furnish the City with Acceptable Feedstock management services (the “Services”) in accordance with the RFP dated February 2013 and the undersigned’s Proposal dated ________, 2013, for the prices presented below.

Guaranteed Fixed Prices, expressed in 2013 dollars*:

<table>
<thead>
<tr>
<th>Fee</th>
<th>Food Scraps Proposed Price ($/Ton)</th>
<th>Yard Trimmings Proposed Price ($/Ton)</th>
<th>If Appropriate, Proposed Combined Price ($/Ton)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptable Feedstock Tipping Fee</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excess Tonnage Fee</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shortfall Charge</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: For the purposes of Proposal evaluation, the guaranteed prices proposed on this form will be adjusted by the assumed annual inflation rate of 2.50% (see Section 7) up to the Commercial Operation Date to establish Year 1 prices. Then the prices will be adjusted by the assumed annual inflation rate of 2.50% for each year of the proposed operating period.

**Fixed Prices Adjustment(s)**

During the Initial Term of the Contract, each Guaranteed Fixed Price presented above shall be subject to annual adjustment by the Adjustment Factor, as defined and provided for in the Contract, as well as to other adjustments as may be provided for in the Contract.

**Electricity Sale to City - - Effect of Changes in Electricity Sale Price**

For each one cent increase in the sale price of electricity above the floor price of $0.077/kWh established by the City in this RFP, each Guaranteed Fixed Price provided above shall be reduced by $____ per ton.

**Electricity Sale to RWQCP - - Discounted Sale Price**

If applicable, Proposer proposes to sell electric power directly to the RWQCP at a discount of ____% from the rate provided for in Utility Rate Schedule E-7.
PRICING PROPOSAL FORM 1.2 (CONT.)

___________________________________________
Authorized Signature

___________________________________________
Company

___________________________________________
Date
## ESTIMATED E/C FACILITY DEVELOPMENT COST
### ALL FEEDSTOCKS

### Estimated E/C Facility Development Cost

The Estimated E/C Facility Development Cost, expressed in 2013 dollars, is as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permitting</td>
<td></td>
</tr>
<tr>
<td>Design</td>
<td></td>
</tr>
<tr>
<td><strong>Construction</strong></td>
<td></td>
</tr>
<tr>
<td>a) Site Improvements and Preparation</td>
<td></td>
</tr>
<tr>
<td>b) Buildings</td>
<td></td>
</tr>
<tr>
<td>c) Foundations</td>
<td></td>
</tr>
<tr>
<td>d) Pre-Processing Equipment</td>
<td></td>
</tr>
<tr>
<td>e) Processing Equipment (list major systems separately):</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
</tr>
<tr>
<td>4. Other</td>
<td></td>
</tr>
<tr>
<td>f) Product Handling Equipment</td>
<td></td>
</tr>
<tr>
<td>g) Residue Handling Equipment</td>
<td></td>
</tr>
<tr>
<td>h) Biogas/Syngas Clean-Up Equipment</td>
<td></td>
</tr>
<tr>
<td>i) Power/Fuel Generating Equipment</td>
<td></td>
</tr>
<tr>
<td>j) Air Pollution Control Equipment</td>
<td></td>
</tr>
<tr>
<td>k) Odor Control Equipment</td>
<td></td>
</tr>
<tr>
<td>l) Control and Monitoring Equipment</td>
<td></td>
</tr>
<tr>
<td>m) Vehicles</td>
<td></td>
</tr>
<tr>
<td>n) Other</td>
<td></td>
</tr>
<tr>
<td><strong>Start-Up and Acceptance</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Other Contractor Costs (please describe)</strong></td>
<td></td>
</tr>
<tr>
<td>a) Interconnection Construction⁽¹⁾</td>
<td>$100,000</td>
</tr>
<tr>
<td>b) Other</td>
<td></td>
</tr>
<tr>
<td>Component</td>
<td>Cost</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Contingency</td>
<td></td>
</tr>
</tbody>
</table>

**Total Estimated Cost**

(1) Provides an allowance of $100,000 as part of E/C Facility Development Cost for Interconnection Construction, should the Facility generate electricity for sale.

__________________________________________________________
Authorized Signature

__________________________________________________________
Company

__________________________________________________________
Date
Estimated E/C Facility Development Cost

The Estimated E/C Facility Development Cost, expressed in 2013 dollars, is as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permitting</td>
<td></td>
</tr>
<tr>
<td>Design</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td></td>
</tr>
<tr>
<td>a) Site Improvements and Preparation</td>
<td></td>
</tr>
<tr>
<td>b) Buildings</td>
<td></td>
</tr>
<tr>
<td>c) Foundations</td>
<td></td>
</tr>
<tr>
<td>d) Pre-Processing Equipment</td>
<td></td>
</tr>
<tr>
<td>e) Processing Equipment (list major systems separately):</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
</tr>
<tr>
<td>4. Other</td>
<td></td>
</tr>
<tr>
<td>f) Product Handling Equipment</td>
<td></td>
</tr>
<tr>
<td>g) Residue Handling Equipment</td>
<td></td>
</tr>
<tr>
<td>h) Biogas/Syngas Clean-Up Equipment</td>
<td></td>
</tr>
<tr>
<td>i) Power/Fuel Generating Equipment</td>
<td></td>
</tr>
<tr>
<td>j) Air Pollution Control Equipment</td>
<td></td>
</tr>
<tr>
<td>k) Odor Control Equipment</td>
<td></td>
</tr>
<tr>
<td>l) Control and Monitoring Equipment</td>
<td></td>
</tr>
<tr>
<td>m) Vehicles</td>
<td></td>
</tr>
<tr>
<td>n) Other</td>
<td></td>
</tr>
<tr>
<td>Start-Up and Acceptance</td>
<td></td>
</tr>
<tr>
<td>Other Contractor Costs (please describe)</td>
<td></td>
</tr>
<tr>
<td>a) Interconnection Construction^{(1)}</td>
<td>$100,000</td>
</tr>
<tr>
<td>b) Other</td>
<td></td>
</tr>
</tbody>
</table>
**PRICING PROPOSAL FORM 1.4 (CONT.)**

<table>
<thead>
<tr>
<th>Component</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contingency</td>
<td></td>
</tr>
<tr>
<td><strong>Total Estimated Cost</strong></td>
<td></td>
</tr>
</tbody>
</table>

(1) Provides an allowance of $100,000 as part of E/C Facility Development Cost for Interconnection Construction, should the Facility generate electricity for sale.

___________________________
Authorized Signature

___________________________
Company

___________________________
Date
Estimated Annual O&M Cost for E/C Facility

The following presents the Estimated Annual O&M Costs, expressed in 2013 dollars:

<table>
<thead>
<tr>
<th>Cost Component</th>
<th>Annual Cost ($/Year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor</td>
<td></td>
</tr>
<tr>
<td>Utilities (1)</td>
<td></td>
</tr>
<tr>
<td>Chemicals</td>
<td></td>
</tr>
<tr>
<td>Fuel</td>
<td></td>
</tr>
<tr>
<td>Supplies</td>
<td></td>
</tr>
<tr>
<td>Standby Electric Power Charge</td>
<td></td>
</tr>
<tr>
<td>Laboratory &amp; Other Contract Services</td>
<td></td>
</tr>
<tr>
<td>Residuals Transportation &amp; Disposal</td>
<td></td>
</tr>
<tr>
<td>Insurance</td>
<td></td>
</tr>
<tr>
<td>Routine Maintenance &amp; Repair</td>
<td></td>
</tr>
<tr>
<td>Capital Repair &amp; Replacement</td>
<td></td>
</tr>
<tr>
<td>Annual Site Rent Payment</td>
<td></td>
</tr>
<tr>
<td>Other Costs (please describe)</td>
<td></td>
</tr>
<tr>
<td>Contingency</td>
<td></td>
</tr>
<tr>
<td><strong>Total Estimated O&amp;M Cost</strong></td>
<td></td>
</tr>
</tbody>
</table>

(1) As applicable, the cost of utilities shall include ammonia treatment at the RWQCP at $0.57/pound.

Guaranteed Utility Consumption

The following presents the Proposer’s guaranteed annual consumption of City-provided utilities:

Water consumption: _______ MGY
Wastewater generation: _____ MGY
Power Consumption: _______ kWh/year
Natural Gas Consumption: _________ MMBtu/year
## PRICING PROPOSAL FORM 1.6

### ESTIMATED OPERATING & MAINTENANCE COSTS

**E/C FACILITY FOOD SCRAPS, YARD TRIMMINGS ONLY**

### Estimated Annual O&M Cost for E/C Facility

The following presents the Estimated Annual O&M Costs, expressed in 2013 dollars:

<table>
<thead>
<tr>
<th>Cost Component</th>
<th>Annual Cost ($/Year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor</td>
<td></td>
</tr>
<tr>
<td>Utilities (1)</td>
<td></td>
</tr>
<tr>
<td>Chemicals</td>
<td></td>
</tr>
<tr>
<td>Fuel</td>
<td></td>
</tr>
<tr>
<td>Supplies</td>
<td></td>
</tr>
<tr>
<td>Standby Electric Power Charge</td>
<td></td>
</tr>
<tr>
<td>Laboratory &amp; Other Contract Services</td>
<td></td>
</tr>
<tr>
<td>Residuals Transportation &amp; Disposal</td>
<td></td>
</tr>
<tr>
<td>Insurance</td>
<td></td>
</tr>
<tr>
<td>Routine Maintenance &amp; Repair</td>
<td></td>
</tr>
<tr>
<td>Capital Repair &amp; Replacement</td>
<td></td>
</tr>
<tr>
<td>Annual Site Rent Payment</td>
<td></td>
</tr>
<tr>
<td>Other Costs (please describe)</td>
<td></td>
</tr>
<tr>
<td>Contingency</td>
<td></td>
</tr>
<tr>
<td><strong>Total Estimated O&amp;M Cost</strong></td>
<td></td>
</tr>
</tbody>
</table>

(1) As applicable, the cost of utilities shall include ammonia treatment at the RWQCP at $0.57/pound.

### Guaranteed Utility Consumption

The following presents the Proposer’s guaranteed annual consumption of City-provided utilities:

- Water consumption: _______ MGY
- Wastewater generation: _______ MGY
- Power Consumption: _______ kWh/year
- Natural Gas Consumption: _______ MMBtu/year
Authorized Signature

Company

Date
APPENDIX B – PART 2
EXPORT PRICING PROPOSAL FORMS
The undersigned hereby proposes to furnish the City with Acceptable Feedstock management services (the “Services”) in accordance with the RFP dated February 2013 and the undersigned’s Proposal dated _______, 2013, for the prices presented below.

Guaranteed Fixed Prices, expressed in 2013 dollars*:

<table>
<thead>
<tr>
<th>Fee</th>
<th>Separate Individual Feedstock Pricing</th>
<th>Combined Pricing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Scraps Proposed Price ($/Ton)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yard Trimmings Proposed Price ($/Ton)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biosolids Proposed Price ($/Ton)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: For the purposes of Proposal evaluation, the guaranteed prices proposed on this form will be adjusted by the assumed annual inflation rate of 2.50% (see Section 7) up to the Commercial Operation Date to establish Year 1 prices, and then for each year of the proposed operating period.

**Fixed Prices Adjustment(s)**

During the Initial Term of the Contract, each Guaranteed Fixed Price presented above shall be subject to annual adjustment by the Adjustment Factor, as defined and provided for in the Contract, as well as to other adjustments as may be provided for in the Contract.

______________________________
Authorized Signature

______________________________
Company

______________________________
Date
**PRICING PROPOSAL FORM 2.2**

**EXPORT PROPOSAL**

**FOOD SCRAPS, YARD TRIMMINGS ONLY**

**FIRST YEAR $/TON PRICES FOR SERVICES**

The undersigned hereby proposes to furnish the City with Acceptable Feedstock management services (the “Services”) in accordance with the RFP dated February 2013 and the undersigned’s Proposal dated ________, 2013, for the prices presented below.

Guaranteed Fixed Prices, expressed in 2013 dollars*:

<table>
<thead>
<tr>
<th>Fee</th>
<th>Food Scraps Proposed Price ($/Ton)</th>
<th>Yard Trimmings Proposed Price ($/Ton)</th>
<th>If Appropriate, Combined Proposed Price ($/Ton)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptable Feedstock Tipping Fee</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excess Tonnage Fee</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shortfall Fee</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: For the purposes of Proposal evaluation, the guaranteed prices proposed on this form will be adjusted by the assumed annual inflation rate of 2.50% (see Section 7) up to the Commercial Operation Date to establish Year 1 prices, and then for each year of the proposed operating period.

**Fixed Prices Adjustment(s)**

During the Initial Term of the Contract, each Guaranteed Fixed Price presented above shall be subject to annual adjustment by the Adjustment Factor, as defined and provided for in the Contract, as well as to other adjustments as may be provided for in the Contract.

Authorized Signature

Company

Date
APPENDIX B – PART 3
OTHER PRICING PROPOSAL FORMS


**PRICING PROPOSAL FORM 3.1**

**ESTIMATED ANNUAL PRODUCT REVENUES – 2013**

**(ALL PROPOSALS)**

**Products & Materials for Sale**

<table>
<thead>
<tr>
<th>Material</th>
<th>Percent of Incoming Feedstock</th>
<th>Annual Quantity (Tons)</th>
<th>Sale Price per Ton</th>
<th>Transportation Cost per Ton</th>
<th>Annual Revenues (Net of Transportation)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Electricity for Sale**

<table>
<thead>
<tr>
<th>Annual Amount (kWh)</th>
<th>Sale Price per Unit</th>
<th>Wheeling Cost per Unit</th>
<th>Annual Revenues (Net of Wheeling Cost)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Fuels for Sale**

<table>
<thead>
<tr>
<th></th>
<th>Annual Amount (1)</th>
<th>Sale Price per Unit</th>
<th>Transportation Cost per Unit</th>
<th>Annual Revenues (Net of Transportation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid Fuels</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gaseous Fuels</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(1) Annual amount expressed in applicable units (e.g., gallons, MMBTU, other)

Authorized Signature

______________________________

Company

______________________________

Date
PRICING PROPOSAL FORM 3.2

SPOT MARKET HOST COMMUNITY PAYMENT
E/C FACILITY ONLY

The Contractor shall pay the City a Host Community Payment of $_________ [to be proposed by Proposer] per ton, adjusted annually by the Adjustment Factor, for Spot Market Feedstock delivered to the E/C Facility, except for Spot Market Feedstock that is used by the City to meet its aggregate Minimum Annual Delivery Requirements or Periodic Delivery Reset shortfalls.

Authorized Signature

Company

Date
# PRICING PROPOSAL FORM 3.3

## ESTIMATED COST FOR E/C FACILITY REMOVAL AND RESTORATION OF THE SITE(S)

**(E/C FACILITY ONLY)**

*(Complete Form as Appropriate)*

<table>
<thead>
<tr>
<th>Site</th>
<th>Estimated Cost for Facility Removal and Restoration as of the Acceptance Date</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RWQCP Site</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Estimated Cost for Facility Removal and Restoration of the RWQCP Site as of the Acceptance Date</td>
</tr>
<tr>
<td></td>
<td>$_________________________</td>
</tr>
<tr>
<td><strong>City Landfill Site</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Estimated Cost for Facility Removal and Restoration of the City Landfill Site as of the Acceptance Date</td>
</tr>
<tr>
<td>Facility: (Proposer to Specify)</td>
<td>$______________</td>
</tr>
<tr>
<td>Facility: (Proposer to Specify)</td>
<td>$______________</td>
</tr>
<tr>
<td>Facility: (Proposer to Specify)</td>
<td>$______________</td>
</tr>
<tr>
<td><strong>Both Sites</strong></td>
<td></td>
</tr>
<tr>
<td>Both Sites</td>
<td>Total Estimated Cost for Removal of all Facilities and Restoration of Both Sites as of the Acceptance Date</td>
</tr>
<tr>
<td></td>
<td>$_________________________</td>
</tr>
</tbody>
</table>

---

** Authorized Signature **

** Company **

** Date **
APPENDIX C

LANDFILL SITE INFORMATION

Figures

Figure 1: Location of Landfill Maintenance Facility on Landfill Site

Figure 2: Alternative Final Cover Grading Plan, 10-acre Development Area

Figure 3: Alternative Final Cover Grading Plan, 7-acre Development Area

Figure 4: Revised Final Cover Grading Plan, 5.4-acre Development Area

Figure 5: Revised Final Cover Grading Plan, 3.8-acre Development Area

Figure 6: Generic Cross Section of Final Cover Grading Plan

Tables

Table 1: Cost Estimates for Site Access, Utilities and Preparation of Site Pad

Other Landfill Site Information

Landfill Gas Projections

March 15, 1989 Geotechnical Investigation - BSK & Associates

Figure 1. Location of Landfill Maintenance Facility on Landfill Site
Figure 2. Alternative Final Cover Grading Plan for 10-Acre Development Area

1. BASED ON MERGED SURFACE OF MAY, 3 2010 TOPOGRAPHY AND 2009 FINAL GRADING PLAN.
2. ADDITIONAL REFUSE DISPOSAL ABOVE 2009 FINAL GRADING PLAN IS APPROXIMATELY 245,700 CY.

LEGEND
- --- LIMIT OF LANDFILL
- --- LIMIT OF PROPOSED BUILDING PAD
- --- FINAL COVER GRADING
- --- MERGED TOPOGRAPHY (NOTE 1)

NOTES
1. APPROXIMATE AREA OF BUILDING PAD LOCATED OVER LANDFILL COVER GRADES HIGHER THAN 2009 FINAL GRADING PLAN.
2. ADDITIONAL REFUSE DISPOSAL ABOVE 2009 FINAL GRADING PLAN IS APPROXIMATELY 245,700 CY.
Figure 3. Alternative Final Cover Grading Plan for 7-Acre Development Area

**LEGEND**
- LIMIT OF LANDFILL
- LIMIT OF PROPOSED BUILDING PAD
- 100'-OE TERT COVER GRADING
- MERGED TOPOGRAPHY (NOTE 1)
- APPROXIMATE AREA OF BUILDING PAD LOCATED OVER LANDFILL COVER GRADES HIGHER THAN 2009 FINAL GRADING PLAN

**NOTES**
1. BASED ON MERGED SURFACE OF MAY 3, 2010 TOPOGRAPHY AND 2009 FINAL GRADING PLAN.
2. ADDITIONAL REFUSE DISPOSAL ABOVE 2009 FINAL GRADING PLAN IS APPROXIMATELY 70,000 CY.
Figure 4. Revised Final Cover Grading Plan for 5.4-Acre Development Area

<table>
<thead>
<tr>
<th>Grading Item</th>
<th>Excavation Vol. (cy)</th>
<th>Fill Vol. (cy)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume difference between top of soil and mapped surface of 2009 topography and 2009 permitted cover grades.</td>
<td>18,150</td>
<td>22,150</td>
<td>Includes over-excavation for retaining wall. Does not include over-excavation of pad floor. Assumes 52,895 cu yd refuse and 5,360 cu yd cover.</td>
</tr>
<tr>
<td>Pad floor over-excavation</td>
<td>10,000</td>
<td>10,000</td>
<td>Assumes 4 foot over-excavation of refuse and landfill with soil to establish working surface.</td>
</tr>
<tr>
<td>Total waste excavation</td>
<td>22,150</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Total soil import</td>
<td>—</td>
<td>32,150</td>
<td>—</td>
</tr>
</tbody>
</table>

**NOTES**

2. Additional refuse disposal above 2009 Final Grading Plan is approximately 33,300 cy.
Figure 5. Revised Final Cover Grading Plan for 3.8-Acre Development Area
Figure 6. Generic Cross Section of Final Cover Grading Plan

WATER QUALITY CONTROL PLANT

Palo Alto Landfill Border

Proposed design to add lost fill volume.

Existing buried refuse within proposed area

Proposed surface

Retaining wall

4' overexcavation of existing refuse. Backfill with engineered fill

NOT TO SCALE
Table 1. Palo Alto Energy/Compost Facility Site Preparation Costs

<table>
<thead>
<tr>
<th>Task</th>
<th>Unit Price</th>
<th>10 Acre Pad</th>
<th>7 Acre Pad</th>
<th>5.4 Acre Pad</th>
<th>3.8 Acre Pad</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Quantity</td>
<td>Quantity</td>
<td>Quantity</td>
<td>Quantity</td>
</tr>
<tr>
<td>Environmental Impact Report</td>
<td>$500,000</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Design and Permits (pad only)</td>
<td>$250,000</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Excavation and onsite re-grading of the refuse</td>
<td>$5.84</td>
<td>242,850</td>
<td>68,500</td>
<td>22,450</td>
<td>0</td>
</tr>
<tr>
<td>Engineered backfill of pad. Import and compact</td>
<td>$20.48</td>
<td>64,533</td>
<td>45,173</td>
<td>34,848</td>
<td>24,523</td>
</tr>
<tr>
<td>retaining 4 feet of backfill required per</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feasibility Study.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retaining wall at $75 per sf</td>
<td>$75.00</td>
<td>18,300</td>
<td>10,100</td>
<td>3,750</td>
<td>0</td>
</tr>
<tr>
<td>New Road</td>
<td>$309,300</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Utilities</td>
<td>$150,000</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
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Landfill Gas Projections
Palo Alto Utilities Marketing Services (Palo Alto) has requested the assistance of SCS Engineers (SCS) in estimating future landfill gas (LFG) generation and recovery rates for the Palo Alto Landfill (Site) through 2042. To estimate these rates, SCS used its existing LFG generation modeling for the Site, waste placement information through 2011 provided by Palo Alto, and LFG collection rates determined during greenhouse gas (GHG) inventories for the Site.

**LFG GENERATION ESTIMATION**

To project LFG recovery rates into the future, a first-order decay model similar to the Environmental Protection Agency's (EPA's) LFG Emission Model (LandGEM) was used. Previous modeling was not done for the purpose of estimating recoverable LFG and used regulatory default modeling values for the methane generation potential ($L_0$) and the decay rate constant ($k$). To provide a better estimate of the methane generation and recovery, SCS adjusted these values based on LFG recovery data from 2005-2011.

The LFG recovery percentage had previously been estimated as 85 percent by SCS using the methodology proposed by the Solid Waste Industry for Climate Solutions (SWICS) for purposes of GHG inventories. SCS believes that this collection rate is appropriate for use while the landfill was active through 2010. This collection rate is also appropriate for 2011 because the final cap has not yet been constructed. SCS estimates that future LFG recovery will increase to 95 percent after the landfill closure as the LFG collection and control system (GCCS) was expanded, and once the final cover will be extended over the site in 2013.

The recovered LFG has averaged 40 percent methane during the period from 2005-2011. The methane concentration of LFG can be highly variable and is dependent on the way the GCCS is operated.

The modeled methane generation and recovery rates are shown in attached Table 1.

If you have any questions about these estimates or how they were calculated, please contact either of the undersigned at (562) 426-9544.
Sincerely,

James Kim  
Staff Scientist  
SCS ENGINEERS

Gabrielle F. Stephens  
Senior Project Professional  
SCS ENGINEERS

Enclosures
Table 1 – Detailed Calculations

cc: Patrick S. Sullivan, SCS Engineers (w/enclosure)  
    Arthur Jones, SCS Field Services (w/enclosure)
ATTACHMENT A
PROJECTED LFG GENERATION AND RECOVERY
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<td>0</td>
<td>4,855,851</td>
<td>0</td>
<td>4,405,154</td>
<td>157</td>
<td>94</td>
<td>180</td>
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<tr>
<td>2039</td>
<td>0</td>
<td>4,855,851</td>
<td>0</td>
<td>4,405,154</td>
<td>155</td>
<td>92</td>
<td>178</td>
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<tr>
<td>2040</td>
<td>0</td>
<td>4,855,851</td>
<td>0</td>
<td>4,405,154</td>
<td>152</td>
<td>90</td>
<td>176</td>
</tr>
<tr>
<td>2041</td>
<td>0</td>
<td>4,855,851</td>
<td>0</td>
<td>4,405,154</td>
<td>149</td>
<td>88</td>
<td>174</td>
</tr>
<tr>
<td>2042</td>
<td>0</td>
<td>4,855,851</td>
<td>0</td>
<td>4,405,154</td>
<td>146</td>
<td>86</td>
<td>172</td>
</tr>
</tbody>
</table>

Bold values indicate measured recovery data. Methane Content of LFG Adjusted to: 50%
Selected Decay Rate Constant (k): 0.020
Selected Ultimate Methane Recovery Rate (Lo): 0.40 m³/Mg eq. ton

C-14
Figure 1. LFG Generation Projection
Palo Alto Landfill, California

<table>
<thead>
<tr>
<th>Year</th>
<th>Calculated Generation (Methane)</th>
<th>Projected Generation (Methane)</th>
<th>Actual Generation (Methane)</th>
<th>Actual Recovery Methane %</th>
<th>Calculated Actual Recovery (Methane)</th>
<th>Projected Actual Recovery (Methane)</th>
<th>Actual Recovery (Methane)</th>
<th>Projected Actual Recovery (Methane)</th>
<th>Actual Actual Recovery (Methane)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>368</td>
<td>265</td>
<td>272</td>
<td>41.9%</td>
<td>285</td>
<td>227.94</td>
<td>227.94</td>
<td>227.94</td>
<td>227.94</td>
</tr>
<tr>
<td>2006</td>
<td>206</td>
<td>262</td>
<td>214</td>
<td>41.0%</td>
<td>219</td>
<td>175.48</td>
<td>175.48</td>
<td>175.48</td>
<td>175.48</td>
</tr>
<tr>
<td>2007</td>
<td>245</td>
<td>309</td>
<td>304</td>
<td>34.2%</td>
<td>260</td>
<td>207.94</td>
<td>207.94</td>
<td>207.94</td>
<td>207.94</td>
</tr>
<tr>
<td>2008</td>
<td>278</td>
<td>356</td>
<td>300</td>
<td>39.4%</td>
<td>296</td>
<td>236.40</td>
<td>236.40</td>
<td>236.40</td>
<td>236.40</td>
</tr>
<tr>
<td>2009</td>
<td>279</td>
<td>252</td>
<td>292</td>
<td>39.36%</td>
<td>287</td>
<td>229.86</td>
<td>229.86</td>
<td>229.86</td>
<td>229.86</td>
</tr>
<tr>
<td>2010</td>
<td>229</td>
<td>248</td>
<td>233</td>
<td>41.80%</td>
<td>243</td>
<td>194.79</td>
<td>194.79</td>
<td>194.79</td>
<td>194.79</td>
</tr>
<tr>
<td>2011</td>
<td>320</td>
<td>243</td>
<td>320</td>
<td>42.50%</td>
<td>340</td>
<td>271.78</td>
<td>271.78</td>
<td>271.78</td>
<td>271.78</td>
</tr>
<tr>
<td>Average</td>
<td>260</td>
<td>255</td>
<td>40.0%</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Assumes 85% collection efficiency from 2005-2011
Geotechnical Investigation
BSK & Associates
March 15, 1989

[ARI TO INSERT REPORT WITH FINAL RFP BEFORE DISTRIBUTION TO PROPOSERS]
APPENDIX D

RWQCP SITE INFORMATION, RWQCP ENERGY NEEDS

Figure 1: RWQCP Long Range Facilities Plan Recommended Long Term Footprint

Figure 2: RWQCP Long Range Facility Plan (LRFP) Recommended Long Term Footprint (0.52 acres)

Figure 3: RWQCP Site Plan showing 1.1 acre-Footprint (after demolition of Incinerator and Air Pollution Control Equipment)

Table 1: Palo Alto RWQCP Energy Use: 2004 – 2011
Note: The RWQCP Site for the E/C Facility, as defined by this RFP, is within the brown area labeled “Solids”.

D-2
Figure 2
RWQCP Long Range Facility Plan (LRFP) Recommended Long Term Footprint
(0.52 acres)
Figure 3
RWQCP Site Plan showing 1.1 acre Footprint
(after demolition of Incinerator and Air Pollution Control Equipment)
Table 1
Palo Alto RWQCP Energy Use 2004 – 2011

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity Use, kWh</td>
<td>17,554,400</td>
<td>17,424,400</td>
<td>17,814,400</td>
<td>17,786,400</td>
</tr>
<tr>
<td>Natural Gas Use (therms)</td>
<td>705,588</td>
<td>696,074</td>
<td>250,233</td>
<td>511,065</td>
</tr>
<tr>
<td>Landfill Gas Use (therms)</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>2008</td>
<td>2009</td>
<td>2010</td>
<td>2011</td>
</tr>
<tr>
<td>Electricity Use, kWh</td>
<td>17,597,800</td>
<td>15,156,107</td>
<td>15,168,209</td>
<td>16,310,202</td>
</tr>
<tr>
<td>Natural Gas Use (therms)</td>
<td>555,561</td>
<td>454,631</td>
<td>585,863</td>
<td>382,289</td>
</tr>
<tr>
<td>Landfill Gas Use (therms)</td>
<td>286,432</td>
<td>213,726</td>
<td>204,539</td>
<td>204,864</td>
</tr>
</tbody>
</table>

APPENDIX E

QUANTITY AND CHARACTERISTICS OF CITY FOOD SCRAPS, YARD TRIMMINGS AND BIOSOLIDS

Table 1: Palo Alto FY2012 Estimate of Yard Trimmings and Food Scraps (TPY)
Table 2: Palo Alto Organic Waste Estimates
Table 3: Palo Alto RWQCP Sludge Loadings: 2010 – 2050
Table 4: Palo Alto Biosolids Percent Volatile Solids
Table 5: Palo Alto Biosolids Cake Metals
Table 1
Palo Alto FY2012 Estimate of Yard Trimmings and Food Scraps (TPY)

<table>
<thead>
<tr>
<th>Source/Tons</th>
<th>July-12</th>
<th>August-12</th>
<th>September-12</th>
<th>October-12</th>
<th>November-12</th>
<th>December-12</th>
<th>January-12</th>
<th>February-12</th>
<th>March-12</th>
<th>April-12</th>
<th>May-12</th>
<th>June-12</th>
<th>Annual Estimate (TPY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Controlled (Yard Trimmings, Leaves)</td>
<td>NA</td>
<td>927</td>
<td>1,047</td>
<td>1,218</td>
<td>1,548</td>
<td>1,807</td>
<td>1,347</td>
<td>1,881</td>
<td>1,615</td>
<td>1,065</td>
<td>1,032</td>
<td>1,347</td>
<td>2,476</td>
</tr>
<tr>
<td>City Crews &amp; Contractors (Yard Trimmings, Leaves)</td>
<td>102</td>
<td>102</td>
<td>102</td>
<td>102</td>
<td>102</td>
<td>102</td>
<td>102</td>
<td>102</td>
<td>102</td>
<td>102</td>
<td>102</td>
<td>102</td>
<td>313</td>
</tr>
<tr>
<td>Residential (Yard Trimmings) collected by Direct Waste</td>
<td>873</td>
<td>983</td>
<td>1,057</td>
<td>1,036</td>
<td>1,292</td>
<td>1,365</td>
<td>1,185</td>
<td>818</td>
<td>818</td>
<td>1,233</td>
<td>1,158</td>
<td>836</td>
<td>23,780</td>
</tr>
<tr>
<td>Yard Trim-Trimmings, Leaves)</td>
<td>899</td>
<td>1,000</td>
<td>2,204</td>
<td>2,364</td>
<td>2,722</td>
<td>3,136</td>
<td>3,362</td>
<td>3,878</td>
<td>1,973</td>
<td>2,664</td>
<td>2,664</td>
<td>2,664</td>
<td>23,780</td>
</tr>
<tr>
<td>Commercial (Yard Trimmings &amp; Food Scraps)</td>
<td>866</td>
<td>888</td>
<td>1,033</td>
<td>1,038</td>
<td>892</td>
<td>1,024</td>
<td>944</td>
<td>891</td>
<td>894</td>
<td>973</td>
<td>973</td>
<td>973</td>
<td>11,947</td>
</tr>
<tr>
<td>Residential (Food Scraps)</td>
<td>1,862</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,862</td>
</tr>
<tr>
<td>Total Compostable Materials</td>
<td>39,691</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>39,691</td>
</tr>
</tbody>
</table>

Notes:
1 City Controlled (Yard Trimmings) = City Crews, City Contractors, (Residential Compost Collection) taken to Palo Alto Composting Facility.
2 Tree trimmers & Street sweepers.
Unit = Tons
NA = Not Applicable
TPY = Tons Per Year
Table 2

Palo Alto Organic Waste Estimates\(^{(1)}\)

<table>
<thead>
<tr>
<th>Type of Feedstock</th>
<th>High Range (TPY)</th>
<th>Low Range (TPY)</th>
<th>Likely (TPY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Organics(^{(2)})</td>
<td>12,000</td>
<td>11,000</td>
<td>11,500</td>
</tr>
<tr>
<td>Residential Expanded Organics(^{(3)})</td>
<td>3,500</td>
<td>1,100</td>
<td>2,300</td>
</tr>
<tr>
<td>Yard Trimmings(^{(4)})</td>
<td>12,300</td>
<td>12,300</td>
<td>12,300</td>
</tr>
<tr>
<td>City Sweeper and Tree Waste(^{(5)})</td>
<td>2,000</td>
<td>1,200</td>
<td>1,725</td>
</tr>
<tr>
<td>Subtotal</td>
<td>29,800</td>
<td>25,600</td>
<td>27,825</td>
</tr>
<tr>
<td><strong>Total Estimate of Organic Waste for RFP Purposes(^{(6)})</strong></td>
<td><strong>30,000</strong></td>
<td><strong>25,000</strong></td>
<td><strong>27,500</strong></td>
</tr>
</tbody>
</table>

1. Provided for informational purposes only.

2. In FY12, the City collected approximately 11,700 tpy of combined organics from the commercial sector, which included Food scraps, compostable paper and Yard Trimmings.

3. Based on the last waste characterization survey, the City estimates that there are approximately 5,800 tpy of residual organics remaining in the residential garbage, including Food Scraps, compostable paper, some Yard Trimmings and other compostables. The "Likely" estimate assumes approximately 40% recovery of the residual organics in the residential garbage (mainly food scraps). The "Low Range" estimate assumes approximately 20% recovery, and the "High Range" estimate assumes approximately 40% recovery.

4. Yard trimmings collected curbside by GreenWaste, which were approximately 12,300 tpy in FY12.

5. In Calendar Year 2011, the City delivered an additional 2,300 tpy of yard trimmings to SMaRT, consisting of sweeper loads (mostly leaves) and tree debris. The "Likely" estimate assumes approximately 75% of that amount will be Acceptable Feedstock, with the remainder consisting of dirty sweeper loads and large tree rounds. The "Low Range" estimate assumes slightly more than 50% will be Acceptable Feedstock, and the "High Range" estimate assumes closer to 90% will be Acceptable Feedstock.

6. The City's estimate of organic waste is expected to remain flat for the Term of the Contract. Although population will increase, the City assumes that Yard Trimmings will decline with conservation landscaping and Food Scraps will decline with food rescue programs.
### Table 3
#### Palo Alto RWQCP Sludge Loadings (2010 – 2050)

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
<th>2040</th>
<th>2045</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average dry weather flow</td>
<td>MGD</td>
<td>21.9</td>
<td>24.2</td>
<td>25.4</td>
<td>26.4</td>
<td>27.8</td>
<td>28.8</td>
<td>29.8</td>
<td>30.7</td>
</tr>
<tr>
<td>Average Annual Flow</td>
<td>MGD</td>
<td>23.2</td>
<td>25.7</td>
<td>27.0</td>
<td>28.0</td>
<td>29.5</td>
<td>30.5</td>
<td>31.6</td>
<td>32.6</td>
</tr>
<tr>
<td>Flow</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dry solids to process</td>
<td>DTPD</td>
<td>20.8</td>
<td>23</td>
<td>24.1</td>
<td>25.0</td>
<td>26.3</td>
<td>27.2</td>
<td>28.1</td>
<td>29.0</td>
</tr>
<tr>
<td>Wet Weight at 26% solids (Note 1)</td>
<td>WTPD</td>
<td>80.0</td>
<td>88.5</td>
<td>92.7</td>
<td>96.2</td>
<td>101.2</td>
<td>104.6</td>
<td>108.1</td>
<td>111.5</td>
</tr>
<tr>
<td>Wet Weight at 26% solids (Note 1)</td>
<td>WTPY</td>
<td>29,200</td>
<td>32,288</td>
<td>33,833</td>
<td>35,096</td>
<td>36,921</td>
<td>38,185</td>
<td>39,448</td>
<td>40,712</td>
</tr>
<tr>
<td>Undewatered at 3.3% solids (Note 2)</td>
<td>GPD</td>
<td>148,188</td>
<td>163,862</td>
<td>171,699</td>
<td>178,111</td>
<td>187,372</td>
<td>193,784</td>
<td>200,196</td>
<td>206,608</td>
</tr>
<tr>
<td>Undewatered at 3.3% solids (Note 2)</td>
<td>MGPY</td>
<td>54.09</td>
<td>59.81</td>
<td>62.67</td>
<td>65.01</td>
<td>68.39</td>
<td>70.73</td>
<td>73.07</td>
<td>75.41</td>
</tr>
<tr>
<td>Max Month Flow</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flow</td>
<td>MGD</td>
<td>24.5</td>
<td>29.2</td>
<td>30.7</td>
<td>31.9</td>
<td>33.6</td>
<td>34.7</td>
<td>35.9</td>
<td>37.1</td>
</tr>
<tr>
<td>Dry solids to process</td>
<td>DTPD</td>
<td>22</td>
<td>26</td>
<td>27</td>
<td>28</td>
<td>30</td>
<td>31</td>
<td>32</td>
<td>33</td>
</tr>
<tr>
<td>Wet Weight at 26% solids (Note 1)</td>
<td>WTPD</td>
<td>84.6</td>
<td>100.0</td>
<td>103.8</td>
<td>107.7</td>
<td>115.4</td>
<td>119.2</td>
<td>123.1</td>
<td>126.9</td>
</tr>
<tr>
<td>Wet Weight at 26% solids (Note 1)</td>
<td>WTPY</td>
<td>30,885</td>
<td>36,500</td>
<td>37,904</td>
<td>39,308</td>
<td>42,115</td>
<td>43,519</td>
<td>44,923</td>
<td>46,327</td>
</tr>
<tr>
<td>Undewatered at 3.3% solids (Note 2)</td>
<td>GPD</td>
<td>156,737</td>
<td>185,235</td>
<td>192,359</td>
<td>199,484</td>
<td>213,733</td>
<td>220,857</td>
<td>227,982</td>
<td>235,106</td>
</tr>
<tr>
<td>Undewatered at 3.3% solids (Note 2)</td>
<td>MGPY</td>
<td>57.21</td>
<td>67.61</td>
<td>70.21</td>
<td>72.81</td>
<td>78.01</td>
<td>80.61</td>
<td>83.21</td>
<td>85.81</td>
</tr>
</tbody>
</table>

Reference: Palo Alto Regional Water Quality Control Plant Biosolids Facilities Plan Scope of Services, section 2.2 page 5, RFP for Professional Services, September 2012

Note 1. Calculated by ARI. Assumes 26% solids in dewatered sludge cake.
Note 2. Calculated by ARI. Assumes 3.3% solids in liquid sludge and sludge specific gravity of 1.02.
Note 3. All quantities in this table exclude FOG and scum.
## Table 4

### Palo Alto Biosolids Percent Volatile Solids

<table>
<thead>
<tr>
<th>Date</th>
<th>Spl Date</th>
<th>Type</th>
<th>Sample Point</th>
<th>Sample Type</th>
<th>Sample Test</th>
<th>wt. grams</th>
<th>wt. grams</th>
<th>Dish Tare</th>
<th>Solids</th>
<th>Total</th>
<th>Volatile</th>
<th>Volatile</th>
<th>Avg, mg/L</th>
<th>Avg, %</th>
<th>Comment</th>
<th>Analyst</th>
<th>AV/RH/CW</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/22/2010</td>
<td>10/19/2010</td>
<td>Blend Tank</td>
<td>10</td>
<td>11.2932</td>
<td>1</td>
<td>1.3272</td>
<td>1.6458</td>
<td>1.2518</td>
<td>39.980</td>
<td>39.910</td>
<td>31.870</td>
<td>32.215</td>
<td>80.9%</td>
<td>86.7%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blend Tank</td>
<td>10</td>
<td>11.3010</td>
<td>2</td>
<td>1.3290</td>
<td>1.6500</td>
<td>1.2204</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waste Activated</td>
<td>10</td>
<td>11.4630</td>
<td>3</td>
<td>1.2769</td>
<td>1.3000</td>
<td>1.2035</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waste Activated</td>
<td>10</td>
<td>11.4403</td>
<td>4</td>
<td>1.2770</td>
<td>1.2956</td>
<td>1.2635</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Primary Sludge</td>
<td>10</td>
<td>11.5578</td>
<td>5</td>
<td>1.2669</td>
<td>1.3190</td>
<td>1.2572</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Primary Sludge</td>
<td>10</td>
<td>11.4610</td>
<td>6</td>
<td>1.2727</td>
<td>1.3190</td>
<td>1.2572</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scum</td>
<td>7</td>
<td>11.250</td>
<td>7</td>
<td>1.4329</td>
<td>4.3592</td>
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Table 4, continued
Palo Alto Biosolids Percent Volatile Solids

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<th>Sample wt, grams</th>
<th>Dish wt, grams</th>
<th>550°C wt, grams</th>
<th>105°C wt, grams</th>
<th>Solids Av.</th>
<th>Solids mg/L</th>
<th>VS%</th>
<th>TS%</th>
<th>TS% Avg</th>
<th>Volatile Solid</th>
<th>Volatile mg/L</th>
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Table 5
Palo Alto Biosolids Cake Metals

PALO ALTO REGIONAL WATER QUALITY CONTROL PLANT
Lab Analysis of Sludge Cake 2011

Sample Source: Cake from Belt Press feeding into sludge feed screw
Sample type: Composite 24 hours
Testing Laboratory: City of Palo Alto Laboratory
Testing Parameters:
  a. Total Solids - %
  b. Metals - mg/Kg, Wet Wt.
Testing Methods:
  a. EPA 3051 - Microwave Digestion for As, Be, Cd, Cr, Cu, Ni, & Pb
  b. EPA 245.1 - Hg in Solid Waste (Cold Vapor)
  c. EPA 200.8 - Trace Elements in Waters and Wastes by ICP-MS
Testing Instrument: ICP-MS

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<th>Date</th>
<th>As</th>
<th>Be</th>
<th>Cd</th>
<th>Cr</th>
<th>Cu</th>
<th>Ni</th>
<th>Pb</th>
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AVE | 0.40 | 0.022 | 0.85 | 3.9 | 83.4 | 16.8 | 4.9 | 0.132 | 26.6 |

* Calculated MDL, RL.
DNQ = Estimated result, value detected above MDL and below RL.
APPENDIX F-1

E/C FACILITY AND EXPORT REQUIREMENTS

This Appendix establishes the scope of services and design requirements for the project, and applies to both the E/C Facility and Export, unless specific requirements are outlined for the E/C Facility or Export.

General Export Description

For Export, the Contractor will be responsible for transporting and managing Acceptable Feedstock. The City will dewater Biosolids, provide handling, storage and loading facilities for dewatered Biosolids and will load the Contractor’s vehicles. Liquid Biosolids will not be exported. For Food Scraps and Yard Trimmings, the City will deliver these feedstocks to a Contractor transfer, processing or other facility located no more than 18 miles from City Hall. The Contractor will be responsible for transport and management of these Acceptable Feedstocks delivered by the City. For Export to facilities that produce a compost product, the compost must meet CalRecycle Compost Standards. Compost produced from Biosolids must meet US EPA Exceptional Quality Standards for metals and Class A requirements for pathogen reduction. Export shall not include export to conventional waste-to-energy or incineration systems.

General E/C Facility Description

The E/C Facility shall utilize Anaerobic Digestion, Gasification, or a combination of these technologies, to process Acceptable Feedstock into marketable products (fuel, electricity, compost or other marketable products) to achieve significant diversion from landfill disposal. The E/C Facility shall include any necessary preprocessing to remove and recover recyclables and other materials and to prepare the Acceptable Feedstock for conversion, and/or back-end processing and recovery of recyclables, marketable products and energy. The E/C Facility can include any type of energy production (e.g., electricity, gas, fuel), except that biogas shall not be injected into the City's natural gas distribution system, and if a fuel is produced it must be exported for sale. To the extent practical, the E/C Facility shall include the beneficial use of landfill gas generated at the City Landfill.

The E/C Facility shall have a Rated Capacity sufficient to handle the Maximum Annual Delivery Threshold of the Acceptable Feedstock (based on an Availability Guarantee of no less than 85%, to be specified by the Proposer). The Maximum Annual Delivery Threshold is 15,500 tons per year of Food Scraps, 14,300 tons per year of Yard Trimmings, 32,288 tons per year of Biosolids dewatered to 26% solids (in 2015), and 226 tons per year of FOG and scum, subject to the specific terms and conditions as outlined in Section 5 of this RFP.

For Anaerobic Digestion, the E/C Facility may digest Biosolids separately from Food Scraps and Yard Trimmings or may co-digest these materials. The digestate generated at the E/C Facility can be composted and cured on the Site or outside of the City. The E/C Facility shall make available to the City and its residents, at no charge, 1,000 tons per year of compost that meets CalRecycle Compost Standards and, for compost generated from
Biosolids, US EPA Exceptional Quality Standards for metals and Class A requirements for pathogen reduction.

The E/C Facility shall have totally enclosed feedstock receiving, storage and processing areas including negative pressure on the receiving area with odor control of the collected air, and adequate odor control for all other areas of the E/C Facility, to ensure there are no objectionable odor impacts off the Site. As applicable, composting and curing areas shall be enclosed or otherwise have covers for such operations with collection of air and odor control of the collected air. There shall be no “outside” placement or storage of feedstock, products, or Residue. All truck movements and processing areas shall be located on the Site so as to minimize exposure and related impacts on the surrounding area. Equipment shall be located in enclosed buildings or structures with control for noise mitigation. The E/C Facility design and operation shall ensure that noise levels conform to the City Comprehensive Plan, which currently limits noise level to 70 dB as a "normal level" and 70-85 dB as a "conditionally acceptable" level for an industrially-zoned area.

The E/C Facility shall be designed to minimize consumptive water use using recycled water to the extent possible. The E/C Facility shall be designed to minimize process wastewater discharge (with a goal of zero discharge). To the extent possible, process wastewater shall be reused within the E/C Facility to reduce consumptive water needs. City sewer limits shall be met for any sewer discharge. The E/C Facility shall include stormwater collection and control for surface water run-off from buildings, impervious surfaces and other disturbed areas. Clean stormwater can be directed to the City’s stormwater collection system with discharge of any contaminated (or potentially contaminated) stormwater to the sanitary sewer, or stormwater can be contained in basins/ponds designed for on-site treatment and control of stormwater. Catch basins shall include oil and grease traps and allow for sediment collection.

The E/C Facility shall be designed, at a minimum, for a 30-year operating life. It shall include redundant design features, as appropriate, to meet the proposed annual availability guarantee and to minimize the need for emergency management of Acceptable Feedstock. It shall include adequate storage of incoming feedstock and outgoing products to meet feedstock delivery schedules and product shipments to markets, and to provide for efficient operation. The E/C Facility shall include a public education center and necessary administrative office areas, laboratories and maintenance facilities, as further outlined herein. The public education center shall include a conference room or classroom setting to meet with small groups of visitors, and shall be equipped with seats, tables, audio visual equipment, educational videos, and scale models of the technology to facilitate tours and informational meetings with such groups. Buildings shall be designed to meet at least minimum LEED certification requirements, as appropriate.

The E/C Facility shall be arranged on the Site to minimize aesthetic, visual, noise, odor and lighting impacts on surrounding land users, including effective use of buffer areas. For the RWQCP Site and for the Landfill Site adjacent to the RWQCP, the E/C Facility (including its architectural treatment) shall be designed to be compatible with existing buildings and structures at the RWQCP. For the Landfill Site, for all areas except that adjacent to the RWQCP, the E/C Facility (including its architectural and visual treatment) shall be designed
to be compatible with a park setting, with landscaping and buffers to minimize visual impacts. Design of buffer areas shall take into account measures to mitigate noise, lighting, potential odors and visual impacts, including the use of landscaping and/or vegetated berms. The E/C Facility shall have totally enclosed feedstock receiving, storage and processing areas with no outside placement or storage of feedstock, products, or Residue, to mitigate potential impacts including reducing aviation hazards associated with the Palo Alto Airport, located directly north of the RWQCP. For the Landfill Site, design of the E/C Facility should minimize use of site space and must be integrated with plans for Landfill capping as well as consideration of minimizing impacts on Byxbee Park. Such integration should consider terracing of the Landfill Site to minimize the height of any headwall needed for Landfill integration. The Contractor will be responsible for design and construction of foundations, as well as providing for routing of on-site utilities, stormwater management, roads and other necessary Site infrastructure and ensuring that these needs are satisfied in a manner to protect the integrity of the Landfill cap.

The E/C Facility shall include all elements necessary to receive, store, recycle, process, and convert Acceptable Feedstock to marketable products and store products prior to shipping. In general, these elements include:

- an access road to the Site, which may share existing Landfill and RWQCP roadways, as applicable;
- a weigh station;
- an enclosed receiving building and storage facilities for Acceptable Feedstock;
- transfer facilities for Unacceptable Feedstock, Bypassed Feedstock, Unprocessable Feedstock, Residue, and products;
- pre-conversion feedstock recycling and processing facilities (as applicable);
- a minimum of two independent conversion process trains (Gasification or Anaerobic Digestion), or other methods to provide adequate redundancy of processing equipment for purposes of meeting the annual throughput requirements and reducing the frequency and extent of Bypassed Feedstock;
- synthesis gas, biogas and landfill gas cleaning systems (as applicable);
- post-conversion composting, curing, product screening, and product recovery facilities (if applicable);
- enclosed product storage area(s);
- heat recovery and power generating equipment (if applicable);
- fuel production and storage facilities (if applicable);
- enclosed Residue processing and Residue recycling facilities (if applicable);
- air pollution control (APC) equipment (if applicable);
- stack (if applicable);
• noise and odor control;
• water use and wastewater reuse and control equipment;
• electrical interconnection;
• water service to the Facility;
• interconnection of all necessary utilities;
• instrumentation and controls;
• a control room;
• administrative offices;
• public education center;
• general facility features – buildings and grounds, utility, chemical and supplemental fuel handling;
• stormwater collection and control of all surface water run-off from buildings, impervious surfaces and other disturbed areas, with catch basins that include oil and grease traps and allow for sediment collection, and discharge of clean stormwater to the City's stormwater system or sanitary sewer system (if contaminated) or use of stormwater basins/ponds that are designed for on-site control of stormwater;
• maintenance facilities;
• laboratory facilities; and
• all appurtenances and equipment thereto.

General Design and Construction Standards for E/C Facility

The E/C Facility shall be designed and constructed in accordance with Applicable Law, Good Industry Practice, Good and Accepted Construction Practice, and applicable design and construction codes and standards. Proposers shall take note of the local climatology and seismology and design the E/C Facility accordingly for anticipated conditions and in accordance with related codes and requirements. All materials and equipment shall be new and unused, be of heavy-duty construction and of quality suitable and commonly used for high availability, long-term service in utility applications. The E/C Facility shall be designed and constructed utilizing equipment and processes proven to be reliable in similar applications. The E/C Facility shall be designed and constructed for a minimum useful life of thirty (30) years.

Applicable Codes and Standards

The Contractor shall perform, or cause to be performed, all work in strict accordance with the latest applicable codes and standards including, but not limited to, the following (as applicable):

• Air Moving and Conditioning Association (AMCA)
• Aluminum Association (AA)
• American Association of State Highway and Transportation Officials (AASHTO)
• American Boiler Manufacturers Association (ABMA)
• American Concrete Institute (ACI)
• American Gear Manufacturer Association (AGMA)
• American Institute of Steel Construction (AISC)
• American Iron and Steel Institute (AISI)
• American Institute of Timber Construction (AITC)
• American National Standards Institute (ANSI)
• American Petroleum Institute (API) for Storage Tanks
• American Society of Mechanical Engineers (ASME), including, but not limited to:
  - Power Boilers
  - Material Specifications
  - Non-Destructive Examination
  - Pressure Vessels
  - Welding
• American Society for Testing and Materials (ASTM)
• American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE)
• American Wood Preservers Association (AWPA)
• American Welding Society
• American Water Works Association (AWWA)
• Antifriction Bearing Manufacturers Association (AFBMA)
• Applicable Federal, State and local laws and codes involving public safety, health and environmental agencies, under whose jurisdiction work is being performed
• Commercial Standard for Industrial Aluminum and Galvanized Steel Chain Link Fencing
• Concrete Reinforcing Steel Institute Handbook and Supplements (CRSI)
• Conveyor Equipment Manufacturers Association (CEMA)
• Crane Manufacturers Association of America (CMMA)
• Cooling Tower Institute (CTI)
• Environmental Protection Agency (EPA)
• Factory Mutual Engineering Corporation (FM)
• Federal Aeronautics Authority (FAA)
• Heat Exchangers Institute (HEI)
• Hydraulic Institute
• Industrial Gas Cleaning Institute
• Insulated Cable Engineer’s Association (ICEA)
• Institute of Electrical and Electronics Engineers (IEEE)
• Instrument Society of America (ISA)
• International Mechanical Code (IMC)
• International Plumbing Code (IPC)
• International Standards Organization (ISO)
• National Board of Fire Underwriters (NBFU)
• National Bureau of Standards (NBS)
• National Electrical Code (NEC)
• National Fire Protection Association (NFPA)
• National Electrical Manufacturers Association (NEMA)
• National Electrical Safety Code (NESC)
• Occupational Safety and Health Act (OSHA)
• Portland Cement Association
• Rubber Manufacturers Association
• Sheet Metal and Air Conditioning Constructor’s National Association
• Steel Structures Painting Council (SSPC)
• Standard Building Code (SBC)
• Thermal Insulation Manufacturers Association
• Tubular Exchange Manufacturers Association
• Underwriters Laboratory, Incorporated (UL)
• California State Building Code, as amended and updated
• City of Palo Alto Building Code, as amended and updated
• Appropriate codes and standards specific to California.
E/C Facility Design Requirements

Landscape Design Requirements

Landscaping and vegetated berms shall be used to minimize the visual and aesthetic impacts of the E/C Facility. Trees, plantings and grasses native to the area shall be used.

Architectural Design Requirements

The architectural features of the E/C Facility shall blend in with the surrounding terrain and natural setting. The use of metal siding is not acceptable. Metal panels may be used with strategically placed glass, brick, concrete or precast concrete to give the E/C Facility an attractive appearance. If metal panels are proposed, they shall be rust resistant with proper treatment and maintenance to ensure a pleasing appearance at all times. All buildings must be designed to meet at least minimum LEED certification requirements to the extent possible.

Site Design Requirements

The Proposal shall be based on an E/C Facility located at the RWQCP Site and/or the Landfill Site described in Section 2 and presented in Appendices C and D. The Proposer shall arrange the E/C Facility on the Site to minimize noise, odor, lighting and visual impacts on surrounding land users. All roads within the boundary of the Site are to be paved with asphalt or concrete. The roads shall be capable of accommodating fire and other safety vehicles, delivery vehicles for feedstock and supplies, vehicles for removing Residue, products and recovered materials, maintenance vehicles and equipment, and all other vehicles that will have cause to be at the E/C Facility. All disturbed areas are to be covered with either pavement, crushed stone, or re-planted with native grasses.

Paved parking shall be provided for employees and visitors. Spaces shall be provided to accommodate the maximum number of employees during an operating shift and at least five additional spaces for visitors, or more as required by applicable codes.

The drainage system shall be designed to control all surface water run-off from buildings, impervious surfaces and other disturbed areas. Catch basins shall include oil and grease traps and allow for sediment collection.

The E/C Facility shall have adequate security features, including a minimum six-foot-high architectural fence. Gates shall be lockable, and have an automatic closure feature.

A permanent entrance sign, approved by the City and constructed of masonry materials with non-deteriorating letters, compatible with the architecture of the E/C Facility, shall be provided at the entrance to the Site.
Outdoor lights shall provide adequate lighting for safely operating and maintaining the Facility at nighttime. Any lighting shall be hooded and directed onto the project site.

**Weigh Station**

The E/C Facility shall be equipped with one automatic weighing station, suitable for weighing all types of vehicles that may deliver waste or other materials to or from the E/C Facility.

A weigh station on the Site shall be properly located to avoid queuing of vehicles off-site. No queuing shall occur off the Landfill Site or RWQCP property. The weigh station shall be used to record the quantity of feedstock delivered to the E/C Facility; Residue leaving the E/C Facility; Bypassed Feedstock, Unprocessable Feedstock and Unacceptable Feedstock unloaded at the Facility and reloaded for disposal, digestate if processed off site, and materials to be marketed. The weigh station shall consist of two (2) identical scales, each with a minimum weighing capacity of sixty (60) tons, or as otherwise appropriate for the E/C Facility proposed. If a scale house is constructed, it shall be designed with the same architectural treatment as other E/C Facility buildings and shall be equipped with lavatory facilities, communication systems, and all necessary equipment and facilities to fully support scale-house operations.

All scales shall each have minimum platform dimensions of seventy (70) feet in length and twelve (12) feet in width, or as otherwise needed to fully accommodate all vehicles that access the E/C Facility. Each scale shall be equipped with a digital weight meter and integrated with a data processing system capable of listing: vehicle number; delivery date and time; gross, net and tare weights; and the daily total of the net weight.

**Feedstock Receiving**

The feedstock receiving area and storage area shall be in a totally enclosed building with roll-up doors at a truck entrance and exit. A single door for the tipping floor entrance and exit is acceptable if Proposers can demonstrate that truck traffic flow is not impeded. In this instance, the Proposal layout drawings shall clearly indicate the flow of truck traffic within the feedstock receiving building, and at the building entrance/exit. To accommodate weekends and holidays, the E/C Facility shall have feedstock receiving and storage capacity for at least three days of delivery at the Rated Capacity. There shall be adequate space provided to tip and inspect loads, as required. Also, the tipping area shall have an adequate space sufficient in size for unloading of multiple trucks thereby minimizing queuing of trucks waiting to unload.

The feedstock receiving area shall be a clear span, with no interior columns and have a sufficient clearance above the tip floor to the lowest obstruction to support
unloading of all types of feedstock delivery vehicles. Bollards, concrete or other protective barriers shall be used to protect all walls, columns and roll-up doors from potential damage caused by feedstock delivery trucks. The entire tipping floor area surface shall be protected with an abrasion resistant coating (or an alternative treatment can be provided if equivalent performance can be demonstrated) to prevent damage due to vehicle traffic and front-end loader operation.

The feedstock receiving and storage area shall be kept under a negative pressure by continuously withdrawing air from the building. All exhaust air from the receiving and storage buildings shall be subjected to continuous odor control.

**Feedstock Storage**

Feedstock storage volume shall be sized for a minimum storage of three (3) times the Rated Capacity of the E/C Facility, all without limiting the number of truck bays available for dumping feedstock (or clearance for each truck-unloading bay), and without restricting access to the feed conveyors. An adequate area of the tipping floor shall be accessible to transfer feedstock out of storage (Bypassed Feedstock). If feedstock storage is provided on a tipping floor, the exterior "push walls" shall be concrete and shall be at least as high as the maximum pile height. If feedstock storage is provided in a pit and the pit is constructed below the groundwater table, it shall be made watertight and leak proof to prevent groundwater infiltration and/or leaks.

Any feedstock delivery system supplied shall be fitted with a mechanism for measuring the weight of feedstock delivered to recycling, pre-processing and conversion (Gasification or Anaerobic Digestion) systems during tests.

**Materials Recycling and Pre-Conversion Waste Processing**

The Contractor may furnish a materials recycling and pre-conversion processing system for material recovery and/or to produce a prepared feedstock for gasification and/or digestion. There shall be a minimum of two independent material processing trains each of sufficient capacity to support the continuous or batch operation of the Gasification or Anaerobic Digestion process, or other methods shall be incorporated to provide adequate redundancy for purposes of meeting the annual throughput requirements and reducing the frequency and extent of Bypassed Feedstock.

All material recycling and pre-processing equipment and storage shall be within a totally enclosed building. Any mechanical shredders used in the material processing trains shall be housed in an isolated concrete structure with an explosion relief vent. Explosion and fire detection systems shall be provided, and interlocked with a fire suppression system.

Any conveyor transporting feedstock outside a building shall be fully enclosed with a fixed metal cover.
All feedstocks from recycling and pre-conversion waste processing shall be stored in a fully enclosed building. The materials recycling and pre-conversion waste processing building or area shall be kept under a negative pressure by continuously withdrawing air. All exhaust ventilation air shall be subjected to dust and odor control. The specific intent is that no air which comes in contact with feedstock during recycling or pre-conversion feedstock processing can be released to the ambient environment, without that air first having been subjected to effective controls for odor and dust. This request can be met by controlling all air in the recycling and pre-conversion waste processing building or, if effective odor and dust control can be provided, by aspirating and treating the air from the immediate vicinity of the processing equipment.

If a wet recycling and wet pre-conversion waste processing system is used, all material processing equipment and storage shall be protected from freezing, as necessary. All feedstocks shall be stored in fully enclosed vessels, or equivalent, which also are protected, as necessary, from freezing. The vessels shall be fitted with pressure relief valves suitable for the design rating of the vessels.

Conversion Processes (Gasification and Anaerobic Digestion)

Gasification and/or Anaerobic Digestion processes supplied, and their associated appurtenances, shall be designed, furnished and installed to provide a minimum of two (2) units, which shall be similar to the design of units previously built by the Contractor (or its licensor), or other methods shall be incorporated to provide adequate redundancy for purposes of meeting the annual throughput requirements and reducing the frequency and extent of Bypassed Feedstock. The combination of the process units shall support an E/C Facility which shall have the capability by design to operate at an annual rate of no less than eighty-five percent (85%) of its Rated Capacity. The proposed units (two or more, as applicable), and ancillary systems must all be identical.

Gasifier Units

For purposes of this procurement, a solid waste Gasification system is defined as an enclosed thermal device that limits oxygen to prevent full oxidation; vitrifies, slags or produces a non-hazardous char or ash from the inorganic feed materials; produces a synthesis gas from feed materials that is used to produce renewable electricity and/or fuels; is capable of synthesis gas cleaning prior to use; and is capable of being tested or equipped with monitoring devices to ensure the quality of the synthesis gas. Any gasifier units supplied must meet this definition.

The gasifier units may be provided for operation without the introduction of air or oxygen into the system (i.e., pyrolytic) or with the controlled introduction of limited amounts of air or oxygen (i.e., sub-stoichiometric). The gasifier units shall include all equipment and appurtenances for introduction of the feedstock into each unit. As applicable, each unit shall also include, but shall
not be limited to, any auxiliary burner systems, reactor vessels and refractory, solid products and residuals collection systems, and synthesis gas quench and cleanup systems. If supplied, synthesis gas cleanup systems shall include removal of particulate matter, sulfur, chlorine and volatile metals, as applicable.

If oxygen is used in the gasifier, an on-site oxygen plant shall be furnished to provide the necessary purity of oxygen to the gasifier units. A minimum of three (3) days of on-site oxygen storage shall be provided, unless the Proposer can demonstrate the viability of lesser storage. Redundancy shall be provided for oxygen plant equipment requiring long lead-time for replacement parts.

**Anaerobic Digestion Units**

Anaerobic Digestion units shall include all equipment and appurtenances for introduction of feedstocks into each unit. As applicable, each unit shall also include, but shall not be limited to, any heating systems, reactor vessels or enclosures, solid products and residuals removal systems, and biogas cleanup systems. Biogas cleanup systems shall include, as applicable, sulfur removal and siloxane removal.

**Post-Conversion Product Recovery Facilities**

The product and recovered materials processing systems shall be designed for the maximum quantity produced by the E/C Facility operating at its Rated Capacity. Product and recovered materials storage shall be enclosed and shall provide for anticipated schedules for off-site shipment or distribution schedules and the Rated Capacity of the E/C Facility. At a minimum, three days storage capacity shall be provided. Should the products or recovered materials be dusty or odorous, controls shall be supplied for prevention of odor and dust.

**Feedwater System**

Any necessary process feedwater system shall be sized for the Rated Capacity of the E/C Facility, and include pumps, heaters, feedwater treatment systems, as determined necessary by the Contractor for optimal operation (e.g., minimization of water use, maximization of thermal efficiency). Any feedwater system pumps shall include a minimum of two (2) each with a pumping capacity equal to the greater of the continuous design rated flow rate required to satisfy the system requirements.

If a boiler feedwater treatment system shall be provided to treat make-up water to the feedwater system, the boiler feedwater treatment system shall satisfy, at a minimum, American Boiler Manufacturers’ Association (ABMA) boiler water quality standards for the design steam conditions.
Any feedwater treatment system shall include a treated make-up water storage tank. Wastewater from the treatment system shall be reused in the E/C Facility to the maximum extent possible, and any remaining wastewater may be evaporated or sewered if it meets sewer discharge limits.

**Power Generating Processes**

If electricity is a product of the E/C Facility, power generating processes (including all ancillary equipment) shall be fully integrated with the supplied technology and with the electrical distribution and export systems at the E/C Facility. All equipment must meet City of Palo Alto utility interconnection requirements.

**Residue Handling Systems**

The Residue removal, processing and storage systems shall be enclosed in a building and shall be designed for the maximum Residue quantity resulting from feedstock processing at the Rated Capacity of the E/C Facility. Residue storage shall be provided for not less than three (3) days of operation at the Rated Capacity.

The floor surface of the storage bunkers and the floor area extending thirty (30) feet from such bunkers in the residue storage building shall be protected with an abrasion resistant coating (or an alternative treatment can be provided if equivalent performance can be demonstrated). If the Residue is capable of generating dust, the building shall be kept under negative pressure with the air filtered by a baghouse prior to being discharged to the atmosphere at or above the residue building roof elevation. If the Residue is odorous or dusty, odor and dust control shall be provided.

The combination of any fly ash with other process Residue is allowed in accordance with Federal guidance, but is not required. If fly ash is generated by air pollution control systems, removal conveyors may be supplied to convey fly ash from any boiler hoppers, dry scrubbers, and/or baghouses, and to combine it with any other residues prior to discharge into Residue storage. Any outdoor conveyors shall be enclosed. If applicable, the fly ash removal system shall also be designed and sized to collect, handle, and store any lime and collected salts discharged from the dry acid gas scrubbing or dry injection and baghouse collection equipment. The Contractor shall select the type of conveying system.

The equipment and facilities related to gasification technologies for handling and storage of Residue shall, at a minimum, comply with the requirements of the New Source Performance Standard (NSPS) Subpart Eb, restricting fugitive emissions of Residue dust.

The Residue removal and storage areas shall have an adequate number of floor drains with floors sloped to the drains, and sufficient hoses for wash down to maintain clean conditions and prevent dust from leaving the area. Drained water shall be reused in the E/C Facility.
Air Pollution Control

The Contractor shall meet the environmental design and performance specifications as required by all permits to construct and operate the E/C Facility. For Proposal purposes, the requirements defined below shall be the basis for design and performance for those technologies that combust synthesis gas or biogas for the production of electricity.

For the technologies which do not pre-clean synthesis gas, the air pollution control equipment shall include but not be limited to acid gas scrubbing (wet, dry or semi-dry), and wet scrubbers and/or baghouses for particulate control. In all cases where synthesis gas or biogas is used on site to generate electricity, NOx control is required. The NOx control system shall be either of the Selective Non-Catalytic Reduction (SNCR) type or the Selective Catalytic Reduction (SCR) type, as applicable. The NSPS Subpart Eb requires use of carbon injection for all gasification technologies, however, if the technology supplier can produce a waiver from U.S. EPA based on an alternate technology that can demonstrate equivalency, such waiver shall be deemed an acceptable alternative to a carbon injection system. A complete air pollution control system shall be furnished for each synthesis gas or biogas power generation train (i.e., thermal oxidizer/waste heat boiler, reciprocating internal combustion engine, or combustion turbine/duct burner, as applicable). The air pollution control system for any gasification technology shall, at a minimum, be capable of meeting the NSPS Subpart Eb requirements, as well as applicable State and local requirements.

Stacks

For the technologies that use the biogas or syngas on site to generate electricity, one or more main stacks shall be supplied. Air pollution control bypass or dump stacks may be technically necessary for safe operation of certain gasifier units or biological units, in which case they shall be supplied.

The Contractor shall design, furnish, and install one or more main stacks, as necessary. A separate flue shall be supplied for each synthesis gas or biogas combustion train (i.e., thermal oxidizer/waste heat boiler, reciprocating internal combustion engine, or combustion turbine/duct burner, as applicable). The stack shall: (a) be designed in compliance with Good Engineering Practice as defined in 40 CFR 51.1(ii); and (b) be grounded. Sampling locations shall be provided as required by the U.S. EPA and State and local requirements. Permanent platforms and access to the sampling locations shall be provided. The stack(s) shall be designed with insulated flue walls to prevent condensation at all times, and shall be of corrosion resistant construction. The exterior of the stack shall match or complement the architectural treatment (including color) of the E/C Facility, as applicable.
As applicable, if air pollution control bypass or dump stacks are necessary for safe operation of a gasifier or biological unit, the operation of each individual bypass or dump stack shall be limited on an hourly basis as required by the U.S. EPA or State and/or local agencies, and monitoring systems shall be designed and provided to track the hours of operation of such stacks. For dump stacks that will handle combustible gases (i.e., synthesis gas from a gasifier unit or biogas from a biological unit), an automatically activated flare system is required to be included in such stack.

**Water Use and Wastewater Control**

Process make-up water and water for potable and sanitary uses will be supplied from the City water system.

All process wastewater, including but not limited to, cooling tower blowdown, boiler blowdown, and washdown water, shall be used within the E/C Facility to the greatest extent possible.

**Condenser Systems**

If applicable, a steam turbine-generator shall have a water-cooled shell and tube condenser with shop-fabricated and shop-installed tubes and connections. It shall be designed in accordance with the HEI Standards and other applicable standards for the expected turbine exhaust flow. Two (2) condensate pumps shall be furnished with the condenser, and each pump shall be sized at 100 percent (100%) of the condensate flow.

Redundant multi-stage air ejector systems or rotary vacuum pumps shall be supplied for removing \( \text{O}_2 \), \( \text{CO}_2 \), and other gases from the condenser during normal operation of the steam generating units.

The Contractor shall provide one (1) or more bypass dump condensers of the shell and tube design. The unit shall be sized such that all the combustion/steam generation units can operate at the maximum design capacity during periods of complete turbine generator outage. The dump condenser and condenser drain tank shall be designed in accordance with ASME Boiler and Pressure Vessel Code and the HEI Standards for closed feedwater heaters.

All condenser systems shall be designed to operate at the maximum continuous rating of the E/C Facility.

As applicable, one (1) or more induced draft cooling towers shall be provided, including structure (installation on a concrete basin), stairways, fans, cooling water distribution system, drift eliminators, and fire protection piping. Timber members shall be redwood. The cooling tower shall be sized to meet the installed Rated Capacity of the E/C Facility system’s maximum cooling requirements. The cooling tower shall be designed in accordance with the National Design Specification for Wood Construction and the CTI standards for installation and operation in California.
Alternatively, stainless steel or poltruded shape fiberglass reinforced plastic cooling towers are acceptable. Three (3) circulating water pumps shall be supplied with the cooling tower, and each pump shall be sized at 50 percent (50%) of the circulating water flow rate. As an option, two (2) pumps at 100 percent (100%) capacity may be supplied. The design and location of the cooling towers shall not obstruct the vision of drivers, or negatively impact roads or sidewalks during operation. The free chlorine levels in the cooling tower sump shall be continuously monitored and maintained at appropriate concentrations.

The cooling tower blowdown shall be directed to the E/C Facility water recycle system.

An air cooled condenser system may be provided, in lieu of a traditional condenser and cooling tower arrangement. Such an air cooled condenser system shall include fans and all appurtenances not limited to structural support, heat exchangers, drain pumps, and interconnection with the cooling water supply system. The air cooled condenser system shall be sized to meet the installed Rated Capacity of the E/C Facility system’s maximum cooling requirements and the local climatological conditions.

**Plant Electrical**

The plant electrical systems shall be arranged for appropriate reliability and redundancy. The E/C Facility shall include, as necessary, medium voltage power distribution; low voltage power distribution; lighting; grounding; raceway and cable; and control, security and communication systems. The sizing of the emergency power supply system must consider the ability to safely shut down the system and consume all feedstock being processed, as well as fight a fire, at a minimum, for three (3) hours. The Proposer shall define the equipment in the system. Critical power requirements shall be met by batteries and/or battery backup uninterruptable AC power systems. Adequate protection for generator, transformers and all electrical equipment shall be provided in accordance with IEEE guidelines.

If applicable, the main distribution switchgear shall be equipped with fully automatic controls for synchronizing with the local utility and for overload protection. In the case of E/C Facilities that supply electricity as a product, the system shall be designed to allow for the following four conditions:

1) buy power from the local utility in the event of a steam turbine-generator and/or engine failure so that processing of the waste can be maintained;
2) run the steam turbine-generator and/or engine to supply plant parasitic power to the E/C Facility in the event the local utility experiences a power failure;
3) allow for a smooth tie-in after the local utility has restored power; and
4) run the steam turbine-generator and/or engine to supply power to the E/C Facility and sell the excess power to the local utility.
Automatic metering and recording of voltage, watts, VARS, power factor, and hertz shall be provided for conditions 1), 2), and 4) above, separately and for measuring usage at the Facility, and all the above shall be integrated with the distributed control system (“DCS”). The DCS shall record the sequence of events which occur during a steam turbine trip.

The equipment furnished shall meet NEMA Standards and the City utility’s requirements. The system shall consist of a: step-up transformer(s), including applicable fire protection and spill containment conditions for oil-filled transformers, as applicable, station service (step-down) transformer, main switchgear, emergency power system, uninterruptible power supply for the DCS, and all auxiliary equipment. The exterior switchyard shall have a separate security fence and locked entrance gate.

**Electrical Interconnection**

If applicable, the Contractor shall provide a new electrical transmission line from the E/C Facility exterior switchyard to the City Substation or transmission line. The final requirements for the transmission line, the tie-in at the City substation and/or transmission line, and the protective devices at the E/C Facility switchyard shall be determined by the City utility. The Contractor shall be responsible for the cost of the interconnection. The Contractor’s E/C Facility Development Cost Estimate shall include, as applicable, an allowance of $100,000 for the interconnection equipment to be installed between the E/C Facility switchyard step-up transformers and the local utility substation or transmission line.

**Process Control and Monitoring System**

A distributed control system (DCS) complete with field hardware shall be furnished for the E/C Facility. The DCS and field hardware shall be industrial grade and of the same manufacture, class, and performance as are used for electric power utility station installations appropriate for the use intended. The installation shall be to industrial standards, as is found in electric power utility station services. The DCS shall: provide for centralized control and monitoring of the feedstock processing systems and energy production equipment; monitor compliance with environmental and safety regulations and the Performance Guarantees; and provide centralized monitoring of other major E/C Facility unit processes.

The system shall include at least three (3) high-resolution color monitors which are interchangeable in function; i.e., any display may be called up on any monitor. At least two (2) operator keyboards and one (1) engineering keyboard shall be included. Each system shall provide for a capacity of at least 120 percent (120%) of the required I/O points. The system shall support monitor trend displays, with a selectable time base of up to one month, for both historical and current trends. Group, detail, single point, alarm summary, diagnostic, and like displays as well as custom graphic displays shall be furnished. The alarm display shall automatically
dump to a preselected alternative position if there is a failure of the selected alarm display.

The DCS system shall include at least two (2) printers, and a video copier capable of recording any CRT display. Alarm, facility equipment status, and operator entry logging shall be automatic. The system shall support the required daily operations listing functions for compliance with environmental, safety and performance parameters.

The DCS shall include historical data storage and data processing capabilities and system software to provide the daily and monthly compliance and performance reporting. The DCS storage shall be sufficient to contain at least 30 days of data storage. The report printing shall be automatic with additional capability to print prior and current day’s data on demand.

An uninterruptible power supply shall be furnished which has sufficient capacity to allow safe shutdown of the Facility. At least one (1) spare DC power supply shall be included. Health and safety systems shall be hardwired and independent of the distributed control system.

The control, measurement, recording, and monitoring functions for the E/C Facility shall include, but shall not be limited to, the following:

1. All incoming feedstock and all Residue, Bypassed Feedstock, Unprocessable Feedstock, Unacceptable Feedstock, digestate, and recovered materials and products leaving the E/C Facility (these functions need not be tied into the DCS system).
2. Feedstocks fed to the pre-processing system, for Gasification and/or Anaerobic Digestion processes, and post-processing facilities.
3. If applicable, the steam mass flow rate, the pressure and temperature of feedwater, steam generation, and blowdown for each boiler, and totals for the E/C Facility.
4. Continuous emissions monitoring, measuring, and recording of stack gas in accordance with New Source Performance Standards (40 CFR 60, Subpart Eb) and other applicable requirements.
5. Calendar year hours of operation of each bypass or dump stack.
6. Electric power production, in-plant use; steam production and in-plant use; and feedwater rate.
7. As applicable, boiler drum level.
8. Oil or other auxiliary fuels used in the plant.
9. A time reference on each recording for data reduction.
All measurement reporting and recording shall be made in English and/or Metric engineering units in accordance with common practice in California and Good Industry Practice.

Surveillance shall be provided by remote control, color, closed-circuit television of areas of the tipping floor, entrance gate area, and other areas selected by the Contractor (if any). The closed-circuit television controls shall include:

a) Zoom
b) Automatic iris control
c) Pan and tilt with scanning
d) Sun shields and weather proofing where required

**Continuous Emissions Monitoring System**

For Gasification technologies that combust the synthesis gas to generate electricity, the E/C Facility shall include a Continuous Emissions Monitoring System (CEMS) to monitor, measure and record flue gas conditions in accordance with New Source Performance Standards (40 CFR 60, Subpart Eb) and to meet other applicable Federal, State and local air regulatory requirements. The specific continuous monitoring data to be made available shall follow all requirements of the California Air Resources Board/Bay Area Air Quality Management District as well as the following NSPS Subpart Eb requirements:

- **Most Recent Compliance Data**
  - Sulfur Dioxide, 24-hour average geometric mean concentration and the removal efficiency.
  - Nitrogen Oxides, 24-hour daily arithmetic average concentration
  - Opacity, 6-minute average percentage values, daily summary
  - Carbon Monoxide, 4-hour block arithmetic average
  - Flue Gas Temperature at the fabric filter inlet (as applicable), 4-hour block arithmetic average

- **Historical Compliance Summaries**
  - For each continuously monitored parameter above, an historical compliance summary, with content and format as approved by EPA and State and local agencies. The format, graphical or tabular, shall clearly convey the number, dates, and magnitudes of any exceedances of applicable units.
• Equipment Malfunction Summaries
  
  – Summaries of time periods during which each continuous monitoring system was malfunctioning while the E/C Facility was operational, as “operational” is defined by applicable regulations.
  
  – Quarterly cumulative summaries of such malfunction time.

In regard to Anaerobic Digestion technologies, those technologies that combust biogas to generate electricity shall include a CEMS to monitor, measure and record flue gas conditions to meet applicable Federal, State and local air regulatory requirements.

As appropriate, including for purposes of documenting greenhouse gas emissions and/or for purposes of compliance with the California Air Resources Board's mandatory greenhouse gas reporting regulation, which appears at sections 95100-95133 of Title 17, California Code of Regulations, E/C Facilities, either anaerobic digestion or gasification facilities, shall include CEMS to monitor, measure and record greenhouse gas emissions. Data shall be reported monthly to the Bay Area Air Quality Management District. Telemetering for real time reporting is not required.

Administrative, Public Education, and Support Facilities

The E/C Facility design shall include an administration building, maintenance shop and spare parts storage area, and a laboratory. The administrative building shall include office areas for the Contractor, locker rooms for operational and maintenance personnel, and a public education center. The public education center shall include a conference room or classroom setting to meet with small groups of visitors, and shall be equipped with seats, tables, audio visual equipment, educational videos, and scale models of the technology to facilitate tours and informational meetings with such groups. The spare parts storage area shall be adequately sized to store all of the spare parts and supplies required to operate and maintain the E/C Facility.

Fire Prevention

The E/C Facility design shall include a fire protection system which shall include detectors, remote fire alarms, and suppression systems in accordance with all applicable codes including, but not limited to: insurance underwriters’ standards; the National Fire Protection Association (NFPA); State, County, and City, as well as any other appropriate local fire regulations; and good industry practice for a highly protected risk facility. Each Contractor shall comply with all insurance requirements applicable to the design, construction, and operation of the E/C Facility.
Safety Requirements

The E/C Facility design shall comply with all OSHA requirements. All chemical or fuel handling areas shall be designed with appropriate containment dikes. Safety showers shall be provided at chemical handling areas.

American Disabilities Act

The E/C Facility shall be designed and constructed to meet applicable requirements of the American Disabilities Act and State building codes.

Environmental Design and Performance Requirements

The Contractor shall, at a minimum, meet the environmental design and performance specifications as required by all permits and approvals required to construct and operate the E/C Facility. If not required by a permit or approval, the E/C Facility shall still, at a minimum, meet the requirements specified in Section 4.

E/C Facility Construction Requirements

General

The Contractor shall perform the Construction Work in accordance with the Design Work and using Good and Accepted Construction Practice and shall have exclusive responsibility for providing all construction means, methods, techniques, sequences, start-up, and Acceptance Tests, and all procedures necessary and desirable for the correct, prompt and orderly conduct and completion of the Construction Work as required by the E/C Facility. Construction shall be scheduled and conducted, as practical, to minimize impacts and disruptions on existing operations at the RWQCP, Byxbee Park, and other surrounding land users.

The Contractor's exclusive responsibility to provide all construction means shall include, but is not be limited to, providing the following construction requirements: temporary power, light and other utilities; temporary offices and construction trailers; a room for on-site, project review meetings; a furnished office with telephone and computer hook up for use by the City's on-site resident engineer; required design certifications; required approvals; field document control and filing system for the control of all submittals and project communications; quality control and testing; independent laboratory testing services; weather protection for stored materials; site cleanup and housekeeping; construction trade management; temporary parking; safety and first aid facilities; correction or compensation for defective work or equipment; equipment and materials storage areas; workshops and warehouses; temporary fire protection for the construction site; site security; potable water; telephone and portable two-way communication; subcontractor coordination and control; receipt and unloading of delivered materials and equipment; erection rigging; temporary supports, and coordination of all construction activities of the Contract.
The Contractor warrants to the City that materials and equipment incorporated in the E/C Facility will be new unless otherwise specified, and in conformance with the Contract documents.

The Contractor shall fully cooperate with the City and its designated representatives to allow the City to monitor and review construction progress, design documents and any proposed changes to design.

The Contractor shall apply Federal, State and local wage and hour laws to the extent required by Applicable Law. For purposes of its Proposal for an E/C Facility or Export, the Proposer should assume that prevailing wages will be required. The Contractor shall make a good faith effort to employ staff from the local and regional labor markets.

**Construction Work Monitoring, Testing and Observation**

The City shall have the right to monitor and observe progress of the Construction Work. During the progress of the Construction Work through the Acceptance Test and Acceptance of the E/C Facility, the Contractor shall allow the City and/or its designated representative(s) access to all sites for the purpose of observing the conduct of the work. During any such observation, the City and its designated representative(s) shall comply with all reasonable rules (safety and other) applicable to the construction sites. It is understood that the City's monitoring and inspection shall be of an observational and review nature and that the City and its representative(s) shall not have the authority to interfere with, halt or delay the Contractor's construction of the E/C Facility, except to ensure conformance with Design Work and to ensure that such construction does not represent a substitution of lesser quality.

The Contractor shall provide the City monthly progress reports detailing Construction Work accomplished during the previous month. The monthly progress reports shall include a summary of accomplished work activities, a summary of next month's work activities, a list of submittals delivered for the report month, a list of submittals scheduled for the next month, and an updated project schedule which shall reflect any change in the Contractor's project schedule submitted the prior month.

The monthly progress reports shall be submitted to the City for its information only. Acceptance of the monthly progress reports shall not bind the City in any manner or imply that the City approves the work to date, or agrees to any changes in schedule or extension of design or construction time.

The Contractor shall provide on-site quality control and quality assurance services. The Contractor shall prepare and submit to the City a quality control and quality assurance plan detailing the actions which the Contractor shall take to control and demonstrate quality of construction. The quality control and quality assurance plan shall be submitted to the City prior to the start of construction. The quality control and quality assurance plan shall identify all shop and field testing to be performed.
during construction and list all testing, along with properly certified, independent, testing laboratories or testing services that will perform the work.

In accordance with the quality control and quality assurance plan, the Contractor shall maintain a file of and if requested, deliver to the City or cause the certified independent testing laboratories or testing services to send the City all required certificates of inspection, testing reports and all written testing documentation.

The City shall reserve the right to conduct and pay for any on-site testing it deems necessary or desirable to verify that the Construction Work, including materials of construction, complies with the Design Work. The Contractor shall not be entitled to any delays in the construction schedule due to reconstruction activities resulting from failed quality control and quality assurance testing.

During the construction period, the Contractor shall conduct project meetings at least on a monthly basis or on an as needed basis, depending on the nature of the schedule and Construction Work for the month. During the project meetings, discussions shall be held concerning all aspects of the construction. Monthly progress reports shall be prepared by the Contractor and submitted to the City at least five Business Days prior to each monthly meeting.

The Contractor shall afford the City an opportunity to make final inspection and approve the Construction Work as having been completed. Final approval and acceptance of the Construction Work by the City or any rejection of the Construction Work or such items as are incomplete shall be made by the City in writing within thirty (30) Business Days from the date of receipt by the City of the above notification of completion.

In the event the City neither accepts nor rejects the work as complete within a thirty-day (30) period after notification of completion by the Contractor, the work shall be deemed complete.

Although the work may be deemed complete, acceptance of work by the City shall be conditioned upon successful completion of the Acceptance Test and satisfying other acceptance requirements.

**Correction of Construction Work**

Throughout the Term of the Contract, the Contractor at its sole cost and expense shall complete, repair, replace, restore, rebuild and otherwise make whole any Construction Work which does not conform with all requirements of the Contract. The City may elect by Change Order, at the Contractor’s request, to accept Construction Work that does not comply with all requirements of the Contract.

If a Change Order is executed for nonconforming Construction Work, the Contractor's obligations for the Acceptance Test or Acceptance provided for in the Contract are in no way altered.
The Contractor shall re-perform any professional Construction Work, for which it is responsible within the Contract, which fails to conform to the Good and Accepted Construction Practice, throughout the Term of the Contract.

The Contractor shall request from all vendors, or subcontractors from which the Contractor procures machinery, equipment, or materials for the E/C Facility, warranties with respect to such machinery, equipment, and materials. The Contractor's responsibility with respect to such machinery, equipment, and materials obtained from vendors or subcontractors, shall not be limited in any way throughout the Term of the Contract. The Contractor shall have total liability, throughout the Term of the Contract, for nonconforming Design Work and nonconforming or defective Construction Work, equipment and materials, whether caused by error, omission, negligence or otherwise. Failure of any vendor, contractor or subcontractor selected by the Contractor, with or without concurrence by the City shall not excuse the Contractor from its Contract obligations or constitute an Uncontrollable Circumstance.

Record Drawings and Documents

Upon completion of construction of the E/C Facility, the Contractor shall provide the City a set of record drawings in print and on CD in an electronic format acceptable to the City to show the character and installation of all Construction Work. At a minimum, record drawings shall include those listed in the Final Design Submittal. As-built construction record drawings shall be submitted to the City no later than sixty (60) days following completion of all Construction Work. The Construction Work shall not be final and complete without the record drawings and all documents of record, including a Certificate of Completion from appropriate local authorities, being received by the City. Any modifications that are required to achieve Acceptance shall be fully documented by the drawings.

Record drawings shall be exclusively for the use of the City and the Contractor and its contractors and subcontractors shall have no liability to any other party on account thereof.


General

The City will conduct a review of Design Work to ensure conformance to Design Requirements and will review, monitor and inspect Construction Work to ensure conformance to Design Work and to ensure that such Construction Work does not represent a substitution of lesser quality.

The reviews and inspections by the City shall not affect in any way the Contractor's responsibilities for compliance with all Contract requirements, nor shall it impose any
responsibility or liability on the City due to such review and inspection, or lack thereof.

**Design Review**

**Design Review Intent**

In accordance with the terms and conditions of the Contract, the City will review the Design Work for consistency with Design Requirements and will provide input on selected issues, such as selection of finishes, architectural treatment, and landscaping.

Input by the City to the design process shall be solicited by the Contractor as required, at monthly design progress meetings and at key stages in the design, considering the design submittal packages specified below.

The City recognizes that the process will require that the Contractor and the City work cooperatively to assure timely design review. At a minimum, the City shall be afforded adequate opportunity for design review (at a minimum four weeks) at:

- completion of the Preliminary Design Submittal; and
- completion of Final Design Submittals.

The City shall be afforded the opportunity for design review prior to any submittal to regulatory agencies.

**Design Submittal Protocol**

No later than 30 days following the execution of the Contract, the Contractor shall submit to the City a protocol for design submittals (Design Review Protocol). The Design Submittal Protocol shall identify the key submittal packages to be prepared by the Contractor and the expected submittal dates. A reasonable time period for the City's review and comments shall be specified in the Design Submittal Protocol. The City's review procedures and time periods shall be consistent with those in the Contract. The Design Submittal Protocol shall also identify the frequency of the Contractor's design progress meetings during various phases of the design and include monthly progress review meetings with the City. The City shall designate the number of copies of submittals and distribution.

At a minimum, the Design Submittal Protocol shall include the following:

1. **Preliminary Design Submittal**

   The Contractor shall make an initial submittal updating the design concept and project development work submitted with its Proposal (and if required as a result of any revisions resulting from Contract negotiations), including:

   - Project master schedule and design period schedule
• Basis of design memorandum outline (all design disciplines)
• Design drawing list
• Specification list
• Preliminary site grading and drainage plans
• Equipment general arrangement plans
• Process flow piping and instrumentation diagrams for all processes
• Architectural floor plan view and exterior elevations
• Preliminary landscape plan, showing all buffer areas
• Make-up water piping system
• Preliminary electrical site plan
• Electrical one-line drawings
• Mass and energy balances
• Water balances
• Chemical and energy use

The Preliminary Design Submittal shall be made no later than 60 days after the Contract is executed.

2. Final Design Submittal

The Contractor shall make a final design submittal 30 days prior to construction of any system or subsystem. At a minimum, each submittal shall include the following items, as applicable:

• Final equipment and material specifications
• Final architectural door, window, finish schedules
• Final architectural floor plan at each floor level and exterior elevations
• Final equipment layout plan views at each floor level with sections and details
• Final landscaping drawings and buffer areas
• Final grading and drainage drawings
• Final site piping drawings
• Final outdoor lighting and electrical site drawings
• Final process and support facility piping and general arrangement drawings
- Final structural concrete drawings, including foundations, tank designs, slab and well sections and details, miscellaneous steel details and framing drawings
- Final process flow piping and Instrumentation diagrams for all processes
- Final instrumentation loop control descriptions and diagram
- Final electrical one-line drawings
- Final electrical wiring diagrams and schedules to include motor control centers, lighting, power, instrumentation and control
- Final wire and conduit schedule
- Final mass and energy balance
- Final water balance
- Final chemical use

**Design Progress Meetings**
The Contractor shall conduct monthly progress review meetings with the City. The meetings will be conducted at the E/C Facility, at the offices of the City, or at another site mutually agreeable to the Contractor and the City.

The Contractor shall record the minutes of all meetings and provide the City with copies of said minutes and documentation produced as a result of the meetings.

**Design Changes**
The procedures to be followed for incorporating any design changes requested by the Contractor and/or the City will be specified in the Contract.

**Construction Review**

**Construction Review Intent**
In accordance with the terms and conditions of the Contract, the City will review, monitor and, as it deems necessary, inspect the Construction Work to ensure conformance to the Design Work and to ensure that such Construction Work does not represent a substitution of lesser quality.

**City Access, Review Meetings**
The City and its designated representative(s) shall have access to the E/C Facility at all times. The Contractor shall report to the City monthly, hold monthly progress review meetings with the City at a location designated by the City, and otherwise solicit input from the City to the process as required. The Contractor shall record the minutes of all meetings and construction progress, and provide the City with copies of minutes and documentation of said meetings.
Construction Submittal Protocol
Prior to start of construction, the Contractor shall submit to the City a protocol for
construction activities (Construction Submittal Protocol). The Construction Submittal
Protocol shall identify the key submittals to be prepared by the Contractor and the
expected submittal dates. A reasonable time period for the City’s review and
comments shall be specified in the Construction Submittal Protocol. The City's
review procedures and time periods shall be consistent with those in the main body
of the Contract. The Construction Submittal Protocol shall also note the frequency
of the Contractor's construction progress meetings and include monthly progress
review meetings with the City. The City shall designate the number of copies of
submittals and distribution.

Construction Submittals
The Contractor shall submit to the City, every two weeks, an updated list of the
current status of all shop drawings and submittals under review. The City may
request copies of any or all said drawings and submittals for its review. The
Contractor shall supply any requested documents within five (5) Business Days of
the City's request.

Shop Drawings
All final shop drawings shall be submitted to the City, filed in accordance with a
numbered index.

Product Data
Product data shall include, but are not limited to standard prepared data for
manufactured products (sometimes referred to as catalog data), such as the
manufacturer's product specification and installation instructions, availability of colors
and patterns, roughing-in diagrams and templates, catalog cuts, product
photographs, standard wiring diagrams, printed performance curves and
operational-range diagrams, production or quality control inspection and test reports
and certifications, recommended spare parts listing, and printed product warranties,
as applicable to the Construction Work.

Samples
Samples shall include, but are not limited to, physical examples of the work such as
sections of manufactured or fabricated work, small cuts or containers of materials,
complete units of repetitively-used products, and color/texture/pattern swatches, as
applicable to the Construction Work.

Format for Design and Construction Submittals
Submittals shall be made in accordance with the Design and Construction Submittal
Protocols and in such sequence as not to cause delay in the Design Work and the
Construction Work.
Submittals shall contain:

1. The date of submission, noting whether it is an original submission or a resubmission.
2. The project title and number.
3. The names of:
   a. Contractor
   b. Supplier
   c. Manufacturer
4. Identification of any deviations from Contract requirements.
5. State of California Registered P.E. and/or Registered Architect certification, as applicable.

**Start-Up Test and Acceptance Test Requirements**

Testing of equipment and systems installed, as part of the E/C Facility, will occur in two phases: the start-up testing and the Acceptance Test (see Section 4).

**Operation and Maintenance Requirements - E/C Facility and Export**

**Transition and Start-Up O&M Services**

The Contractor shall provide services necessary for a smooth start-up for operation and maintenance of the E/C Facility or for the provision of Export, as applicable.

Unless otherwise required in this RFP, after the Contract Date, but prior to initiating E/C Facility O&M services or Export Services, the Contractor shall be responsible for:

- Meeting with the City as the City deems necessary to develop a plan for and implement a smooth, uninterrupted provision of services.
- Preparing an Operations and Maintenance Manual.
- Obtaining required insurance for operations.
- Developing and implementing a training program for the E/C Facility or for Export services.
- Implementing computerized operations and maintenance management, inventory control, and process control data management systems.
- Setting up the computerized operations and maintenance management, inventory control and process control data systems to generate necessary reports and plots, including executive-level report and data summaries.
- Planning and scheduling for all operations and maintenance supplies, utilities, consumables, office supplies, and materials.
• Preparing an Exit Transition Plan.

Exit Transition Services

At the end of the Contract, whether at its stated expiration or by earlier termination for whatever reason, the Contractor shall provide services necessary for a smooth, uninterrupted transition of service to the City or its designated contractor. At Contract termination, the Contractor shall also provide for transfer of any license(s) to the City necessary for continued operations and maintenance of the E/C Facility.

Alternatively, should the City exercise its right to have the E/C Facility removed from the Site after the Contract expiration or by earlier termination as provided in Section 5 of this RFP, the Contractor shall provide services necessary to accomplish this task and restore the Site to a safe and useable condition.

The Contractor shall prepare an Exit Transition Plan describing said services and provide said plan to the City prior to initiating O&M services.

Export Services

The Contractor shall provide Export services to manage the City's Biosolids, Food Scraps and Yard Trimmings, as applicable. All services provided shall be in accordance with the Contract, meet or exceed Good Industry Practice, and be in full compliance with all applicable Federal, State and local permits, laws, regulations, policies and rules of all jurisdictional agencies having control over Contractor's Export services.

The Contractor shall:

1. Provide Export services in accordance with an O&M Manual approved, as required, by appropriate regulatory agencies, and with generally accepted industry principles and practices in full compliance with permit requirements and all applicable laws, regulations, policies and required approvals. The O&M manual shall be revised as necessary, for any changes to operational practices and/or for any additions or revisions to standard operating procedures. Revisions to the O&M manual shall incorporate practices, as required by applicable regulations, or in accordance with the Contract and Good Industry Practices, whichever are more stringent. Revisions to the O&M manual must be approved, as required, by appropriate regulatory agencies.

The O&M Manual shall address Contractor programs for monitoring and inspection of incoming feedstock and for separation and proper disposal of Unacceptable Feedstock.

The O&M Manual shall describe how feedstocks received for processing will be weighed, including weigh scale calibration programs, procedures for
resolution if standards are not met, and alternative means of weighing feedstock and materials should scales not meet standards.

2. Provide the required staff in accordance with a plan for staffing. The plan for staffing must include job titles and certification levels. A schedule must be provided detailing the coverage for each shift for the proposed workweek (including weekends and holidays).

3. Provide training for personnel, as applicable. The Contractor shall notify the City in advance of any training programs and allow the City to participate in said programs. Class size shall be limited to that prescribed by the Contractor training policy.

4. Provide administrative and technical support services to ensure efficient Export services. The services shall be provided as needed during the Term of the Contract.

5. Provide a quality assurance/quality control program (QA/QC Program) for sampling, testing, and analysis and perform monitoring, sampling, testing, laboratory analyses, and reporting, all as necessary for process control and full compliance with all local, State and Federal regulations and permits and Good Industry Practice. All testing necessary for compliance with permits and local, State and Federal programs shall be performed by a properly certified laboratory, to the extent required by applicable laws, regulations and policies. Weigh scales shall be tested monthly. The Contractor shall notify the City if scales do not meet standards, and provide alternative services when scales are out of calibration. The City shall have the right to independently test the scales at any time, at its own expense.

6. Provide for vehicle and/or capital repair and replacement, and repair or replace any vehicles, equipment, materials, facilities or other structures used to provide Export services, which are in need of repair or fail during the Term of the Contract.

7. Provide the required labor, materials, machinery, vehicles, equipment, fuel, power, chemicals, supplies, spare parts, expendables, consumables, long-lead-time replacement items, and all other items to provide Export services.

8. Respond promptly to (within two (2) hours after notice, or as otherwise required) and rectify all normal problems and emergencies relating to the Export services and maintain at all times during the Term of this Contract a toll-free, twenty-four-hour (24) telephone number with person-to-person service where emergencies can be reported. The Contractor shall immediately notify the City in the case of any emergency.
9. Provide for the satisfactory and proper transportation, processing and disposal, as applicable, of all feedstock, materials and Residuals.

10. Provide and maintain well-documented records of Export services, including operations, maintenance, laboratory analysis, personnel, training, safety, process control, daily inspections, materials, alarms, and any other significant events.

11. Prepare and sign all required regulatory and compliance reports. Copies of all reports shall be sent to the City and to the appropriate regulatory agencies by required deadlines. The Contractor shall maintain records as required by the regulatory agencies. Such records shall be accessible to the City.

12. At least once per month, or more frequently if necessary, meet with the City to review and discuss Export services, reports, ongoing and expected expenses, plans, and events which may impact contractual monetary performance or environmental compliance.

13. The Contractor shall maintain and provide for any monitoring, sampling and analysis required by regulatory agencies.

14. Provide for and maintain all Federal, State and local permits and other legal requirements that are necessary to provide Export services. Future permits or permit modifications required for providing services and which shall be procured and maintained by the Contractor with support from the City, and if appropriate, required changes will be subject to review under the Uncontrollable Circumstances (Change-in-Law) provisions of the Contract.

**Operation and Maintenance of the E/C Facility**

The Contractor shall provide continuous, full-service operation and maintenance services and asset management for the E/C Facility. All services provided by the Contractor shall be in accordance with the Contract, meet or exceed Good Industry Practice, and be in full compliance with all applicable Federal, State and local permits, laws, regulations, policies and rules of all jurisdictional agencies having control over the E/C Facility.

The Contractor shall accept for processing all Acceptable Feedstock delivered by or on behalf of the City that can be stored and processed within the limits specified by this RFP and as negotiated in the Contract. The Contractor can accept additional material (Spot Market Feedstock) as can be accommodated by the E/C Facility and as allowed by permit.

The Contractor shall:

1. Provide full-service, 24-hour-a-day, seven-day-a-week operation and maintenance of the E/C Facility. Services shall be provided in accordance with
an O&M Manual approved, as required, by appropriate regulatory agencies, and with generally accepted industry principles and practices in full compliance with permit requirements and all applicable laws, regulations, policies and required approvals. The Contractor shall operate and maintain the E/C Facility in accordance with the O&M manual and in accordance with the Contract and Good Industry Practices, whichever is most stringent.

The O&M manual shall be revised as necessary, for any changes to operations and maintenance practices, for any additions or revisions to standard operating procedures and for any E/C Facility modifications. Revisions to the O&M manual shall incorporate practices, as required by applicable regulations, or in accordance with the Contract and Good Industry Practices, whichever are more stringent. Revisions to the O&M manual must be approved, as required, by appropriate regulatory agencies.

The O&M manual shall include descriptions of the unit or system and component parts, its function, operating characteristics, and limiting conditions, and performance curves, engineering data and replacement parts for the equipment furnished, by reference to manufacturer/vendor-supplied information contained in engineering design submittals to the City and as defined in the Contract. The O&M manual shall also include complete maintenance instructions, parts lists, controls, and other information describing the construction, operation, control and maintenance of the equipment furnished. In addition, the O&M manual shall contain detailed operation instructions for all unit processes to include process control descriptions, target values for all process related control parameters, emergency process control provisions and process recovery procedures during unit process upsets or abnormal conditions.

The O&M Manual shall address Contractor programs for monitoring and inspection of incoming waste and for separation and proper disposal of Unacceptable Feedstock.

The O&M Manual shall describe weigh scale calibration programs, procedures for resolution if standards are not met, and alternative means of weighing feedstock and materials should scales not meet standards.

2. Provide the required staff in accordance with a plan for staffing. The plan for staffing must include job titles and certification levels. A schedule must be provided detailing the coverage for each shift for the proposed workweek (including weekends and holidays).

3. Provide training for personnel, as applicable, in the areas of E/C Facility operations, maintenance, safety, supervisory skills, and laboratory management. This training will include both plant specific and general, but related, educational materials.
The Contractor shall notify the City in advance of any training programs and allow the City to participate in said programs. Class size shall be limited to that prescribed by the Contractor training policy.

4. Provide administrative and technical support services to ensure efficient maintenance and operation of the E/C Facility. The services shall be provided as needed during the Term of the Contract.

5. Provide 24-hour-a-day access for the City's personnel, and their designated representatives, to the E/C Facility. All visitors to the E/C Facility shall notify the Contractor upon arrival and shall comply with the Contractor's safety policies and procedures.

6. The Contractor shall provide a quality assurance/quality control program (QA/QC Program) for sampling, testing, and analysis and perform monitoring, sampling, testing, laboratory analyses, and reporting, all as necessary for process control and full compliance with all local, State and Federal regulations and permits and Good Industry Practice. All testing necessary for compliance with permits and local, State and Federal programs shall be performed by a properly certified laboratory, to the extent required by applicable laws, regulations and policies.

Weigh scales shall be tested monthly. The Contractor shall notify the City if scales do not meet standards, and provide alternative services when scales are out of calibration. The City shall have the right to independently test the scales at any time, at its own expense.

7. Perform all Corrective, Predictive and Preventive Maintenance Plan activities and repairs for the E/C Facility in accordance with the O&M manual and Good Industry Practice.

8. Conduct all activities to maintain and enforce new and existing equipment warranties and guarantees.

9. Provide for capital repair and replacement, and repair or replace any materials, equipment, building or other structures, which are in need of repair or fail during the Term of the Contract.

10. Provide the required labor, materials, machinery, vehicles, equipment, fuel, power, chemicals, supplies, spare parts, expendables, consumables, long-lead-time replacement items, and all other items to operate and maintain the E/C Facility.

11. Perform routine and normal repairs, including maintenance of all equipment, structures, buildings and grounds which are part of the E/C Facility. Maintenance shall include housekeeping, cleaning, painting and landscaping services.
12. Provide safety and security for the E/C Facility in compliance with applicable health and safety regulations, Good Industry Practice, and as warranted by the site location. Fences and gates shall be maintained in neat order and structural integrity.

13. Respond promptly to (within two (2) hours after notice, or as otherwise required) and rectify all normal problems and emergencies relating to the E/C Facility and maintain at all times during the Term of this Contract a toll-free, twenty-four-hour (24) telephone number with person-to-person service where emergencies can be reported. The Contractor shall immediately notify the City in the case of any emergency.

14. Immediately notify the City, if, during the course of excavation work necessary to make repairs and/or improvements to the E/C Facility, faulty or leaking underground storage tanks or hazardous or toxic waste or materials (as defined in Applicable Law) are identified by the Contractor, and immediately notify such other governmental agencies as may be required by law and take such further actions to assist the City in protecting the health, safety and welfare of the public.

15. Conduct emergency repairs to protect employees, equipment, buildings and grounds, as required.

16. Provide for the satisfactory and proper handling and storage of all recovered materials and products.

17. Provide for the satisfactory and proper handling, loading, transportation and disposal of all Residuals, Bypassed Feedstock, and Unacceptable Feedstock. Residue must be characterized and disposed of in accordance with Applicable Law. Prepare and maintain a record of disposal of these materials in accordance with Applicable Law.

18. Remove and dispose, or sell unused and replaced equipment. The Contractor shall identify such equipment.

19. Provide and maintain well-documented records of operations, maintenance, laboratory analysis, personnel, training, safety, process control, daily inspections, materials, alarms, and any other significant events.

20. Prepare and sign all regulatory operation and maintenance reports and CEMS compliance reports. Copies of all reports shall be sent to the City and to the appropriate regulatory agencies by required deadlines. The Contractor shall maintain records as required by the regulatory agencies. Such records shall be accessible to the City.

21. At least once per month, or more frequently if necessary, meet with the City to review and discuss operations and maintenance activities, reports, ongoing
and expected expenses, plans, and events which may impact contractual monetary performance or environmental compliance. At any time, the E/C Facility may be inspected by the City or its designated representative(s) to ensure all required work is being performed, including maintaining an acceptable level of cleanliness and appearance.

22. Conduct semi-annual inspections of the E/C Facility. The City's designated representative(s) shall accompany the Contractor on these inspections.

23. Perform such repairs or maintenance items as identified in writing by the City as a result of any the City's inspection that reveals a lack of repairs or necessary maintenance to the E/C Facility which may impact contractual monetary performance, environmental compliance, or public safety. Disagreements arising from actions taken in this item shall be subject to the dispute resolution procedure in the Contract.

24. The Contractor shall maintain and provide for any monitoring, sampling and analysis required by regulatory agencies.

25. Provide for and maintain all Federal, State and local permits and other legal requirements that are necessary to operate and maintain the E/C Facility. Future permits or permit modifications required for providing operations and maintenance services and which shall be procured and maintained by the Contractor with support from the City, and if appropriate, required changes will be subject to review under the Uncontrollable Circumstances (Change-in-Law) provisions of the Contract.

26. The Contractor shall be responsible for maintaining the E/C Facility in good working condition according to Good Industry Practice and Contract terms.

**Computerized Operation and Maintenance Management for E/C Facility**

Operation and maintenance activities for the E/C Facility shall be administered using computerized operations and maintenance management system provided by the Contractor. This system shall be operational prior to Acceptance.

**Records and Reports - E/C Facility and Export**

The Contractor shall maintain records and prepare reports as described herein and as may otherwise be required by applicable Federal, State and local government agencies. Minimum reporting requirements to the City are described herein. Recordkeeping and reporting requirements shall apply to the E/C Facility and, as applicable, Export services.

The Contractor shall maintain records and prepare reports to the City documenting facilities' and systems' operations and maintenance, regulatory activities, laboratory analyses, training, process control, daily inspections, significant alarms, chemicals
on hand, fuel on hand, maintenance plans and activities, outages, permit and compliance results, equipment status, and other relevant information, such as Export services, in accordance with the City's requirements as specified below, applicable laws, regulations, permits, and guidelines and as Good Industry Practice shall require. The City and its designated representative(s) shall have full access to these reports and data at all times.

The Contractor shall provide the following reports to the City:

- **Monthly Operations and Maintenance Report** – The Contractor shall prepare and provide to the City within 20 days of the end of each month an operations and maintenance report. At a minimum, the Contractor shall identify any permit violations for the month and include a summary of E/C Facility performance, including the performance with respect to permit parameters, status of maintenance, major expenditures, and other pertinent information of the E/C Facility. The report shall quantify the Acceptable Feedstock received by source, Acceptable Feedstock processed, Residue, Bypassed Feedstock, Unprocessable Feedstock and Unacceptable Feedstock disposed, digestate produced, materials recovered, electricity produced and sold, electricity used, fuel produced and sold, and other materials recovered and/or products produced and sold or beneficially used. It shall list forced outages and planned outages, and forecast E/C Facility planned outages for the next three months. It shall also document fuels and chemicals used; include maintenance monitoring reports; and include copies of any correspondence with regulatory agencies, including that associated with any permit violations. The report shall also list all maintenance work performed, the maintenance plan for the next month, and record keeping activities. The report shall document accidents, injuries, damages to the City's property, emergencies and alarm activations and the response actions taken by the Contractor.

For Export services, the Contractor shall provide a similar monthly report documenting applicable information.

- **Monthly Statement** – Within 20 days of the end of each month, a Monthly Statement shall be prepared and submitted to the City which documents in sufficient detail for City’s verification of the payment due to the City, or the payment due the Contractor. The Statement shall include cost items, revenues, feedstock throughput and quantity of products generated and sold.

- **Monthly Complaint Log** – Within 20 days of the end of each month, the Contractor shall prepare and provide to the City a monthly report of all complaints relating to the E/C Facility or Export services. The report shall include a description of the response to the inquiry and an assessment of the complainant's satisfaction with the response.
- **Annual Operation and Maintenance Report** – Within 90 days of the end of each Contract Year, the Contractor shall prepare a report presenting a summary of the past year’s operation and maintenance activities at the E/C Facility or for Export services based on the monthly reports and presenting planned activities for the next year. Capital repair and replacement and capital improvements shall be described. The report shall also document in sufficient detail any adjustments required in payments to or by the City. After submission of the report, the Contractor shall, at the City's request, meet with the City to review the report.

**Staffing**

The Contractor shall provide a staff of qualified and experienced employees in accordance with the plan for staffing and shall provide such additional third-party support as may be needed to perform its duties and obligations hereunder. Said third parties shall be equally qualified for the particular services to be performed and shall not have any direct claim against the City whatsoever. The Contractor shall at all times maintain the necessary number of employees, staff and third-party contractors to operate, maintain and manage the E/C Facility or to provide Export services in accordance with the Operations and Maintenance Plan and the Contract, to adequately maintain the E/C Facility or vehicles and facilities used to provide Export services in good repair, to adequately operate the E/C Facility or conduct Export services to provide good service to the customers, and to protect the health, welfare and safety of the citizens of the local community and surrounding communities. The Contractor shall make a good faith effort to employ staff from the local and regional labor markets.

The Contractor shall provide: (i) qualified management, supervisory, technical, laboratory, and operating and maintenance personnel, licensed or certified as required, for operation and maintenance of the E/C Facility or for provision of Export services; (ii) a manager for day-to-day supervision; (iii) specialists, as may be necessary, including those for troubleshooting, emergency management, and similar circumstances; and (iv) office and clerical support staff as necessary.

The Contractor shall provide a technical support group that will provide on-call backup advice, expertise and quality control, management, maintenance and plant repair to assist the operational staff and ensure performance of obligations hereunder and to design and construct any improvements to the E/C Facility. The Contractor’s technical support group shall also provide assistance in the investigation, development and implementation of modifications in the processes as may be appropriate or necessary for regulatory compliance, worker safety, or process improvement.

The Contractor shall provide and maintain an organizational chart that lists job classification and the number of staff proposed for the full-time operation. The Contractor shall notify the City of any proposed material revisions to the plan for
staffing and/or to the personnel organization for the E/C Facility or for Export services.

**Licenses and Certifications**

The Contractor shall acquire and hold, and cause its personnel to acquire and hold, all required Federal, State and local approvals, licenses, and certifications necessary to operate, maintain and manage the E/C Facility or to provide Export services.

**Training**

The Contractor shall provide, as appropriate, overall career development, on-site direction, and support to on-site personnel, in addition to providing an ongoing series of specialized training programs in the following areas:

- [ ] Laboratory
- [ ] Process control
- [ ] Operations and maintenance and repairs
- [ ] Safety
- [ ] Confined space entry
- [ ] QA/QC
- [ ] Right-to-Know
- [ ] Emergency preparedness and response
- [ ] Personnel relations
- [ ] Community relations

The Contractor shall notify the City in advance of any training programs held by the Contractor and allow the City’s participation in said programs. Class size shall be limited to that prescribed by the Contractor training policy. Training shall be an integral component of operation and maintenance services. Mandatory training shall be required for all personnel in general operation, and in area-specific and job-specific performance. Refresher courses shall be tailored for each area of responsibility. As new employees are introduced, experienced employees are given new assignments or new equipment/processes are introduced, a training program shall be implemented. Documentation of the training and evaluation of the results shall be completed.

**Emergency Preparedness and Emergency Situations**

The Contractor shall prepare an Emergency Preparedness Plan (EPP) in accordance with Federal and State regulations governing emergency action and fire prevention plans and in cooperation with Federal, State and local officials and public safety departments. Potential emergency situations shall be identified and specific
actions to minimize the chance of an emergency shall be described. The Contractor shall develop written policies, preventative measures and response actions necessary to manage Extremely Hazardous Substances (EHS) and systems that may pose a threat to the safety of workers and the surrounding community environment. These written policies shall be developed and implemented as necessary to comply with Federal and State safety, health and environmental regulations governing EHS.

In addition, the EPP shall address actual response and notification requirements for each type of anticipated emergency. The notification, depending on the situation, shall include the local Fire, Police and Public Works Departments, the Office of Emergency Management, and the applicable State and Federal agencies. The EPP shall also identify specific response actions that shall be taken by the Contractor and specific local or other applicable agencies to ensure that either the waste services are not disrupted, or the disruption is minimized to the maximum extent possible.

The Contractor shall implement the EPP based on the following:

- **Operation and Maintenance Staff.** Operators shall be trained in the use of equipment and in the implementation of the EPP. Specific procedures, tailored to the E/C Facility or Export services, as applicable, shall be developed with operator input and shall be used in the event of equipment failure and customer complaints regarding service. Designated Contractor employees shall have personal pagers and on-call duties will be rotated at the Contractor’s discretion to ensure the availability of adequate response on a 24-hour-a-day basis.

- **Emergency Operations Plan.** A written emergency operations plan shall be developed and implemented for the E/C Facility or for Export services, as applicable, with the input of local community and State agencies and departments and safety service officials, as well as the City and applicable Federal agencies. Procedures shall be rehearsed with appropriate officials to ensure that response functions are properly executed in the event of an emergency. This plan shall meet the requirements for a contingency plan, and shall cover potential emergencies due to natural disasters, power failures, spills or releases of contaminants, etc.

- **Monitoring Equipment and Alarms.** The Contractor shall provide monitoring equipment and alarms for the E/C Facility. All key process functions shall be monitored, and when they exceed alarm setpoints, the early warning devices shall notify the on-call operator.

The Contractor shall immediately notify the City, appropriate Federal agencies, the State and the local community of any activity, problem, or circumstance that threatens the safety, health or welfare of the users of the E/C Facility or the residents of local community.
In the event of damage or destruction of the E/C Facility or any emergency which, in the reasonable judgment of the Contractor, is likely to result in material loss or damage to the E/C Facility or constitute a material threat to human health or safety, the Contractor may suspend operation of the E/C Facility, or similarly suspend Export services. Emergency repairs as are necessary to mitigate or reduce such loss, damage or threat to human health or public safety shall be done in consultation with the City, appropriate Federal agencies, the State and the local community. Notification of emergency/noncompliance events within the E/C Facility or Export services shall be in accordance with permit requirements and an emergency plan to be developed by the Contractor and submitted to and approved by the City, appropriate Federal agencies, the State, and the local community and any subsequent amendments or modifications thereto.

The Contractor shall respond to emergencies and unusual circumstances in accordance with applicable regulations and requirements and with such personnel and equipment as necessary to maintain or restore the operations of the E/C Facility or Export services in a timely manner with the least possible disruption or inconvenience to the users of the E/C Facility or Export services.

**OSHA Compliance**

The Contractor shall prepare and implement a technical and safety training plan and program for the E/C Facility or Export services in accordance with OSHA requirements, Good Industry Practice and the Contractor standard practices, whichever are most stringent. The Contractor shall assign the administration of the technical and safety training plan and program to its appropriate staff.

Safety meetings shall be held regularly. Said meetings shall be used to provide safety training and to review site-specific job and general safety requirements.

Inspections by the Contractor's personnel responsible for health and safety shall be used as a tool in determining how the health and safety program is progressing in conformance with the established plan. Should an accident occur, a written accident investigation procedure shall be followed to document the accident and prevent reoccurrences.

**Noise Control**

The Contractor shall be responsible for meeting the requirements of Applicable Law and minimizing noise impacts on surrounding land use for the E/C Facility and for Export services. Particular emphasis should be placed on minimizing noise impacts after normal business hours and during weekends and holidays.

**Odor Control**

The Contractor shall be responsible for: 1) managing odors from the E/C Facility such that no objectionable odor can be detected beyond the Site boundaries; and 2)
investigating and satisfying odor complaints and correcting any odor problems should they occur. For Export services, the Contractor shall be responsible for managing odors from its vehicles, any transfer facilities and its processing facilities. Activities shall include, but are not limited to the following, which shall also apply to Export services as applicable for its vehicles picking up and transporting Acceptable Feedstocks as well as any transfer facilities and its processing facilities:

**Good Housekeeping**
The Contractor shall implement a regimented housekeeping schedule and work plan for the E/C Facility to maintain clean facilities.

**Proper Feedstock and Product Management**
The Contractor shall provide proper feedstock and product management within the E/C Facility.

**Efficient Process Control**
The Contractor shall maintain a proactive approach to odor control through diligent process control of the unit operations of the E/C Facility. Typical of these are:

- Ongoing evaluation of the E/C Facility odor control systems to insure adequate control of the controllable parameters; and
- Optimization of feedstock processing to reduce the on-site feedstock inventory.

**Enhanced Odor Awareness, Evaluation and Reduction**
The Contractor shall provide ongoing audits of the odor conditions of the E/C Facility components. As part of its services, the Contractor shall perform annual odor control evaluations of the E/C Facility and the surrounding areas and shall submit a report on same to the City.

The Contractor shall be responsible for all steps consistent with industry standards and Good Industry Practice for reducing all odors so that off-site odors are minimized and complaints are satisfied.

**Community Relations**
The Contractor shall be sensitive to the impact that “poor housekeeping”, undesirable odors, noise, excessive light or other such operational and environmental factors can have on community relations. In the event of a complaint(s), the Contractor shall respond rapidly to resolve any reported problems. The Contractor’s actions shall be taken in a professional manner that maintains positive community relations for the E/C Facility and Export services within the community.
As a minimum, the Contractor shall:

- Report to the City any complaints related to the E/C Facility or Export services.
- Provide a 24-hour telephone hotline for those who wish to comment on issues of immediate concern.
- Provide an e-mail address for those who wish to comment on issues of concern.

**Public Information Program**

The Contractor shall be responsible for assisting the City with their public information programs by providing information to support those programs. The Contractor shall describe its proposed efforts, which may include activities such as:

- Creation of a Web Page informing the public of the status of the E/C Facility or Export services and various public education materials and programs available associated with the E/C Facility or Export services.
- Issuance of newsletters and/or press releases to inform the public of the Contractor’s activities related to the E/C Facility or Export services.
- Preparation of fact sheets and household guides explaining State and local community regulations and activities at the E/C Facility or related to Export services that positively affect recycling and renewable energy generation.
- Presentations to local civic, environmental and other groups or at public events, which will include presentation of available videos.
- Providing a repository of publications pertaining to waste policies and waste reduction and recycling programs, information about purchasing products made from recyclable products and directories of companies that provide these types of goods, recycling guidance documents and technologies that will be available to interested parties at the E/C Facility or another location agreed to by the City. Such a repository shall be inclusive of information or guides generated and provided by the City.
- Hosting of E/C Facility open houses, as well as at Export facilities.
- Hosting of tours of the E/C Facility or Export facilities for interested members of the public.
- Technical assistance on source and waste toxicity reduction to target users of concern.
- Participation in public hearings, public meetings, and meetings of elected officials and interested groups.
- Participation in City, State and local community public events.
Laboratory Management

The Contractor shall perform all required sampling, testing and laboratory analyses for the E/C Facility or for Export services and prepare and file the required reports.

The Contractor shall maintain a laboratory quality assurance and quality control program that ensures all regulatory data is legally defensible. The Contractor shall set up, audit and monitor all laboratory operations to ensure compliance with EPA standard test methods and any State and local requirements.
APPENDIX F-2

UTILITY INFORMATION

Utility Rate Schedule E-7 (Large Commercial Electric Service)
City of Palo Alto Standard Electricity Interconnection Agreement

[Note: The City’s Standard Interconnection Agreement is for a term of 10 years. For purposes of Proposal preparation, Proposers shall assume that the term of the interconnection agreement will be consistent with both the Term of the Contract and the term of the power sales agreement to be negotiated with the City]

Northern California Power Agency (NCPA) Scheduling Protocols
Stormwater Collection System at the Landfill Site
A. **APPLICABILITY:**

This schedule applies to demand metered secondary service for commercial customers with a maximum demand of at least 1,000 KW per month per site, who have sustained this demand level at least 3 consecutive months during the last twelve months.

B. **TERRITORY:**

This rate schedule applies anywhere the City of Palo Alto provides electric service.

C. **RATES:**

*Rates per kilowatt (kW) and kilowatt-hour (kWh):*

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</tbody>
</table>

D. **SPECIAL NOTES:**

1. **Calculation of Charges**

The actual bill amount is calculated based on the applicable rates in Section C above and adjusted for any applicable discounts, surcharges and/or taxes. On a customer’s bill statement, the bill amount may be broken down into appropriate components as calculated under Section C.
2. **Seasonal Rate Changes**

The Summer Period is effective May 1 to October 31 and the Winter Period is effective from November 1 to April 30. When the billing period includes use both in the summer and in the winter periods, the usage will be prorated based on the number of days in each seasonal period, and the charges based on the applicable rates therein. For further discussion of bill calculation and proration, refer to Rule and Regulation 11.

3. **Request for Service**

Qualifying customers may request service under this schedule for more than one account or one meter if the accounts are on one site. A site shall be defined as one or more utility accounts serving contiguous parcels of land with no intervening public right-of-ways (e.g. streets) and have a common billing address.

4. **Maximum Demand Meter**

Whenever the monthly use of energy has exceeded 8,000 kilowatt-hours for three consecutive months, a maximum demand meter will be installed as promptly as is practicable and thereafter continued in service until the monthly use of energy has fallen below 6,000 kilowatt-hours for twelve consecutive months, whereupon, at the option of the City, it may be removed.

The maximum demand in any month will be the maximum average power in kilowatts taken during any 15-minute interval in the month provided that in case the load is intermittent or subject to violent fluctuations, the City may use a 5-minute interval. A thermal-type demand meter which does not reset after a definite time interval may be used at the City's option.

The billing demand to be used in computing charges under this schedule will be the actual maximum demand in kilowatts for the current month. An exception is that the billing demand for customers with Thermal Energy Storage (TES) will be based upon the actual maximum demand of such customers between the hours of noon and 6 pm on weekdays.
LARGE COMMERCIAL ELECTRIC SERVICE
UTILITY RATE SCHEDULE E-7

5. **Power Factor**

For new or existing customers whose demand is expected to exceed or has exceeded 300 kilowatts for three consecutive months, the City has the option to install applicable metering to calculate a power factor. The City may remove such metering from the service of a customer whose demand has been below 200 kilowatts for four consecutive months.

When such metering is installed, the monthly electric bill shall include a “power factor penalty”, if applicable. The penalty adjustment shall be applied to a customer’s bill prior to the computation of any primary voltage discount. The power factor penalty is applied by increasing the total energy and demand charges for any month by 0.25 percent (0.25%) for each one percent (1%) that the monthly power factor of the customer’s load was less than 95%.

The monthly power factor is the average power factor based on the ratio of kilowatt hours to kilovolt-ampere hours consumed during the month. Where time-of-day metering is installed, the monthly power factor shall be the power factor coincident with the customer's maximum demand.

6. **Changing Rate Schedules**

Customers may request a rate schedule change at any time to any applicable full service rate schedule as is applicable to their kilowatt-demand and kilowatt-hour usage profile.

7. **Primary Voltage Discount**

Where delivery is made at the same voltage as that of the line from which the service is supplied, a discount of 2 1/2 percent for available line voltages above 2 kilovolts will be allowed provided the City is not required to supply service at a particular line voltage where it has, or will install, ample facilities for supplying at another voltage equally or better suited to the customer's electrical requirements. The City retains the right to change its line voltage at any time after providing reasonable advance notice to any customer receiving a discount hereunder and affected by such change. The customer then has the option to change his system so as to receive service at the new line voltage or to accept service (without voltage discount) through transformers to be supplied by the City subject to a maximum kVA size limitation. *(End)*
INTERCONNECTION AGREEMENT

This Interconnection Agreement (the “Agreement”), dated, for convenience, 20 (the “Effective Date”), is entered into by and between the CITY OF PALO ALTO, a California chartered municipal corporation (the “City”), acting by and through its Department of Utilities (“CPAU”), and ABC COMPANY, a California corporation (the “Facility Owner”), located at the address stated below (the City and the Facility Owner are referred to, individually, as a “Party”, and, collectively, as the “Parties”).

1.0 TERM

1.1 This Agreement takes effect on the Effective Date, and it will continue for a term of ten (10) years, until it is earlier terminated, as follows: (a) the Facility Owner gives the City or CPAU thirty (30) days’ prior written notice of termination; (b) if Operating Mode #2 or Operating Mode #3 is selected in Exhibit A, upon the effective date of termination of the Power Purchase Agreement or the Other Agreement between the Parties; or (c) a Party effectively terminates due to a material default and breach by the other Party.

1.2 Upon a default referred to in Section 1.1(c), the non-defaulting Party shall give written notice of such event of default to the defaulting Party. The defaulting Party shall have sixty (60) days from the receipt of notice of default in which to cure the default; provided, if the defaulting Party informs the non-defaulting Party that it cannot cure the default within the sixty-days period and it in good faith has continuously and diligently attempted to cure the default, then, if the defaulting Party cures within six (6) months from the receipt of the notice of default, the non-defaulting Party may not terminate this Agreement. No default shall be deemed to exist if the failure to discharge an obligation (other than the payment of money) is the result of force majeure or an act or omission of the other Party.

2.0 GENERATING FACILITY INTERCONNECTION AND METERING

2.1 The Facility Owner will install, operate, maintain, and repair the Generating Facility and use the meter(s) that meet(s) the requirements of CPAU’s Rules and Regulations, as amended, and other applicable laws, rules and regulations, including, without limitation, CPAU’s interconnection standards, as set forth in its Utilities Rule and Regulation 27 (“Rule 27”).

2.2 CPAU, at its sole cost and expense, may inspect and approve the installation of the Generating Facility and verify or otherwise authenticate the accuracy of the meter(s) as a condition precedent to its obligation to interconnect.

2.3 The Facility Owner grants to the City, including CPAU, its officers, employees, agents and representatives the non-exclusive right of ingress and egress on, over and across the Premises, upon reasonable prior notice, for the purpose of inspecting and approving the installation and operation of the Generating Facility and
authenticating the accuracy of the meter(s), or without notice, in the event of an emergency, to protect the public health, safety and welfare, or in regard to a disconnection of the Generating Facility, if CPAU reasonably determines that a condition hazardous to person or property exists and immediate action is necessary to protect person or property from damage or interference caused by the Facility or as a result of the lack of properly operating protective devices of the Facility.

2.4 The Facility Owner will obtain and maintain the required governmental approvals, authorizations, permits, and any policy (or policies) of insurance, including, without limitation, commercial general liability, property, and professional liability insurance, as may be required by the City or CPAU or applicable laws.

2.5 The Facility Owner will comply with all applicable federal, state and local safety and performance standards applicable to the Generating Facility and established by or under the National Electrical Code (NEC), the Institute of Electrical and Electronics Engineers (IEEE) and accredited testing laboratories, including, without limitation, Underwriters Laboratories (UL), and in accordance with the applicable orders, rules and regulations of the California Public Utilities Commission, pertaining to the safety and reliability of electrical generating systems, and applicable City building codes.

2.6 Neither the City nor CPAU will be obligated to accept or pay for, and the City or CPAU may require the Facility Owner to temporarily interrupt or reduce, the delivery of available energy generated by the Generating Facility in the event of the following: (a) whenever CPAU determines that the interruption or reduction is necessary in order for CPAU to construct, install, maintain, repair, replace, remove, investigate, or inspect any part of CPAU’s electric utility distribution system; or (b) if CPAU determines that the interruption or reduction is necessary on account of an emergency, voluntary or involuntary outage, force majeure, or compliance with good utility practice.

2.7 Notwithstanding any other provision of this Agreement, if CPAU determines that either (a) the operation of the Generating Facility may threaten or endanger the public health, safety or welfare or the City or CPAU’s personnel or property, or (b) the continued operation of the Generating Facility may endanger the operational integrity of CPAU’s electric utility distribution system, then CPAU will have the right to temporarily or permanently disconnect the Generating Facility from CPAU’s electric utility distribution system upon the delivery of prior reasonable notice to the Facility Owner; provided, CPAU may act without giving prior notice to the Facility Owner, if CPAU determines that it is impracticable to provide the notice. The Generating Facility will remain disconnected until such time as CPAU is satisfied that the conditions referred to in this subsection have been corrected or sufficiently addressed.

2.8 The Facility Owner will (a) maintain the Generating Facility, which interconnects with CPAU’s electric utility distribution system, in a safe and prudent manner and in
conformance with all applicable laws, rules and regulations, including, without limitation, the requirements of this Section 2, and (b) obtain any governmental approvals, authorizations and permits required for the construction and operation of the Generating Facility.

2.9 The Facility Owner will reimburse CPAU for any and all losses, damages, claims, penalties, or liability that the City or CPAU may incur or sustain as a result of the Facility Owner’s failure to obtain and maintain any and all governmental approvals, authorizations and permits that may be required for the construction, installation, operation, repair or maintenance of the Generating Facility.

3.0 INTERCONNECTION FACILITIES, DISTRIBUTION SYSTEM UPGRADES, AND AFFECTED SYSTEMS

3.1 The Facility Owner shall, in accordance with CPAU Rule 27 or other applicable CPAU Rule, pay, in advance and in full, for all of CPAU’s estimated design and construction costs of the Interconnection Facilities and the Distribution System Upgrades, which are specified in Exhibit A.

3.2 In the event that the Facility Owner owns the real property, on which the Interconnection Facilities are or will be located, then the Facility Owner shall grant to the City and CPAU (or in the event that Facility Owner is leasing or otherwise obtaining rights to locate the Generating Facility on real property of a third party, the Facility Owner shall obtain for the City and CPAU):

3.2.1 The right to install the Interconnection Facilities and related equipment or materials on that real property along the most practical route, which is of sufficient width to provide the appropriate and safe clearance from all structures now or hereafter erected on that real property; and

3.2.2 The right of ingress and egress to and from that real property, as may be reasonably necessary for CPAU to operate, maintain, repair, and remove the Interconnection Facilities.

3.3 Where rights-of-entry or easements are required on or over that real property or the property of a third party for the installation of the Interconnection Facilities, the Facility Owner acknowledges and agrees that CPAU’s obligation to install the Interconnection Facilities is expressly conditioned on the granting, without cost to the City or CPAU, of any and all necessary rights-of-entry or easements to the City.

3.4 THE CITY MAKES NO REPRESENTATIONS, WARRANTIES, COVENANTS OR ASSURANCES WITH RESPECT TO THE DESIGN, CONSTRUCTION, DURABILITY OR SUITABILITY OF THE NEW INTERCONNECTION FACILITIES OR ANY PART THEREOF, WHETHER EXPRESS OR IMPLIED, AND THE CITY EXPRESSLY DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY, QUIET ENJOYMENT, AND ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE APPLICABLE TO
3.5 The one-line diagram of the interconnection (at the Delivery Point) is described in Exhibit A. The Interconnection Facilities are the sole and exclusive property of and shall be owned, operated, maintained, and repaired by the City and CPAU, and the Facility Owner disclaim any interest therein.

3.6 The Facility Owner shall pay CPAU for the costs of the Interconnection Facilities. The direct costs for the design and construction of the Interconnection Facilities shall be paid in advance by the Facility Owner. The Facility Owner shall be additionally responsible for costs related to ongoing operations, maintenance, and replacement of the Interconnection Facilities.

3.7 Upon the Facility Owner’s discontinuation of use of the Interconnection Facilities due to termination of this Agreement, or otherwise, CPAU shall have the right to remove any portion of the Interconnection Facilities from the real property on which the Interconnection Facilities are installed or located.

3.8 As may be required by applicable agreements between the City or CPAU and one or more Affected Systems’ owners and/or operators, CPAU shall coordinate with those Affected Systems’ owners and/or operators to support the interconnection. An “Affected System” is an electric system not owned by the City or CPAU but to which CPAU’s electric utility distribution system is connected. “Affected System” includes, without limitation, the transmission system that is owned by the Pacific Gas and Electric Company but is operated by the California Independent System Operator Corporation (“CAISO”). If upgrades to an Affected System are required by an Affected System owner and/or operator as a condition of interconnection of the Generating Facility, then the Facility Owner shall be responsible for the costs of such upgrades. The Facility Owner and each Affected System owner and/or operator shall enter into one or more agreements that provide(s) for the financing of such upgrades, as needed, and any repayment as set forth in applicable tariffs of the Affected System’ owner and/or operator. The Facility Owner, at its own cost and expense, shall be responsible for entering into any other agreements as may be required by an Affected System’s owner and/or operator as a condition of interconnected operation and complying with the requirements of any applicable tariffs. Such agreements may include the “Participating Generator Agreement” (ISO Tariff Appendix M) and the “Meter Services Agreement for CAISO Metered Entities” with the CAISO.

4.0 INDEMNITY

4.1 Each Party, as indemnitor, shall defend, protect, indemnify and hold harmless the other Party, as indemnitee, its elected and appointed officials, directors, officers, employees, agents and representatives of the other Party from and against any and all losses, liability, damages, claims, costs, charges, demands, or expenses (including any direct, indirect or consequential loss, liability, damage, claim, cost, charge, demand, or expense, and reasonable attorneys’ fees) for personal injury or death
and property damage, arising, directly or indirectly, out of or in connection with (a) the engineering, design, construction, maintenance, repair, operation, supervision, inspection, testing, protection or ownership of the indemnitor’s facilities, or (b) the making of replacements, additions, betterments to, or reconstruction of the indemnitor’s facilities; provided, however, the Facility Owner’s duty to indemnify the City and CPAU shall not extend to any loss, liability, damage, claim, cost, charge, demand, or expense resulting from interruptions in electrical service to CPAU’s electric utility customers other than the Facility Owner. Neither Party shall be indemnified hereunder for its loss, liability, damage, claim, cost, charge, demand, or expense arising out of or resulting from its sole negligence or willful misconduct.

4.2 Notwithstanding the foregoing indemnity, and excepting a Party’s willful misconduct or sole negligence, each Party shall be solely responsible for damage to its own facilities resulting from electrical disturbances or faults.

4.3 This Section 4 shall not be construed to relieve any insurer of its obligations to pay any insurance claims in accordance with the provisions of any valid insurance policy to be procured by a Party.

4.4 EXCEPT AS OTHERWISE PROVIDED IN SECTION 4.1, A PARTY SHALL NOT BE LIABLE TO THE OTHER PARTY FOR ANY CONSEQUENTIAL, PUNITIVE, EXEMPLARY, SPECIAL OR INCIDENTAL DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF BUSINESS, LOSS OF REVENUE, LOSS OF OPPORTUNITY OR LOSS OF DATA), HOWSOEVER CAUSED, WHETHER ARISING UNDER TORT, CONTRACT, OR OTHER LEGAL THEORY, AND WHETHER OR NOT FORESEEABLE, THAT ARE INCURRED BY THE OTHER PARTY.

5.0 NOTICE

5.1 Any notice required to be given under this Agreement will be delivered, in writing, and electronically mailed or delivered by the United States Postal Service, with postage prepaid and correctly addressed to the Party, or personally delivered to the Party, at the address below. Changes to such designation may be made by notice similarly given. All written notices will be directed, as follows:

TO CITY:

City of Palo Alto Department of Utilities
250 Hamilton Ave Palo Alto, CA 94301
ATTN.: Utilities Resource Management Phone: (650) 329-2689
FAX: (650) 326-1507
Email: UtilityCommoditySettlements@CityofPaloAlto.org
6.0 MISCELLANEOUS PROVISIONS

6.1 This Agreement is governed by and interpreted in accordance with the laws of the State of California as if executed and to be performed wholly within the State of California.

6.2 Any amendment or modification to this Agreement will not be binding upon the Parties, unless the Parties agree thereto, in writing. The failure of a Party at any time or times to require performance of any provision hereof will in no manner affect the right at a later time to enforce the same. No waiver by a Party of the breach of any covenant, term or condition contained in this Agreement, whether by conduct or otherwise, will be deemed or be construed as a further or continuing waiver of any such breach or a waiver of the breach of any other covenant, term or condition, unless such waiver is stated, in writing.

6.3 This Agreement supersedes any existing agreement, to which the City and the Facility Owner are parties, under which the Facility Owner is currently operating the Generating Facility, and any such agreement shall be deemed terminated as of the date this Agreement becomes effective.

IN WITNESS WHEREOF, the Parties by their duly appointed representatives have executed this Interconnection Agreement in Palo Alto, County of Santa Clara, as of the Effective Date.

CITY OF PALO ALTO

City Manager

APPROVED AS TO FORM:

Senior Asst. City Attorney

ABC COMPANY

President

APPROVED:

Director of Utilities
EXHIBIT A

PART 1. GENERATING FACILITY DESCRIPTION

1. Service address: ____________________________, Palo Alto, CA________ (the “Premises”)

2. Generating Facility Description:

3. Gross power rating of the Generating ______ kW, based on: Facility
   □ Inverter rating
   □ Solar array rating (Panel rated output at PV USA test conditions x inverter efficiency)
   □ Generator nameplate
   □ Prime mover nameplate

4. Generating Facility primary fuel/technology: ________________________________

5. Net power rating of the Generating Facility: ___kW, which is the gross power rating stated above net of power used in the Generating Facility to power lights, motors, control systems, and other electrical loads used in operation, including losses on the Generating Facility’s electric distribution system

6. Maximum instantaneous power to be exported through the Point of Common Coupling: ___________________________kW

7. Generating facility is connected to the CPAU distribution system at___Kv

8. Operating Mode (select one of following):
   □ #1 Power used on-site; no energy export or incidental energy export (default choice);
   □ #2 Sale to CPAU (feed-in tariff (FIT) rate or merchant generator), which requires disclosure of the Power Purchase Agreement #__;
   □ #3 Other Agreement:
   Description: ___________________________________________,
   which requires disclosure of the Other Agreement ___.

F-2-10
PART 2. INTERCONNECTION FACILITIES DESCRIPTION; ESTIMATED COSTS

☐ No Interconnection Facilities are required.

☐ Interconnection Facilities are required (provide information below).

1. The Interconnection Facilities Description:

________________________________________________________________________

________________________________________________________________________

2. The direct costs of the design and construction of the Interconnection Facilities shall be paid in advance by the Facility Owner in accordance with Rule 27, as amended.

3. The Final Estimated CPAU Design and Construction Costs is $___.

4. The Final Estimated CPAU Operations and Maintenance Cost is $_____.

5. The Total Cost of Interconnection Facilities is $_____.

6. A One-line Diagram of the Interconnection is inserted as Page(s) through .

7. A diagram of the Site Layout is inserted as Page(s) through .

PART 3. DISTRIBUTION SYSTEM UPGRADES REQUIRED

☐ No Distribution Upgrades are required.

☐ Distribution Upgrades are required (provide information below).

1. Description of Distribution Upgrades:

________________________________________________________________________

________________________________________________________________________

2. The direct costs of the design and construction of the Distribution Upgrades shall be paid in advance by the Facility Owner in accordance with Rule 27, as amended.

3. The Final Estimated CPAU Design and Construction Cost is $___.

4. The Final Estimated CPAU Operations and Maintenance Cost is $_____.

5. The Total Cost of the Distribution Upgrades is $_____.

6. A description of the Distribution Upgrades is inserted as Page(s) through .
Scheduling and Outage Notification Procedure

C.1 Applicability. These procedures apply to the operator of a generating facility that sells power to the City of Palo Alto electric utility and which meets the definition of a “Participating Generator,” as may be defined by the CAISO Tariff the California Independent System Operator’s (CAISO’s) tariff (typically generators larger than 1 MW that export energy to the distribution system), and which have designated NCPA as their Scheduling Coordinator. The owner of the generating facility is referred to as the “Seller.”

C.2 Annual Operations Forecast

C.2.1 By the tenth (10th) day September of each calendar year, the Seller will provide NCPA with an annual operations forecast detailing hourly expected generation and all proposed planned Outages for the next calendar year. The annual operations forecast for the calendar year shall be provided by not later than ninety (90) days prior to the scheduled Commercial Operation Date of the Generating Facility.

C.2.2 NCPA may request modifications to the annual operations forecast at any time, and the Seller shall use good faith efforts to accommodate the requested modifications.

C.2.3 The Seller shall not conduct Planned Outages at times other than as set forth in its annual operations forecast, unless approved in advance by NCPA, which approval shall not be withheld or delayed unreasonably.

C.2.4 The Seller shall not schedule or conduct Planned Outages from 12:00 p.m. through 7:00 p.m. Pacific Time during the months of June through October.

C.3 Short Term Operations Forecasts

C.3.1 Quarterly Operations Forecast

C.3.1.1 By the fifth (5th) day of January, April and July of each Contract Year, the Seller shall provide a calendar quarter-operations forecast by hour of expected generation and all proposed Planned Outages for the next full calendar quarter and the twelve (12) months following that calendar quarter. As an example, by January 5, 2013, the Seller would provide a calendar quarter-operations forecast by hour of expected generation for the period, April 1, 2013 through June 30, 2013, and identify all proposed Planned Outages for the period, April 1, 2013 through June 30, 2014.

C.3.1.2 NCPA will approve or require modifications to the proposed calendar quarter-operations forecast within ten (10) days of receipt of the forecast.

C.3.1.3 If required by NCPA, the Seller will provide a modified calendar quarter-operations forecast within seven (7) days after receipt of required modifications from NCPA.

C.3.2 Weekly Update

C.3.2.1 By 14:00 of each Wednesday, the Seller shall provide an electronic update, in a format specified by NCPA, to the calendar quarter-operations forecast for the following seven (7) days (Thursday through the next Wednesday).

C.3.2.2 The weekly update shall include hourly expected generation and all proposed planned Outages for the relevant seven (7) day period.

C.4 Outage Detail for Annual and Short Term Operations Forecasts. Outage information provided by the Seller shall include, at a minimum, the start time and stop time of the Outage, capacity out of service (kW), the equipment that is or will be out of service, and the reason for the Outage.
C.5 General Scheduling Protocols

C.5.1 Daily Modifications to Forecasts. Unless otherwise mutually agreed, the Seller may make changes to the weekly update to the calendar quarter-operations forecast by providing such changes to NCPA prior to 08:00 of the day that is two (2) Business Days before the active scheduling day as determined by the WECC prescheduling calendar. Example: For power that is scheduled for generation or delivery on Thursday, March 29, 2012, changes must be submitted to NCPA by 08:00 on Tuesday, March 27, 2012.

C.5.2 Hourly Modifications to Active Schedules. Unless otherwise mutually agreed, the Seller may request changes to active schedules by providing such changes to NCPA with a minimum of four (4) hours’ notice prior to the applicable CAISO market deadline (e.g. Hour Ahead Scheduling Process (“HASP”) Scheduling deadline, as defined in the CAISO Tariff). Active day Schedule changes are not binding. Changes to active Schedules are limited to two (2) changes per day, excluding forced Outages, unless otherwise agreed to between the Parties. One request for a Schedule change, of one-hour or multiple-hours duration, constitutes one Schedule change. Example: For power that is scheduled for generation or delivery in hour ending 15:00 (for the period from 14:01 to 15:00), changes must be submitted to NCPA by 10:00.

C.5.3 Unforeseen Circumstances. At the Seller’s request, NCPA may, but is not required to, modify the Schedules for the Generation Facility Output due to unforeseen circumstances in accordance with the above scheduling timeline constraints described in this Exhibit PPA-C.

C.5.4 Absence of Forecasts. In the absence of forecasts and schedules as required by this Agreement or this Exhibit, NCPA shall utilize the most current information the Seller provides in the development and submission of Schedules.

C.6 Outage Reporting Protocols

C.6.1 Notification. The Seller shall notify NCPA of all planned or forced Outages of the Generating Facility to ensure compliance with the CAISO Outage Coordination and Enforcement Protocols.

C.6.1.1 Outage information provided by the Seller shall include, at a minimum, the start time and stop time of the Outage, Capacity out of service (kW), equipment out of service, and the reason for the Outage.

C.6.1.2 Seller shall provide the Planned Outages not included in the annual operations forecast, the calendar quarter-operations forecast, or the weekly update, to NCPA at least four (4) Business Days prior to the start of the requested outage.

C.6.1.3 At any time prior to the start of a Planned Outage, the CAISO may deny the Outage due to a System Emergency (as defined in the CAISO Tariff) or as otherwise permitted under the CAISO Tariff. If NCPA receives notice that the CAISO has denied an Outage in accordance with the CAISO Tariff, NCPA will notify the Seller as soon as possible and the Seller shall modify the planned Outage as required by the CAISO.

C.6.2 Commencement of an Outage. The Seller shall not begin any Planned Outage without the prior approval of NCPA and the CAISO.

C.6.3 Forced Outages

C.6.3.1 The Seller shall report the Forced Outages to NCPA within twenty (20) minutes of such Outages.

C.6.3.2 The Seller’s notice of a Forced Outage sent to NCPA shall include the reason for the Outage (if known), expected duration of the Outage, and the Capacity reduction.
C.6.3.3 By the end of the next Business Day following the day on which a Forced Outage has occurred, the Seller shall provide to NCPA a detailed written report, specifying the reason for the Outage, expected duration of such Outage, capacity reduction, and actions taken to mitigate such Outage.

C.6.4 Return to Service. The Seller shall notify NCPA as soon as possible, but in any case before the Generating Facility is returned to service.

C.7 Notices. All Scheduling notices and Schedules shall be submitted to NCPA by phone, fax or email, or other means as may be mutually agreed by the Parties, to the persons designated in Exhibit “PPA-F.”

C.8 Changes in Scheduling and Outage Procedure. The Buyer shall revise Exhibit “PPA-C,” or, as appropriate, give written notice to the Seller regarding the revision, and issue a new Exhibit “PPA-C,” which shall then become part of the Agreement to reflect changes in the scheduling and outage notification procedure.
APPENDIX G

PRELIMINARY CEQA CHECKLIST

[TO BE PROVIDED BY ARI]
APPENDIX H

[RESERVED FOR FUTURE USE]
APPENDIX I

ASSIGNMENT PROVISIONS

The Contract shall be subject to the following limitations on transfer or assignment:

(a) Neither party shall assign its rights nor delegate or otherwise transfer its obligations under this Contract to any other person without the prior written consent of the other party. Any such assignment made without the consent of the other party shall be void and the attempted assignment shall constitute a material breach of this agreement. The City may, however, assign its rights and delegate its obligations under this agreement to a joint powers authority, district, or similar governmental entity without the prior written consent of Contractor. For purposes of this section, “assignment” shall include, but not be limited to:

1. A sale, exchange or other transfer to a third party of at least twenty-five percent of Contractor’s assets dedicated to service under this agreement; and

2. A sale, exchange or other transfer to a third party, including other shareholders, of outstanding common stock of Contractor which may result in a change of control of Contractor; and

3. Any dissolution, reorganization, consolidation, merger, recapitalization, stock issuance or re-issuance, voting trust, pooling agreement, escrow arrangement, liquidation or other transaction which Contractor or any of its shareholders are a party which results in a change of ownership or control of Contractor; and

4. Any assignment by operation of law, including insolvency or bankruptcy, assignment for the benefit of creditors, writ of attachment for an execution being levied against this agreement, appointment of a receiver taking possession of Contractor’s property, or transfers occurring in a probate or other estate proceeding; and

5. Any combination of the foregoing (whether or not in related or contemporaneous transactions, which has the effect of any such transfer or change of ownership, or change of control of Contractor.

(b) Contractor acknowledges that this agreement involves rendering a vital service to City residents and businesses, and that the City has selected Contractor to perform the services specified herein based on:

1. Contractor’s experience, skill and reputation for conducting its solid waste management operations in a safe, effective and responsible fashion, at all times in keeping with applicable local, state and federal environmental laws, regulations and best waste management practices; and

2. Contractor’s financial resources to maintain the required equipment and to support its indemnity obligations to the City under this agreement.

(c) If Contractor requests the City’s consideration of and consent to an assignment, the City may deny or approve such request at its discretion. The City will not unreasonably withhold
its consent. The City is concerned about the possibility that assignment could result in significant rate increases, solid waste disposal problems for the City, environmental problems, as well as a change in the quality of solid waste service for City residents. Accordingly, the following standards have been set to ensure that assignment will result in continued quality service. At a minimum, no request by Contractor for consent to an assignment need be considered by the City unless and until Contractor has met the following requirements:

(1) Contractor shall undertake to pay the City their reasonable expenses (including attorneys' fees and other professional services fees) to investigate the suitability of any proposed assignee, and to review and finalize any documentation required as a condition for approving any such assignment;

(2) Contractor shall furnish the City with audited financial statements of the proposed assignee’s operations for the immediately preceding three operating years;

(3) Contractor shall furnish the City with satisfactory proof:

   (A) That the proposed assignee has solid waste management experience of sufficient type and duration to ensure it can fulfill the terms of this agreement, including operation of the conversion technology involved in the project on a scale equal to or exceeding the scale of operations conducted by Contractor under this agreement,

   (B) That in the last five years, the proposed assignee or affiliates has not suffered any significant citations or other censure from any federal, state or local agency having jurisdiction over its waste management operations due to any significant failure to comply with state, federal or local environmental laws, and that the assignee has provided the City with a complete list of such citations and censures,

   (C) That the proposed assignee has at all times conducted its operations in an environmentally safe and conscientious fashion,

   (D) That the proposed assignee conducts its solid waste management practices in accordance with sound waste management practices in full compliance with all federal, state and local laws regulating the collection and disposal of solid waste, including hazardous wastes, and

   (E) Of any other information required by the City to ensure the proposed assignee can fulfill the terms of this agreement in a timely, safe and effective manner.

(4) The assignee shall assume all duties and obligations, whether precedent or otherwise.

(5) The Contractor shall remain secondarily liable for the agreement.

(d) Under no circumstances shall the City be obliged to consider any proposed assignment if Contractor is in default of its agreement at any time during the period of consideration.
GUARANTY AGREEMENT

THIS GUARANTY AGREEMENT dated as of ______________ is made by ______________(insert Guarantor's name), (the “Guarantor”), to the City of Palo Alto (the “City”), as a political subdivision and municipality of the State of California.

Background

The Contractor has entered into a Service Contract dated as of ______________ (the “Contract”) with the City to which the City has agreed, under certain terms and conditions, to deliver Acceptable Feedstock to the E/C Facility to be constructed and operated by the Contractor for the purpose of conversion and energy production. One of the conditions to the performance by the City of the Contract is the guaranty of the Contractor’s obligations by the Guarantor. The Guarantor is willing to make this Guaranty because the Guaranty will result in direct financial benefit to the Guarantor. Consequently, the Guarantor, for good and valuable consideration, the receipt of which is hereby acknowledged, agrees as follows:

SECTION 1. GUARANTY. (a) The Guarantor hereby absolutely, presently, irrevocably and unconditionally guarantees the City (1) the full and prompt payment when due of each and all of the payments required to be credited or made by the Contractor under the Contract (including all amendments and supplements thereto) to, or for the account of, the City, and (2) the full and prompt performance and observance of each and all of the covenants and obligations under the Contract, and (3) the full and prompt performance of all of the covenants and agreements to be performed under the E/C Facility Site Lease (collectively, the “Obligations”).

SECTION 2. GUARANTY OF PAYMENT AND PERFORMANCE. This Guaranty shall constitute a guaranty of payment and or performance and not of collection, and Guarantor specifically agrees that in the event of a failure by the Contractor to pay or perform any Obligation, the City shall have the right to proceed first and directly against the Contractor or exhaust any other remedies against the Contractor or against any other Party with responsibilities under this Guarantee and the Contract. Without limiting the foregoing, the Guarantor agrees that it shall not be necessary, and that the Guarantor shall not be entitled to require, as a condition of enforcing the liability of the Guarantor hereunder, that the City (1) file suit to obtain or assert a claim for personal judgment against the Contractor, (2) make any other effort to obtain payment or performance of the Obligations from the Contractor other than providing the Contractor with any demands or notice of default as may be required by the terms of the Contract, (3) foreclose against or seek to realize upon any security for the obligations set forth in the Contract, or (4) exercise or assert any other
right or remedy to which the City are or may be entitled in connection with the obligations or any other right security therefore of any other guarantee thereof, except to the extent that any such exercise or assertion of such other right or remedy may be conditioned precedent to the obligations of the Contract. Upon any unexcused failure by the Contractor in the payment or performance of any obligation and the giving such notice, if any, to the City as may be required in connection with such obligation, the liability of the Guarantor shall be effective and shall immediately be paid or performed. The City shall have the right to proceed against the Guarantor without notice to, or the consent or approval of, the Contractor, Guarantor or any other person, and without the necessity of joining or being joined by the or any other person in any such enforcement proceeding.

SECTION 3. GUARANTY ABSOLUTE AND UNCONDITIONAL. The obligations of the Guarantor hereunder shall remain in full force and effect until the Contractor shall have fully discharged the obligations in accordance with their respective terms, and shall not be subject to any claim of the Guarantor against the City, or any other person other than a claim that the matter giving rise to the City’s claim is the subject of dispute resolution in good faith under the Contract or in the courts of the State of California. Unless otherwise waived by the Guarantor pursuant to the terms of this Guaranty, the Guarantor shall be entitled to assert any rights of set-off, counterclaim or defense available to the Contractor or its partners with respect to any obligations in the Contract, and if the Guarantor shall assert such right to set-off, counterclaim or defense and thereafter such a claim is prosecuted in good faith by appropriate negotiation or legal proceedings, the Guarantor’s obligation to make payment pursuant to this Guaranty shall be automatically suspended pending resolution of such claim, but only to the extent of the amount of such claim. In the event any such right of set-off, counterclaim or defense shall be determined adversely to the Contractor or its partners, the Guarantor agrees to be bound by such determination.

Without limiting the foregoing, the obligations of the Guarantor hereunder shall not be released, discharged or in any way affected by reason of any of the following (whether with or without notice to, acknowledge by further consent of the Guarantor):

(1) the extension or renewal of this Guaranty or the Contract.

(2) any exercise or failure, omission or delay by the City in the exercise of any right, power or remedy conferred on the City by this Guaranty or the Contract or by law;

(3) any permitted transfer or assignment of right or obligations under the Contract or other transfer of any of any interests in the E/C Facility or the Site;

(4) any permitted assignment for the purpose of creating a security interest or mortgage of all or any part of the respective interests of the Contractor, the City or any person in the Contract, or in any transaction contract or in any other agreements affecting the E/C Facility or Site;

(5) any amendment, change or modification in respect of any of the obligations, or the release or discharge of the Contractor from the performance or observance of any of the obligations by operation of law;
(6) any renewal, amendment, change or modification in respect of any of the terms or conditions of the Contract, or in any transaction contract;

(7) any failure of title with respect to all, or any part of the respective interests in the Site or the E/C Facility, except to the extent such failure of title prevents or delays the performance of any obligations hereunder;

(8) the voluntary or involuntary liquidation, dissolution, sale or other disposition of all or substantially all the assets, marshalling or assets and liabilities, receivership, insolvency, bankruptcy, assignment for the benefit of creditors, reorganization, moratorium, arrangement, composition with creditors or readjustment of, or other similar proceedings against the Contractor, the Guarantor, or any other party to a transaction contract, or any of the property of any of them, or any allegation or contest of the validity of the Guaranty, the Contract, or any other transaction contract in any such proceedings (it is specifically understood, consented and agreed to that, to the extent permitted by law, this Guaranty shall remain and continue in full force and effect and shall be enforceable against the Guarantor to the same extent and with the same force and effect as if any such proceeding had not been instituted, it being the intent and purpose of this Guaranty that Guarantor shall and does hereby waive all rights and benefits which might accrue to it by reason of any such proceeding);

(9) any sale or other transfer by the Guarantor of any of the capital stock or other interest of the Guarantor in the now or hereafter owned, directly or indirectly, by the Guarantor, or any changes in composition of the interests in the;

(10) any failure on the part of the Contractor for any reason to perform or comply with any agreement with the Guarantor;

(11) any release or impairment of the security pledged under any indenture, or any furnishing or acceptance of any additional security;

(12) the release, substitution or replacement in accordance with the terms of the Contract of any property subject thereto or any redelivery, repossession, surrender or destruction of any such property, in whole or in part;

(13) any failure of any party to the Contract, or any transaction contract to mitigated damages resulting from any default thereunder;

(14) the merger or consolidation of any party to a transaction contract into or with a any other person, or any sale, lease, transfer, abandonment or other disposition of any or all of the property of any of the foregoing to any person except to the extent that any such occurrence prevents or delays the performance of any obligations hereunder;

(15) any legal disability or incapacity of any party to a transaction contract, except to the extent that any such occurrence prevents or delays the performance of any obligations hereunder;
(16) that entering into any transaction contract by any person was invalid or in excess of the powers of such party; or

(17) that the rights of any person as against any party to a transaction contract have become barred by any applicable statute of limitation or otherwise.

Should any money due or owing under this Guaranty not be recoverable from Guarantor due to any of the matters specified as recoverable from the Guarantor due to any of the matters specified in subparagraph (1) through (17) above, or otherwise, then, in any such case, such money, together with all additional sums due hereunder, shall nevertheless be recoverable from the Guarantor as though Guarantor were the principal debtor in respect thereof and not merely a guarantor and shall be paid by Guarantor forthwith.

SECTION 4. WAIVERS BY THE GUARANTOR. The Guarantor hereby unconditionally and irrevocably waives:

(1) notice from the City of its acceptance of this Guaranty;

(2) notice of any of the events referred to in Section 3 of the Guaranty, except to the extent that notice is required to be given as a condition to the enforcement of Obligations;

(3) to the fullest extent lawfully possible, all notices which may be required by statute, rule of law or otherwise to preserve intact any rights against the Guarantor, including, without limitation, presentment to or demand of any payment from the Contractor with respect to the Obligations, and notice to the of default or protest for nonpayment or failure by the Contractor to perform and comply with the obligations, except any notice provisions to the Contractor required pursuant to the Contract;

(4) to the fullest extent lawfully possible, all defenses which may now or hereafter exist by virtue of any stay, valuation, moratorium or similar law in any way limiting or restricting the liability of the Guarantor hereunder, except the sole defense of payment and performance;

(5) any right to require a proceeding first against the Contractor or any other Person or the security provided by or under any agreement;

(6) any requirement that the Contractor or any other Person be joined as a party to any proceeding for the enforcement of any term of any agreement;

(7) the filing of claims by the City in the event of the receivership or bankruptcy of the Contractor; and

(8) all demands upon the Contractor or any other person and all other formalities the omission of any of which, or delay in performance of which, might, but for the provisions of this Section 4, by rule of law or otherwise, constitute grounds for relieving or discharging the Guarantor, in whole or in part, from its absolute, present, irrevocable, unconditional and continuing obligations hereunder, it being the intention of the Guarantor that its obligations
hereunder shall not be discharged except by payment and performance and then only to the extent of such payment and performance.

SECTION 5. PAYMENT OF COSTS AND EXPENSES. The Guarantor agrees to pay the City on demand all reasonable costs and expenses, legal or otherwise (including counsel fees), incurred by or on behalf of the City in enforcing or attempting to enforce payment or performance and observance of the obligations against the Guarantor, or in enforcement or attempting to enforce the covenants and agreements of the Guarantor in this Guaranty, whether by suit or otherwise, other than the costs and expenses that the City incurred in performing any of its obligations under the Contract or applicable transaction contract where such obligations are a condition precedent of performance by the Contractor of its obligations.

SECTION 6. SUBORDINATION OF RIGHTS. The Guarantor agrees that any right of subrogation or contribution which it may have at any time against the Contractor as a result of any payment or performance hereunder in hereby fully subordinated to the rights of the City hereunder and under the Contract and the agreements, and that the Guarantor shall not recover or seek to recover any payment made by it hereunder from the Contractor until the Contractor and the Guarantor shall have fully and satisfactorily paid or performed and discharged the obligations.

SECTION 7. SEPARATE OBLIGATIONS. The obligations of the Guarantor to make any payment or to perform and discharge any other duties, agreements, covenants, undertakings or obligations hereunder shall (1) to the extent permitted by Applicable Law, constitute separate and independent obligations of the Guarantor from its other obligations under this Guaranty, (2) give rise to separate and independent cause of action against the Guarantor and (3) apply irrespective of any indulgence granted from time to time by the City.

SECTION 8. TERM OF GUARANTY. This Guaranty shall continue in effect until all the obligations of the Contractor have been paid or performed, as the case may be, and the time has expired under Applicable Law, that would permit the recapture of any payment made by the Contractor pursuant to the Contract or any agreement by or on behalf of the Contractor or its creditors.

SECTION 9. REPRESENTATIONS AND WARRANTIES OF THE GUARANTOR. The Guarantor hereby represents and warrants that:

(a) Existence and Powers. The Guarantor is duly organized and validly existing as a corporation and is able to conduct business under the laws of the State of California, with full legal right, power and authority to enter into and perform its obligations under this Guaranty.

(b) Due Authorization and Biding Obligation. The Guarantor has duly authorized the execution and delivery of this Guaranty, and this Guaranty has been duly executed and delivered by the Guarantor and constitutes the legal, valid and binding obligation of the Guarantor, enforceable against the Guarantor in accordance with its terms, except insofar
as such enforcement may be affected by bankruptcy, insolvency, moratorium and other laws affecting creditors’ rights generally and the availability of specific enforcement or injunctive relief and other equitable remedies is subject to the discretion of the court before which any proceeding may therefore be brought.

(c) **No Conflict.** Neither the execution or delivery by the Guarantor of this Guaranty, nor the performance by the Guarantor of its obligations hereunder (1) conflicts with, violates, or results in a breach of any law or government regulation applicable to the Guarantor, (2) conflict with, violates or results in a breach of any term or condition of the Guarantor’s corporate chapter or by-law or any judgment, decree, agreement or instrument, or (3) will result in the creation or imposition of any lien, encumbrance or change of any nature whatsoever upon any of the properties or assets of the Guarantor, except as expressly contemplated hereby.

(d) **No Governmental Approval Required.** No approval, authorization, order or consent or, or declaration, registration or filing with any governmental authority is required for the valid execution and delivery by the Guarantor of this Guaranty, except such as shall have been duly obtained or made.

(e) **No Litigation.** There is no action, suit or other proceeding, at law or in equity, before or by any court or governmental authority, pending or, to the Guarantor’s best knowledge, threatened against the Guarantor wherein an unfavorable decision, ruling or finding would materially and adversely affect the validity or enforceability of the Guaranty, or which would materially and adversely affect the performance by the Guarantor or its obligations hereunder.

(f) **No Legal Prohibition.** The Guarantor has no knowledge of any Applicable Law in effect on the date as of which this representation is being made which would prohibit the performance by the Guarantor of this Guarantor and the transactions contemplated hereby.

(g) **Consent to Agreements.** The Guarantor is fully aware of and consents to the terms and conditions of the Contract and the agreements.

**SECTION 10. MAINTENANCE OF CORPORATE EXISTENCE.** The Guarantor covenants that during the term of this Guaranty it will maintain its corporate existence, will not dissolve or otherwise dispose of all or substantially all its assets and will not consolidate with or merge into another person or entity, or permit one or more other persons or entities to consolidate with or merge into it, or sell or otherwise transfer to another person or entity all or substantially all of its assets as an entirety and thereafter dissolve unless the successor person or entity (if other than the Guarantor) (i) assumes in writing all then obligations of the Guarantor hereunder and, if required by law, is duly qualified to do business in the State, (ii) delivers to the City an opinion of counsel, which counsel shall be reasonably acceptable to the City, to the effect that its obligations under this Guaranty are legal, valid, binding and enforceable, subject to applicable bankruptcy, insolvency or any other similar laws and to laws affecting creditors’ rights generally and the availability of specific enforcement or injunctive relief and other equitable remedies in the court before which any proceeding therefore may be brought.
SECTION 11. CONTINUANCE OF OBLIGATIONS. The provisions of Section 10 shall continue in full force and effect after the occurrence of any event described in Section 10.

SECTION 12. ASSIGNMENT. This Agreement may not be assigned by the Guarantor without the prior written consent of the City, subject to the provisions of Section 10 of this Guaranty.

SECTION 13. QUALIFICATION IN CALIFORNIA. The Guarantor agrees that, so long as this Guaranty is in effect and if required by law to permit this Guaranty to be enforced, the Guarantor will be duly qualified to do business in the State of California.

SECTION 14. AGENT FOR SERVICE. The Guarantor irrevocably: (1) agrees that any suit, action or other legal proceeding arising out of this Guaranty may be brought in the courts of the State of California; (2) consents to the jurisdiction of the Superior Court of Santa Clara County in any such suit, action or proceedings; and (3) waives any objection which it may have to the venue of any such suit, action or proceeding. During the term of this Guaranty, the Guarantor irrevocably designates the Secretary of State of the State of California, and designates the Contractor, as its agents to accept and acknowledge in its behalf service of any and all process in any such suit, action or proceeding brought in any such court and agrees and consents that any such service of process upon either agent shall be taken and held to be valid personal service upon the Guarantor whether or not the Guarantor shall then be doing, or at any time shall have done, business within the State of California, and that any such service of process shall be of the same force and validity as if the Guarantor had itself accepted the service of process. Such agents shall not have any power or authority to enter any appearance or to file any pleadings in connection with any suit, action or other legal proceeding against the Guarantor or to conduct the defense of any such suit, action or any other legal proceedings.

SECTION 15. BINDING EFFECT. This Guaranty shall inure to the benefit of the City and shall be binding upon the Guarantor and its successors and assigns.

SECTION 16. AMENDMENTS, CHANGE AND MODIFICATIONS. This Guaranty may not be amended, changed or modified and none of its provisions may be waived, except with the prior written consent of the City and the Guarantor.

SECTION 17. COURSE OF DEALINGS. No failure or delay by the City in exercising any right, power or privilege hereunder or under the Contract shall operate as a waiver thereof nor shall any single or partial exercises thereof preclude any other right, power or privilege. The rights and remedies provided herein shall be cumulative and not exclusive of any rights or remedies provided in the Contract or by law or equity. No waiver, amendment, release or modification of this Guaranty shall be established by conduct, custom or course of dealing, but solely by an instrument in writing duly executed by the party against whom such waiver, amendment, release or modification is sought to be enforced.
SECTION 18. NOTICES. Any notices or communications required or permitted hereunder shall be in writing and shall be sufficiently given if telefaxed, sent via electronic mail, delivered in person, or sent by certified or registered mail, return receipt requested, postage prepaid, to the following addresses, or to such other addresses as any of the recipients may from time to time designate by notice given in writing.

If to the Guarantor: [Insert]

If to the City: [Insert]

SECTION 19. CAPITALIZATION TERMS. All capitalization terms not defined in this Guaranty shall have the meaning given in the RFP.

SECTION 20. GOVERNING LAW. This Agreement shall be construed in accordance with and governed by the laws of the California. In the event that changes in law, regulations or practices not already known or anticipated as of this Agreement become effective, or changes in relevant permits materially alter the procedures applicable to the parties’ performance of their respective obligations hereunder, the parties will endeavor in good faith to negotiate appropriate and mutually agreeable amendments to this Agreement or separate protocols to account for such changes, attempting in all events to restore or maintain for each Party as nearly as possible, its respective rights and obligations and benefits under this Agreement.

IN WITNESS WHEREOF, the Guarantor has caused this Guaranty to be executed in its name and on its behalf by its duly authorized officer as of the [INSERT DATE]

GUARANTOR NAME

By: ___________________________
Title: __________________________

CITY of PALO ALTO

By: ___________________________
Title: __________________________
This Guaranty Agreement dated as of ______________ is made by ______________ (insert Guarantor's name), (the “Guarantor”), to the City of Palo Alto (the “City”), as a political subdivision and municipality of the State of California.

Background

The Contractor has entered into a Service Contract dated as of ______________ (the “Contract”) with the City to which the City has agreed, under certain terms and conditions, to deliver or cause to be delivered to the Contractor Acceptable Feedstock which the Contractor shall accept, transport, process, dispose of or otherwise manage, as provided for in the Contract. One of the conditions to the performance by the City of the Service Contract is the guaranty of the Contractor’s obligations by the Guarantor. The Guarantor is willing to make this Guaranty because the Guaranty will result in direct financial benefit to the Guarantor. Consequently, the Guarantor, for good and valuable consideration, the receipt of which is hereby acknowledged, agrees as follows:

SECTION 1. GUARANTY. (a) The Guarantor hereby absolutely, presently, irrevocably and unconditionally guarantees the City (1) the full and prompt payment when due of each and all of the payments required to be credited or made by the Contractor under the Contract (including all amendments and supplements thereto) to, or for the account of, the City and (2) the full and prompt performance and observance of each and all of the covenants and obligations under the Service Contract (collectively, the “Obligations”).

SECTION 2. GUARANTY OF PAYMENT AND PERFORMANCE. This Guaranty shall constitute a guaranty of payment and or performance and not of collection, and Guarantor specifically agrees that in the event of a failure by the Contractor to pay or perform any Obligation, the City shall have the right to proceed first and directly against the Contractor or exhaust any other remedies against the Contractor or against any other Party with responsibilities under this Guarantee and the Contract. without limiting the foregoing, the Guarantor agrees that it shall not be necessary, and that the Guarantor shall not be entitled to require, as a condition of enforcing the liability of the Guarantor hereunder, that the City (1) file suit to obtain or assert a claim for personal judgment against the Contractor, (2) make any other effort to obtain payment or performance of the Obligations from the Contractor other than providing the Contractor with any demands or notice of default as may be required by the terms of the Contract, (3) foreclose against or seek to realize upon any security for the obligations set forth in the Service Contract, or (4) exercise or assert any other right or remedy to which the City is or may be entitled in connection with the Obligations or any other right security therefore of any other guarantee thereof, except to
the extent that any such exercise or assertion of such other right or remedy may be conditioned precedent to the Obligations of the Contract. Upon any unexcused failure by the Contractor in the payment or performance of any Obligation and the giving such notice, if any, to the City as may be required in connection with such Obligation, the liability of the Guarantor shall be effective and shall immediately be paid or performed. The City shall have the right to proceed against the Guarantor without notice to, or the consent or approval of, the Contractor, Guarantor or any other person, and without the necessity of joining or being joined by the or any other person in any such enforcement proceeding.

SECTION 3. GUARANTY ABSOLUTE AND UNCONDITIONAL. The obligations of the Guarantor hereunder shall remain in full force and effect until the Contractor shall have fully discharged the Obligations in accordance with their respective terms, and shall not be subject to any claim of the Guarantor against the City or any other person other than a claim that the matter giving rise to the City’s claim is the subject of dispute resolution in good faith under the Contract or in the courts of the State of California. Unless otherwise waived by the Guarantor pursuant to the terms of this Guaranty, the Guarantor shall be entitled to assert any rights of set-off, counterclaim or defense available to the Contractor or its partners with respect to any obligations in the Contract, and if the Guarantor shall assert such right to set-off, counterclaim or defense and thereafter such a claim is prosecuted in good faith by appropriate negotiation or legal proceedings, the Guarantor’s obligation to make payment pursuant to this Guaranty shall be automatically suspended pending resolution of such claim, but only to the extent of the amount of such claim. In the event any such right of set-off, counterclaim or defense shall be determined adversely to the Contractor or its partners, the Guarantor agrees to be bound by such determination. Without limiting the foregoing, the obligations of the Guarantor hereunder shall not be released, discharged or in any way affected by reason of any of the following (whether with or without notice to, acknowledge by further consent of the Guarantor):

(1) the extension or renewal of this Guaranty or the Contract.

(2) any exercise or failure, omission or delay by the City in the exercise of any right, power or remedy conferred on the City by this Guaranty or the Contract or by law;

(3) any permitted transfer or assignment of right or obligations under the Contract or other transfer of any of any interests in the Contract;

(4) any permitted assignment for the purpose of creating a security interest or mortgage of all or any part of the respective interests of the Contractor, City or any person in the Contract, or in any transaction contract or in any other agreements affecting the Contractor, the Services and the Contract;

(5) any amendment, change or modification in respect of any of the Obligations, or the release or discharge of the Contractor from the performance or observance of any of the Obligations by operation of law;

(6) any renewal, amendment, change or modification in respect of any of the terms or conditions of the Contract, or in any transaction contract;
(7) any failure of title with respect to all, or any part of, the Contractor's interests in its sites, facilities or associated assets necessary to the provision of Services under the Contract;

(8) the voluntary or involuntary liquidation, dissolution, sale or other disposition of all or substantially all the assets, marshalling or assets and liabilities, receivership, insolvency, bankruptcy, assignment for the benefit of creditors, reorganization, moratorium, arrangement, composition with creditors or readjustment of, or other similar proceedings against the Contractor, the Guarantor, or any other party to a transaction contract, or any of the property of any of them, or any allegation or contest of the validity of the Guaranty, the Contract, or any other transaction contract in any such proceedings (it is specifically understood, consented and agreed to that, to the extent permitted by law, this Guaranty shall remain and continue in full force and effect and shall be enforceable against the Guarantor to the same extent and with the same force and effect as if any such proceeding had not been instituted, it being the intent and purpose of this Guaranty that Guarantor shall and does hereby waive all rights and benefits which might accrue to it by reason of any such proceeding);

(9) any sale or other transfer by the Guarantor of any of the capital stock or other interest of the Guarantor in the now or hereafter owned, directly or indirectly, by the Guarantor, or any changes in composition of the interests in the;

(10) any failure on the part of the Contractor for any reason to perform or comply with any agreement with the Guarantor;

(11) any release or impairment of the security pledged under any indenture, or any furnishing or acceptance of any additional security;

(12) the release, substitution or replacement in accordance with the terms of the Contract of any property subject thereto or any redelivery, repossession, surrender or destruction of any such property, in whole or in part;

(13) any failure of any party to the Contract, or any transaction contract to mitigated damages resulting from any default thereunder;

(14) the merger or consolidation of any party to a transaction contract into or with a any other person, or any sale, lease, transfer, abandonment or other disposition of any or all of the property of any of the foregoing to any Person except to the extent that any such occurrence prevents or delays the performance of any obligations hereunder;

(15) any legal disability or incapacity of any party to a transaction contract, except to the extent that any such occurrence prevents or delays the performance of any obligations hereunder;

(16) that entering into any transaction contract by any Person was invalid or in excess of the powers of such party; or
(17) that the rights of any person as against any party to a transaction contract have become barred by any applicable statute of limitation or otherwise.

Should any money due or owing under this Guaranty not be recoverable from Guarantor due to any of the matters specified as recoverable from the Guarantor due to any of the matters specified in subparagraph (1) through (17) above, or otherwise, then, in any such case, such money, together with all additional sums due hereunder, shall nevertheless be recoverable from the Guarantor as though Guarantor were the principal debtor in respect thereof and not merely a guarantor and shall be paid by Guarantor forthwith.

SECTION 4. WAIVERS BY THE GUARANTOR. The Guarantor hereby unconditionally and irrevocably waives:

(1) notice from the City of its acceptance of this Guaranty;

(2) notice of any of the events referred to in Section 3 of the Guaranty, except to the extent that notice is required to be given as a condition to the enforcement of Obligations;

(3) to the fullest extent lawfully possible, all notices which may be required by statute, rule of law or otherwise to preserve intact any rights against the Guarantor, including, without limitation, presentment to or demand of any payment from the Contractor with respect to the Obligations, and notice to the Contractor of default or protest for nonpayment or failure by the Contractor to perform and comply with the Obligations, except any notice provisions to the Contractor required pursuant to the Contract;

(4) to the fullest extent lawfully possible, all defenses which may now or hereafter exist by virtue of any stay, valuation, moratorium or similar law in any way limiting or restricting the liability of the Guarantor hereunder, except the sole defense of payment and performance;

(5) any right to require a proceeding first against the Contractor or any other person or the security provided by or under any agreement;

(6) any requirement that the Contractor or any other person be joined as a party to any proceeding for the enforcement of any term of any agreement;

(7) the filing of claims by the City in the event of the receivership or bankruptcy of the Contractor; and

(8) all demands upon the Contractor or any other person and all other formalities the omission of any of which, or delay in performance of which, might, but for the provisions of this Section 4, by rule of law or otherwise, constitute grounds for relieving or discharging the Guarantor, in whole or in part, from its absolute, present, irrevocable, unconditional and continuing obligations hereunder, it being the intention of the Guarantor that its obligations hereunder shall not be discharged except by payment and performance and then only to the extent of such payment and performance.
SECTION 5. PAYMENT OF COSTS AND EXPENSES. The Guarantor agrees to pay the City on demand all reasonable costs and expenses, legal or otherwise (including counsel fees), incurred by or on behalf of the City in enforcing or attempting to enforce payment or performance and observance of the Obligations against the Guarantor or the Back-Up Guarantor, or in enforcement or attempting to enforce the covenants and agreements of the Guarantor in this Guaranty, whether by suit or otherwise, other than the costs and expenses that the City incurred in performing any of its Obligations under the Contract or applicable transaction contract where such obligations are a condition precedent of performance by the Contractor of its Obligations.

SECTION 6. SUBORDINATION OF RIGHTS. The Guarantor agrees that any right of subrogation or contribution which it may have at any time against the Contractor as a result of any payment or performance hereunder in hereby fully subordinated to the rights of the City hereunder and under the Contract and the agreements, and that the Guarantor shall not recover or seek to recover any payment made by it hereunder from the Contractor until the Contractor and the Guarantor shall have fully and satisfactorily paid or performed and discharged the Obligations.

SECTION 7. SEPARATE OBLIGATIONS. The obligations of the Guarantor to make any payment or to perform and discharge any other duties, agreements, covenants, undertakings or obligations hereunder shall (1) to the extent permitted by Applicable Law, constitute separate and independent obligations of the Guarantor from its other obligations under this Guaranty, (2) give rise to separate and independent cause of action against the Guarantor and (3) apply irrespective of any indulgence granted from time to time by the City.

SECTION 8. TERM OF GUARANTY. This Guaranty shall continue in effect until all the Obligations of the Contractor have been paid or performed, as the case may be, and the time has expired under Applicable Law, that would permit the recapture of any payment made by the Contractor pursuant to the Contract or any agreement by or on behalf of the Contractor or its creditors.

SECTION 9. REPRESENTATIONS AND WARRANTIES OF THE GUARANTOR. The Guarantor hereby represents and warrants that:

(a) Existence and Powers. The Guarantor is duly organized and validly existing as a corporation and is able to conduct business under the laws of the State of California, with full legal right, power and authority to enter into and perform its obligations under this Guaranty.

(b) Due Authorization and Biding Obligation. The Guarantor has duly authorized the execution and delivery of this Guaranty, and this Guaranty has been duly executed and delivered by the Guarantor and constitutes the legal, valid and binding obligation of the Guarantor, enforceable against the Guarantor in accordance with its terms, except insofar as such enforcement may be affected by bankruptcy, insolvency, moratorium and other laws affecting creditors’ rights generally and the availability of specific enforcement or injunctive relief and other equitable remedies is subject to the discretion of the court before which any proceeding may therefore be brought.
(c) **No Conflict.** Neither the execution or delivery by the Guarantor of this Guaranty, nor the performance by the Guarantor of its obligations hereunder (1) conflicts with, violates, or results in a breach of any law or government regulation applicable to the Guarantor, (2) conflict with, violates or results in a breach of any term or condition of the Guarantor’s corporate chapter or by-law or any judgment, decree, agreement or instrument, or (3) will result in the creation or imposition of any lien, encumbrance or change of any nature whatsoever upon any of the properties or assets of the Guarantor, except as expressly contemplated hereby.

(d) **No Governmental Approval Required.** No approval, authorization, order or consent or, or declaration, registration or filing with any governmental authority is required for the valid execution and delivery by the Guarantor of this Guaranty, except such as shall have been duly obtained or made.

(e) **No Litigation.** There is no action, suit or other proceeding, at law or in equity, before or by any court or governmental authority, pending or, to the Guarantor’s best knowledge, threatened against the Guarantor wherein an unfavorable decision, ruling or finding would materially and adversely affect the validity or enforceability of the Guaranty, or which would materially and adversely affect the performance by the Guarantor or its obligations hereunder.

(f) **No Legal Prohibition.** The Guarantor has no knowledge of any Applicable Law in effect on the date as of which this representation is being made which would prohibit the performance by the Guarantor of this Guaranty and the transactions contemplated hereby.

(g) **Consent to Agreements.** The Guarantor is fully aware of and consents to the terms and conditions of the Contract and the agreements.

**SECTION 10. MAINTENANCE OF CORPORATE EXISTENCE.** The Guarantor covenants that during the term of this Guaranty it will maintain its corporate existence, will not dissolve or otherwise dispose of all or substantially all its assets and will not consolidate with or merge into another person or entity, or permit one or more other persons or entities to consolidate with or merge into it, or sell or otherwise transfer to another person or entity all or substantially all of its assets as an entirety and thereafter dissolve unless the successor person or entity(if other than the Guarantor) (i) assumes in writing all then obligations of the Guarantor hereunder and, if required by law, is duly qualified to do business in the State, (ii) delivers to the City an opinion of counsel, which counsel shall be reasonably acceptable to the City, to the effect that its obligations under this Guaranty are legal, valid, binding and enforceable, subject to applicable bankruptcy, insolvency or any other similar laws and to laws affecting creditors’ rights generally and the availability of specific enforcement or injunctive relief and other equitable remedies in the court before which any proceeding therefore may be brought.

**SECTION 11. CONTINUANCE OF OBLIGATIONS.** The provisions of Section 10 shall continue in full force and effect after the occurrence of any event described in Section 10.
SECTION 12. **ASSIGNMENT.** This Agreement may not be assigned by the Guarantor without the prior written consent of the City, subject to the provisions of Section 10 of this Guaranty.

SECTION 13. **QUALIFICATION IN CALIFORNIA.** The Guarantor agrees that, so long as this Guaranty is in effect and if required by law to permit this Guaranty to be enforced, the Guarantor will be duly qualified to do business in the State of California.

SECTION 14. **AGENT FOR SERVICE.** The Guarantor irrevocably: (1) agrees that any suit, action or other legal proceeding arising out of this Guaranty may be brought in the courts of the State of California; (2) consents to the jurisdiction of the Superior Court of Santa Clara County in any such suit, action or proceedings; and (3) waives any objection which it may have to the venue of any such suit, action or proceeding. During the term of this Guaranty, the Guarantor irrevocably designates the Secretary of State of the State of California, and designates the Contractor, as its agents to accept and acknowledge in its behalf service of any and all process in any such suit, action or proceeding brought in any such court and agrees and consents that any such service of process upon either agent shall be taken and held to be valid personal service upon the Guarantor whether or not the Guarantor shall then be doing, or at any time shall have done, business within the State of California, and that any such service of process shall be of the same force and validity as if the Guarantor had itself accepted the service of process. Such agents shall not have any power or authority to enter any appearance or to file any pleadings in connection with any suit, action or other legal proceeding against the Guarantor or to conduct the defense of any such suit, action or any other legal proceedings.

SECTION 15. **BINDING EFFECT.** This Guaranty shall inure to the benefit of the City and shall be binding upon the Guarantor and its successors and assigns.

SECTION 16. **AMENDMENTS, CHANGE AND MODIFICATIONS.** This Guaranty may not be amended, changed or modified and none of its provisions may be waived, except with the prior written consent of the City and the Guarantor.

SECTION 17. **COURSE OF DEALINGS.** No failure or delay by the City in exercising any right, power or privilege hereunder or under the Contract shall operate as a waiver thereof nor shall any single or partial exercises thereof preclude any other right, power or privilege. The rights and remedies provided herein shall be cumulative and not exclusive of any rights or remedies provided in the Contract or by law or equity. No waiver, amendment, release or modification of this Guaranty shall be established by conduct, custom or course of dealing, but solely by an instrument in writing duly executed by the party against whom such waiver, amendment, release or modification is sought to be enforced.

SECTION 18. **NOTICES.** Any notices or communications required or permitted hereunder shall be in writing and shall be sufficiently given if telefaxed, sent via electronic mail, delivered in person, or sent by certified or registered mail, return receipt requested, postage prepaid, to the following addresses, or to such other addresses as any of the recipients may from time to time designate by notice given in writing.
SECTION 19. CAPITALIZATION TERMS. All capitalization terms not defined in this Guaranty shall have the meaning given in the RFP.

SECTION 20. GOVERNING LAW. This Agreement shall be construed in accordance with and governed by the laws of the California. In the event that changes in law, regulations or practices not already known or anticipated as of this Agreement become effective, or changes in relevant permits materially alter the procedures applicable to the parties’ performance of their respective obligations hereunder, the parties will endeavor in good faith to negotiate appropriate and mutually agreeable amendments to this Agreement or separate protocols to account for such changes, attempting in all events to restore or maintain for each Party as nearly as possible, its respective rights and obligations and benefits under this Agreement.

IN WITNESS WHEREOF, the Guarantor has caused this Guaranty to be executed in its name and on its behalf by its duly authorized officer as of the  [INSERT DATE]

GUARANTOR NAME

By: __________________________

Title: __________________________

DESIGNATED REPRESENTATIVE OF THE CITY of PALO ALTO

By: __________________________

Title: __________________________
Preliminary Checklist

Palo Alto Energy/Compost Facility/Export

Prepared by:
Douglas Environmental
1517 28th Street
Sacramento, CA 95816

January 4, 2013
Preliminary Checklist

Palo Alto Energy/Compost Facility/Export

Prepared by:
Douglas Environmental
1517 28th Street
Sacramento, CA 95816

Contact:
Douglas Brown
(916) 739-8407

January 4, 2013

Prepared for:
City of Palo Alto
Department of Public Works
250 Hamilton Avenue
Palo Alto, CA 94301
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PREFACE/PURPOSE

This document is a preliminary checklist that has been prepared to address the potential impacts associated with a proposed Palo Alto Energy/Compost Facility/Export (proposed project). The main purpose of this checklist is to provide proposers with environmentally relevant information about the site conditions of this project so that proposers can incorporate the mitigation measure assumptions into their proposals.

Notwithstanding the potential to mitigate the potential significant environmental impacts, the City of Palo Alto has determined that an Environmental Impact Report will be prepared to allow full public review of potential environmental impacts and mitigation measures.
1 PROJECT DESCRIPTION

1.1 INTRODUCTION

This document is a preliminary checklist for the proposed Palo Alto Energy-Compost Facility/Export (proposed project). This checklist has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et seq. and the State CEQA Guidelines, California Code of Regulations Section 15000 et seq. The lead agency for the proposed project, whether it may have a significant effect on the environment or not, will complete an Environmental Impact Report (EIR). This document is intended to provide project proposers with a preliminary understanding of the potential mitigation measures needed to prepare a comprehensive proposal in response to the Energy/Compost Facility or Export Option Request for Proposal (RFP).

The CEQA lead agency is the public agency with primary responsibility over the proposed project. In accordance with CEQA Guidelines Section 15051, the CEQA lead agency for the proposed project is the City of Palo Alto.

1.2 CEQA CONSIDERATIONS

This checklist is tiered from the Programmatic EIR prepared for Statewide Anaerobic Digester Facilities for the Treatment of Municipal Organic Solid Waste (ESA June 2011), consistent with State CEQA Guidelines Section 15152. “Tiering” refers to using the analysis of general matters contained in a broader EIR when preparing a later EIR or negative declaration on a narrower project; incorporating by reference the general discussions from the broader EIR; and concentrating the later EIR or negative declaration solely on the issues specific to the later project (Section 15152(a)). Agencies are encouraged to tier the environmental analysis which they prepare for separate but related projects including general plans, zoning changes, and development projects. This approach can eliminate repetitive discussions of the same issues and focus the later negative declaration on the actual issues ripe for decision at each level of environmental review. Tiering is appropriate when the sequence of analysis is from an EIR prepared for a plan, policy or program to a site-specific EIR or negative declaration (Section 15152(b)).

Section 15152(d) states that where an EIR has been prepared and certified for a program, plan, policy, or ordinance consistent with the requirements of Section 15152, any lead agency for a later project pursuant to or consistent with the program, plan, policy, or ordinance should limit the EIR or negative declaration on the later project to effects which:

1) Were not examined as significant effects on the environment in the prior EIR; or

2) Are susceptible to substantial reduction or avoidance by the choice of specific revisions in the project, by the imposition of conditions, or other means.

Although all resource issues have been re-evaluated in preparing this checklist, the analysis is focused on those issues that are unique to the project site that may require mitigation measures beyond those identified in the Programmatic EIR. This is consistent with State CEQA Guidelines Section 15152.

STATEWIDE ANAEROBIC DIGESTER FACILITIES PROGRAMMATIC EIR

The Statewide Anaerobic Digester Facilities for the Treatment of Municipal Organic Solid Waste Final Program Environmental Impact Report (SCH# 2010042100) (Statewide AD Facilities EIR) provides a programmatic analysis of potential environmental effects that may result from the adoption of an Anaerobic Digestion (AD) Initiative and subsequent development of AD facilities in the State of California, in accordance with the California Environmental Quality Act (CEQA).
CalRecycle adopted an Anaerobic Digestion Initiative (the AD Initiative) on Jun 22, 2011, which includes a set of comprehensive program elements to foster the development of AD facilities that convert organic solid wastes into sources of energy and can produce valuable compost feedstocks, soil amendments, and other products. Implementation of the AD Initiative will assist in meeting the following objectives:

- Support CalRecycle Strategic Directive 6.1: to reduce the amount of organics in the waste stream by 50 percent by 2020.
- Support Assembly Bill 32 (AB 32), the California Global Warming Solutions Act of 2006, greenhouse gas reduction measures related to the use of anaerobic digestion.
- Assist local governments and state agencies (both lead and responsible agencies) by providing program-level analyses that will identify potential environmental effects of AD facilities and discuss mitigation measures or best management practices that can reduce or eliminate the environmental effects.

The Statewide AD Facilities EIR evaluates and describes, on a statewide, program-level basis, the potential environmental impacts associated with the construction and operation of AD facilities, identifies those impacts that could be significant, and presents mitigation measures, which could avoid or minimize these impacts. No significant and unavoidable impacts were identified in the Statewide AD Facilities EIR.

The existing setting discussion and summary of project impacts and mitigation measures included in the Statewide AD Facilities EIR are hereby incorporated by reference into this checklist, consistent with State CEQA Guidelines Section 15150. The impact conclusions of the Statewide AD Facilities EIR are discussed throughout the resource sections of this checklist.

The Statewide Anaerobic Digester Facilities for the Treatment of Municipal Organic Solid Waste Final Program EIR is available for review at the following web link:

http://www.calrecycle.ca.gov/SWFacilities/Compostables/AnaerobicDig/PropFnlPEIR.pdf

1.3 PROJECT DESCRIPTION

The City of Palo Alto is exploring several options for managing the City’s source separated organic waste (including food scraps and yard trimmings) and biosolids due to the closure of the Palo Alto Landfill and the future discontinuation of use of the existing biosolids incinerator. The City estimates that between 12,100 and 15,500 tons per year (tpy) of food scraps and between 13,500 and 14,300 tpy of yard trimmings (not including yard trimmings delivered by self haul vehicles, which would increase these estimates) will be generated in the City at the time a contract could be started with a private operator. In addition, the City estimates that between 22,602 tpy and 32,288 tpy of biosolids (at 26% solids) are projected to be generated at the RWQCP in 2015, which is projected to increase to between 29,382 tpy and 41,975 tpy by 2050. The City also estimates that between 158 tpy and 226 tpy of fats, oils and grease (FOG) and scum will be generated in 2015 and mixed with the biosolids, which amount is projected to remain level over time.

Through March 2012, the City composted yard trimmings at a traditional, open windrow compost facility on approximately 7.5 acres at the landfill, which ceased receiving municipal solid waste in July 2011. The closed landfill is dedicated as Byxbee Park within the City’s Comprehensive Plan and the application of the final landfill cap and its conversion to park uses resulted in composting operations ceasing at the landfill. Currently, yard trimmings collected in the City are delivered to the Sunnyvale SMaRT Station.

Residential food scraps are currently mixed with and collected as part of the City’s municipal solid waste, taken to the Sunnyvale SMaRT Station, and transported to and disposed at the Kirby Canyon Landfill in South San Jose. In the future, the City plans to initiate curbside collection of source separated residential food scraps (either mixed
The City completed a feasibility study on February 20, 2012 that evaluated several options for managing the City’s source separated organic waste and biosolids. The focus of the feasibility study was on developing a dry anaerobic digestion (AD) facility at the City’s landfill to convert source separated organic waste and potentially biosolids to renewable energy (electricity or fuels) and produce a useable compost. However, the feasibility study also evaluated a broad range of alternatives for managing source separated materials and biosolids within the City including the use of wet AD facilities, the ongoing use of incineration for biosolids, or the use of a combination of technologies and handling approaches for the different waste types. In addition, the August 2012 Long Range Facilities Plan prepared by the City included as an option gasification technologies for biosolids management. Gasification technologies include the use of a thermal process with limited oxygen that changes the composition of the organic portion of the feedstock to produce a synthesis gas that is typically converted to electricity, heat and/or fuel. Gasification includes pyrolysis, high and low temperature gasification and plasma gasification. Because the use of oxygen is restricted in the process, it does not include the incineration or combustion of the feedstock.

The feasibility study also evaluated exporting the source separated organic waste out of the City with the food scraps going to either a proposed AD facility in San Jose or the existing ZBEST compost facility in Gilroy, and the yard trimmings going to the ZBEST facility. The source separated organic waste is assumed to be transported directly from its point of collection to the selected export facility without the use of an intermediate transfer or storage facility within the City. The City has also considered exporting biosolids to a processing location outside of the City, which would require the construction of a biosolids handling, storage and truck loading facility at the RWQCP. Although specific export locations were identified in the feasibility study, future export would not be limited to these locations or the specific waste management processes at these locations. Because any facilities outside of the City are assumed to be permitted to accept and process the wastes they would receive, the site-specific environmental impacts at these export facilities are not evaluated in this checklist.

Palo Alto citizens passed the Palo Alto Green Energy and Compost Initiative (Measure E) in November 2011 that removed approximately 10 acres of land adjacent to the RWQCP from dedicated parkland for the exclusive purpose of considering building a facility for converting yard trimmings, food scraps, other municipal organics and/or sewage sludge from the regional wastewater treatment plant by biological and/or other environmentally equally protective technology. Approximately 8 acres of this 10-acre area are located on the uncapped portion of the Palo Alto Landfill. Measure E requires the operation to include all feasible methods for mitigating any significant environmental impacts identified during environmental review, including visual, sound and odor. Measure E provides for the 10-acre parcel to remain undedicated as parkland for a minimum of 10 years for purposes of considering use of the parcel for an E/C Facility.

**SITE LOCATION**

The proposed location for the E/C Facility is at the RWQCP and/or within the 10-acre Measure E parcel located directly southeast of the RWQCP at the existing Palo Alto Landfill. The Palo Alto Landfill is located in the northeastern portion of the City on the San Francisco Bay within the Baylands Master Plan area. The proposed landfill site is located on land that the City dedicated for park use as part of Byxbee Park. Access is proposed to be provided from Embarcadero Way, which intersects with Embarcadero Road approximately 1,700 feet to the northwest.

The RWQCP is surrounded by the Palo Alto Landfill to the southeast, Embarcadero Way to the southwest, and Embarcadero Road to the northwest, north and northeast. The RWQCP site has 0.52 acre available for E/C Facility uses before demolition of the incinerator and associated equipment. Following demolition, approximately 1 acre would be available at the RWQCP. The RWQCP provides treatment and disposal of wastewater services to...
the cities of Palo Alto, Mountain View and Los Altos, the Town of Los Alto Hills, the East Palo Alto Sanitation District, and Stanford University, known collectively as the RWQCP Partners (RMC March 2009).
## PROJECT INFORMATION

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1. Project Title:</td>
<td>Palo Alto Energy/Compost Facility/Export</td>
</tr>
</tbody>
</table>
| 2. Lead Agency Name and Address: | City of Palo Alto  
Public Works Department  
250 Hamilton Avenue  
Palo Alto, CA 94301 |
| 3. Contact Person and Phone Number: | Matthew Krupp, 650-496-5958 |
| 4. Project Location: | The project includes two potential project sites including one at the Palo Alto Landfill and one at the Palo Alto Regional Water Quality Control Plant. Both sites are located in the northeastern portion of the City of Palo Alto, California. |
| 5. Project Sponsor’s Name and Address: | City of Palo Alto  
Department of Public Works  
250 Hamilton Avenue  
Palo Alto, CA 94301 |
| 6. General Plan Designation: | “Public Park” for the Palo Alto Landfill Site and “Major Institution/Special Features” for the Regional Water Quality Control Plant Site |
| 7. Zoning: | PF(D), Public Facilities District/Site and Design Review Combining District |
| 8. Description of Project: | The City of Palo Alto is exploring several options for managing the City’s source separated organic waste (including food scraps and yard trimmings) and biosolids due to the closure of the Palo Alto Landfill and discontinuation of use of the existing biosolids incinerator. The City completed a feasibility study on February 20, 2012 that evaluated several options for managing the City’s source separated organic waste and biosolids. The focus of the feasibility study was on developing a dry anaerobic digestion (AD) facility at the City’s landfill to convert source separated organic waste and potentially biosolids to renewable energy (electricity or fuels) and usable compost. However, the feasibility study also included a broad range of alternatives for managing source separated materials and biosolids within the City including the use of wet AD facilities, the ongoing use of incineration for biosolids, or the use of a combination of technologies and handling approaches for the different waste types. Gasification technologies were reviewed as an option for biosolids management as part of the recently published (August 2012) Long Range Facilities Plan for the Regional Water Quality Control Plant. Gasification technologies include the use of a thermal process with limited oxygen that changes the composition of the organic portion of the feedstock to produce a synthesis gas that is typically converted to electricity, heat and/or fuel. Gasification includes pyrolysis, high and low temperature gasification and plasma gasification. Because the use of oxygen is restricted in the process, it does not include the incineration or combustion of the feedstock. The feasibility study also evaluated exporting the source separated organic waste out of the City with the food scraps going to either a proposed AD facility in San Jose or the existing ZBEST compost facility in Gilroy, and the yard trimmings going to the ZBEST facility. The source separated organic waste is assumed to be transported directly from its point of collection to the selected export facility without the use of an intermediate transfer or storage facility within the City. The feasibility study also evaluated exporting biosolids to a processing location outside of the City, which would require the construction of a biosolids handling, storage and truck loading facility at the RWQCP. Although specific export locations were identified in the feasibility study, future export would not be limited to these locations or the specific waste management processes at these locations. Because any facilities outside of the City are assumed to be permitted to accept and process the wastes they would receive, the site-specific environmental impacts at these export facilities are not evaluated in this checklist. |
| 9. Surrounding Land Uses and Setting: | The proposed alternatives include facilities within the boundaries of the Palo Alto Landfill and/or the RWQCP. Both the landfill and the RWQCP are located within the Palo Alto |
Baylands Nature Preserve and the closed landfill is designated as Byxbee Park. The landfill is surrounded by the RWQCP to the northwest and Baylands Nature Preserve/Byxbee Park to the northeast, east, south and southwest. The RWQCP is surrounded by the Palo Alto Airport to the north, the Baylands Nature Preserve/Byxbee Park to the northeast, the closed landfill and Baylands Nature Preserve/Byxbee Park to the southeast, and commercial offices/light industrial uses to the southwest.

10: Other public agencies whose approvals are required: Santa Clara County Department of Environmental Health (Local Enforcement Agency), the San Francisco Bay Regional Water Quality Control Board (RWQCB), the California Department of Resources Recycling and Recovery (CalRecycle), the San Francisco Bay Area Air Quality Management District (BAAQMD), and potentially, the San Francisco Bay Conservation and Development Commission (DCDC) and the State Lands Commission.

### ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages.

<table>
<thead>
<tr>
<th>Environment Factor</th>
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<tbody>
<tr>
<td>Aesthetics</td>
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<td>Biological Resources</td>
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<td>Hazards &amp; Hazardous Materials</td>
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<td>Mineral Resources</td>
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<td>Public Services</td>
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<td>Utilities / Service Systems</td>
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<td>Agriculture Resources</td>
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<td>Hydrology / Water Quality</td>
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<td>Noise</td>
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<td>Recreation</td>
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<td>Mandatory Findings of Significance</td>
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<td>Air Quality</td>
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<td>Geology / Soils</td>
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<td>Land Use / Planning</td>
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<td>Population / Housing</td>
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<td>Transportation / Traffic</td>
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<td>None With Mitigation</td>
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None With Mitigation
2.1 AESTHETICS

<table>
<thead>
<tr>
<th>ENVIRONMENTAL ISSUES</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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<tbody>
<tr>
<td>I. Aesthetics. Would the project:</td>
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<tr>
<td>a) Have a substantial adverse effect on a scenic vista?</td>
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<tr>
<td>b) Substantially damage scenic resources, including, but not limited to, trees, rock</td>
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<td>outcroppings, and historic buildings within a state scenic highway?</td>
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<td>c) Substantially degrade the existing visual character or quality of the site and its</td>
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<td>surroundings?</td>
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<tr>
<td>d) Create a new source of substantial light or glare which would adversely affect</td>
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<tr>
<td>day or nighttime views in the area?</td>
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ENVIRONMENTAL SETTING

The landfill site is part of Byxbee Park and the Palo Alto Baylands Nature Preserve, therefore, it is located within a sensitive recreational viewshed. The RWQCP is located at the existing RWQCP and is visible from areas within Byxbee Park. The visual character of both of these sites is strongly influenced by their existing land uses, the landfill site containing the landfill mound and the treatment plant containing the plant infrastructure.

DISCUSSION

a) Have a substantial adverse effect on a scenic vista?

Less Than Significant with Mitigation Incorporated. Impacts to scenic vistas and resources could occur from construction, pre-processing equipment (grinding, screening, sorting, etc.), buildings and/or structures (digester, administrative facilities), or biogas equipment (gas boosters, fuel cells, flares, IC engines, etc). These activities and facilities could interfere with existing views of scenic vistas or resources within the Palo Alto Baylands Nature Preserve and Byxbee Park and thus, this impact is potentially significant.

The export of biosolids outside of the City would also require the construction of facilities at the RWQCP for storage, handling and loading of biosolids into trucks. Depending upon the size and scale of these facilities, the change in existing views of scenic vistas or resources within the Palo Alto Baylands Nature Preserve and Byxbee Park would be potentially significant.

The potential for AD facilities to degrade scenic vistas was identified as a significant impact in the Statewide AD Facilities EIR. These same impacts on scenic vistas would be anticipated with the implementation of other waste conversion and waste export facilities at the proposed alternative sites. The impact was considered less than significant following implementation of the identified mitigation measures.

To ensure the impacts of the proposed alternatives on scenic vistas remain less than significant, the following mitigation measure included in the Statewide AD Facilities EIR shall be implemented.
Mitigation Measure 1

Landscaping and/or vegetated berms should be used to minimize views of facilities from sensitive views.

b) **Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?**

**No Impact.** No State-designated scenic highways are located within the project area. Therefore, the proposed alternatives would not damage scenic resources within a State scenic highway.

c) **Substantially degrade the existing visual character or quality of the site and its surroundings?**

**Less Than Significant With Mitigation Incorporated.** The visual character of an E/C Facility would be similar to many large-scale permitted solid waste facilities. The digestion process would occur within a tank (wet processes) or other enclosed facility (dry processes). A gasification facility would be visually similar to energy-generating industrial plants and the biosolids export facilities would include material storage areas and handling/loading areas. The RWQCP currently includes a biosolids incineration facility, which is integrated into the existing wastewater treatment operations. An E/C Facility or biosolids export facilities could potentially affect sensitive viewsheets such as users of the Palo Alto Baylands Nature Preserve and Byxbee Park. Potential concerns include the following:

- **Litter** - Any facility receiving solid waste needs to be concerned with the potential for blowing litter.
- **Piling** - Handling and storage of feedstock and digester byproducts can create visibly deteriorated site conditions if any portion of it occurs outdoors.
- **Buildings** – The buildings associated with an E/C Facility or biosolids export facilities have the potential to degrade visual quality based on the height and design of the buildings.
- **Cylindrical Tanks (Wet processes)** – The tanks that enclose wet digester processes can be large in order to hold substantial processed feedstock. These tanks have the potential to degrade the visual character of the area. Tank sizes can range from 20 feet to 75 feet in height. Tank size is dependent on a number of factors including planned capacity, specific technology, number of tanks and diameter.
- **Flare** - Outdoor processing of biogas could also affect surrounding views. Post-processing facilities would require an outdoor gas booster pump and flare to combust raw biogas; facilities conditioning biogas would still require flare facilities in the event of equipment failure.

The potential for an E/C Facility or biosolids export facilities to degrade the existing visual character/quality of the project sites and surroundings would depend, to a large degree, on the type of facility ultimately selected, the specific design of the facility, and the proposed site grading and landscaping. Additional analysis will be necessary in the EIR for the proposed alternatives to determine their specific visual impacts and their level of significance.

d) **Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?**

**Less Than Significant With Mitigation Incorporated.** The operation of an E/C Facility or biosolids export facilities may require the use of portable or permanent outdoor lighting during low light conditions or nighttime for safe operations. This may be a source of concern in light sensitive areas (such as adjacent to the Palo Alto Baylands Nature Preserve). Additionally, flares from biogas processing may be visible, particularly at night.
The potential for E/C facilities to create a new source of light or glare was identified as a significant impact in the Statewide AD Facilities EIR. These same light and glare impacts would be anticipated with the implementation of other waste conversion and/or biosolids export facilities at the project sites. The impact was considered less than significant following implementation of the identified mitigation measures.

To ensure the light and glare impacts of the proposed alternatives remain less than significant, the following mitigation measure included in the Statewide AD Facilities EIR shall be implemented.

**Mitigation Measure 2**

Any lighting (portable or permanent) should be hooded and directed onto the project site. This would reduce effects to nighttime skies from uplighting, reduce glare, and prevent light from spilling onto adjoining properties and roads.

Flares may be enclosed to reduce the visibility of flames during operation.
### 2.2 AGRICULTURAL RESOURCES

<table>
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<tr>
<th>ENVIROMENTAL ISSUES</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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<tbody>
<tr>
<td>II. Agricultural Resources.</td>
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<tr>
<td>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:</td>
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<tr>
<td>a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?</td>
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<tr>
<td>b) Conflict with existing zoning for agricultural use or a Williamson Act contract?</td>
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<tr>
<td>c) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?</td>
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### ENVIRONMENTAL SETTING

#### Prime Farmland

Farmlands are mapped by the State of California Department of Conservation under the Farmland Mapping and Monitoring Program (FMMP). Farmlands are delineated into the following eight categories: Prime Farmland; Farmland of Statewide Importance; Unique Farmland; Farmland of Local Importance; Grazing Land; Urban or Built-Up Land; other Land; and Water. The definitions used in the program are based on the land’s suitability for agricultural production, which includes both physical and chemical characteristics of soils and actual land use. No prime farmland is mapped on either the landfill site or the RWQCP site.

#### Williamson Act Lands

The California Land Conservation (Williamson) Act of 1965 is the State’s principal policy for the preservation of a maximum amount of the limited supply of agricultural land in the state (Government Code Section 51220). The voluntary program is administered through local governments, which are responsible for contracting with landowners. The purposes of the Williamson Act are preservation of agricultural and open space, and fostering efficient urban growth patterns. Williamson contracts last for 10 years and are self renewing. Neither the landfill site nor the RWQCP site are under a Williamson Act contract.
DISCUSSION

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

**No Impact.** Neither the landfill nor the RWQCP site contain farmland. Therefore, implementation of the proposed alternatives would not convert any farmland to non-agricultural uses and no adverse impacts on prime farmland would occur.

b) Conflict with existing zoning for agricultural use or a Williamson Act contract?

**No impact.** Neither the landfill nor the RWQCP site are zoned for agricultural use or contain a Williamson Act contract. Therefore, implementation of the proposed alternatives would not result in any conflicts with existing agricultural zoning or Williamson Act contracts.

c) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?

**No Impact.** The proposed alternatives would not include any changes to the existing environment that would result in the conversion of farmland to non-agricultural use. As such, the proposed alternatives would not individually or cumulatively contribute to the loss of farmland in the project area.
2.3 AIR QUALITY

III. Air Quality.

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied on to make the following determinations.

Would the project:

<table>
<thead>
<tr>
<th>a) Conflict with or obstruct implementation of the applicable air quality plan?</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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<tbody>
<tr>
<td>b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?</td>
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<tr>
<td>c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?</td>
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<td>d) Expose sensitive receptors to substantial pollutant concentrations?</td>
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<td>e) Create objectionable odors affecting a substantial number of people?</td>
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ENVIRONMENTAL SETTING

The project sites are located in the San Francisco Bay Air Basin, within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The BAAQMD adopts air quality rules and issues permits consistent with city, county and state regulations.

Criteria Pollutants

Concentrations of the following air pollutants: ozone, carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), respirable and fine particulate matter (PM₁₀ and PM₂.₅), and lead are used as indicators of ambient air quality conditions. Because these are the most prevalent air pollutants known to be deleterious to human health and extensive health-effects criteria documents are available, they are commonly referred to as “criteria air pollutants.”

The ambient concentrations of air pollutant emissions are determined by the amount of emissions released by pollutant sources and the atmosphere’s ability to transport and dilute such emissions. Natural factors which affect transport and dilution include terrain, wind, atmospheric stability, and the presence of sunlight. Therefore, existing air quality conditions in the area are determined by such natural factors as topography, meteorology, and climate, in addition to the amount of emissions released by existing air pollutant sources.
Both the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (ARB) designate areas of the state as attainment, nonattainment, or unclassified for various pollutant standards. An “attainment” designation for an area signifies that pollutant concentrations did not violate the standard for that pollutant in that area. A “nonattainment” designation signifies that a pollutant concentration violated the standard, excluding those occasions when a violation was caused by an exceptional event, as identified in the criteria. An “unclassified” designation signifies that data do not support either an attainment or nonattainment status. In addition, each agency has several levels of classification used to further describe the severity of nonattainment conditions. For instance, the ARB classifies nonattainment areas into moderate, serious, or severe air pollution categories, with increasingly strict control requirements mandated for each.

The project sites are located in the San Francisco Bay Air Basin. For ozone ($O_3$), the San Francisco Bay Air Basin is currently classified as a “non-attainment” by both state federal standards. For particulate matter less than 10 micrometers in diameter ($PM_{10}$), the San Francisco Bay Air Basin is currently designated as a “non-attainment” area by state standards. For particulate matter less than 2.5 micrometers in diameter ($PM_{2.5}$), the San Francisco Bay Air Basin is currently designated as a “non-attainment” area by state and federal (24 hour) standards. State and federal standards designate all other criteria pollutants as “attainment” or “unclassified”

**Toxic Air Contaminants**

In addition to the criteria air pollutants, toxic air contaminants (TACs) are airborne substances that are capable of causing short-term (acute) and/or long-term (chronic) and carcinogenic (cancer-causing) adverse health effects to humans. TACs include both organic and inorganic chemical substances. AD facilities are sources of TACs, particularly from biogas emissions and diesel exhaust. Gasification facilities are also sources of TACs. TACs are regulated separately from the criteria air pollutants at both the federal and state levels; however, the impacts of TAC emissions must be considered when evaluating project impacts due to their potential to affect human health.

**DISCUSSION**

a) **Conflict with or obstruct implementation of the applicable air quality plan?**

**No Impact.** Stationary source activities that have the potential to affect air quality are regulated and permitted by the BAAQMD, pursuant to the adopted Bay Area 2010 Clean Air Plan (CAP). According to BAAQMD Guidelines, consistency with the CAP means that direct and indirect emissions associated with the project are accounted for in the CAP’s emission growth assumptions and the project is consistent with policies adopted in the CAP. Since the proposed alternatives would not generate growth, they would not be subject to the CAP’s emission growth assumptions. Additionally, the anticipated vehicular trip generation associated with the proposed alternatives would be expected to fall below that which would generate an impact under the CAP. As a result, the proposed alternatives are consistent with the Bay Area 2010 CAP and no impacts would result.

b) **Violate any air quality standard or contribute substantially to an existing or projected air quality violation?**

**Construction Emissions**

**Less Than Significant With Mitigation Incorporated.** Construction related emissions for an E/C Facility or export facilities would arise from a variety of activities, including: (1) grading, excavation, road building, and other earth moving activities; (2) travel by construction equipment and employee vehicles, especially on unpaved surfaces; (3) exhaust from construction equipment; (4) architectural coatings; and (5) asphalt paving.

Construction-related fugitive dust emissions would vary from day to day, depending on the level and type of activity, silt and clay content of the soil, and the weather. In the absence of mitigation, construction activities may result in significant quantities of dust, and as a result, local visibility and $PM_{10}$ concentrations may be adversely
affected on a temporary and intermittent basis during construction. In addition, the fugitive dust generated by construction would include not only PM10, but also larger particles, which would fall out of the atmosphere within several hundred feet of the site and could result in nuisance-type impacts.

Construction equipment and construction-worker commute vehicles would also generate criteria air pollutant emissions. Criteria pollutant emissions of ROG and NOx from these emissions sources would incrementally add to regional atmospheric loading of ozone precursors during the construction period (ESA June 2011).

**Operational Emissions**

Emissions associated with operations would depend on the technology selected with variations depending upon the size and type of AD facility (e.g., one-stage or two-stage continuous systems, batch systems, wet or dry processes), gasification facility (e.g., pyrolysis, high and low temperature gasification, plasma gasification), or biosolids export facilities at the RWQCP and any equipment needed for pre-processing. Emissions would also be generated by the increased traffic on the local and regional roadway network (including additional waste haul trucks and employees), and the post processing of the biogas (e.g., flaring of excess biogas, combusting for electricity, or cleaning up biogas for use as a transportation fuel). For the export of biosolids, the transport truck emissions are anticipated to generate the primary air quality impacts within the City.

Operational sources of fugitive dust would primarily be processing equipment and truck movement over paved and unpaved surfaces. In addition, non-methane VOCs released from pre-digested food scraps and yard trimmings during the receipt and pre-processing activities at the facility would not be a regional change but could result in increased localized emissions. Although there would be emissions associated with these sources at the facility, its operations would divert organics out of landfills. By doing so, there would be less activity at the disposal landfill, such as potentially fewer pieces of off-road equipment and a potential decrease in the vehicle miles traveled (VMT) for haul trucks. The E/C Facility could also generate biogas to replace fossil fuels for electricity production or for vehicle transportation (ESA June 2011).

The generation of criteria air pollutant emissions associated with the construction and operation of AD facilities was identified as a significant impact in the Statewide AD Facilities EIR. The generation of criteria air pollutant emissions associated with gasification facilities and export facilities would also be considered significant. The impact was considered less than significant following implementation of the identified mitigation measures.

To ensure criteria air pollutant emission impacts remain less than significant, the following mitigation measure included in the Statewide AD Facilities EIR shall be implemented.

**Mitigation Measure 3**

An Air Quality Technical Report shall be prepared as part of the EIR review process for the proposed alternatives. The technical report shall include an analysis of potential air quality impacts (including a screening level analysis to determine if construction and operation related criteria air pollutant emissions would exceed BAAQMD thresholds, as well as greenhouse gas (GHG) emissions and any health risk associated with toxic air contaminants (TACs) from all AD or gasification facility sources) and reduction measures. Preparation of the technical report should be coordinated with the BAAQMD and shall identify compliance with all applicable New Source Review and Best Available Control Technology (BACT) requirements. The technical report shall identify all emissions from permitted (stationary) and non-permitted (mobile and area) sources and mitigation measures (as appropriate) designed to reduce significant emissions to below the applicable BAAQMD thresholds of significance.

The construction contractor and facility operator shall be required to implement the following Best Management Practices (BMPs) as applicable during construction and operations:
• Facilities shall be required to comply with the rules and regulations from the BAAQMD.

• Facilities shall require substrate unloading and pre-processing activities to occur indoors within enclosed, negative pressure buildings. Collected foul air (including volatile organic compounds (VOCs) off-gassed from undigested substrates) should be treated via biofilter or air scrubbing system.

• Use equipment meeting, at a minimum, Tier II emission standards, as established by the U.S. Environmental Protection Agency.

• Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes (as required by the state airborne toxics control measure [Title 13, §2485 of the California Code of Regulations]). Provide clear signage that posts this requirement for workers at the entrances to the site.

• Maintain all equipment in proper working condition according to manufacturer’s specifications.

• Use electric equipment when possible.

• Where feasible as an alternative to internal combustion engines, which generate nitrogen oxide (NO\textsubscript{x}) emissions, use biogas from AD or gasification facilities as a transportation fuel (compressed biomethane) or in fuel cells to generate clean electricity. If there are other low NO\textsubscript{x} alternative technologies available at the time of AD or gasification facility development, these should be considered as well during the facility design process.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Less-Than-Significant Impact. As discussed in response to question b) above, emissions generated by the proposed alternatives would be considered less than significant following implementation of the identified mitigation measures. Thus, emissions generated by the proposed alternatives would not result in a cumulatively considerable net increase of a criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard.

d) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant With Mitigation Incorporated. For construction impacts, emissions of toxics can occur from site preparation and construction activities that are required for the AD, gasification and biosolids export facilities. The impacts from operation of a typical AD, gasification or export facility can be determined by comparing the facility’s pre and post-project emissions. For operations, air toxics emissions could include diesel particulate matter (DPM) from trucks that deliver substrate to the facility, or from trace amounts of air toxics (primarily hydrogen sulfide \([\text{H}_2\text{S}]\) and ammonia) that may be released as fugitives from the anaerobic digester or from the potential combustion or flaring of the biogas. Additional air toxics that could be generated by the combustion of biogas (either in an engine or flare) include benzene, formaldehyde, and other products of incomplete combustion. Combustion of biogas containing \(\text{H}_2\text{S}\) generates sulfur dioxide, which can react with water to produce sulfuric acid. AD facilities typically include control technologies that convert the \(\text{H}_2\text{S}\) to sulfur, which is then removed from the gas stream in order to avoid corrosion of engine parts in the combustion chamber and in the exhaust system. In addition, ammonia may form in the anaerobic digestion process from nitrogen compounds contained in the organic substrates (ESA June 2011).

Health impacts from exposure to toxic emissions related to the AD, gasification and export facilities are dependent on the magnitude of concentrations that the public can be exposed to, as well as to the relative
toxicities of the individual pollutants released from each type of facility. Exposure levels are determined by carrying out dispersion modeling of estimated toxics emissions from typical proposed facility sources by using a screening model, such as the EPA model SCREEN3 (USEPA 1995). The SCREEN3 model predicts possible worst-case impacts, by using hypothetical worst-case meteorology. For calculating more accurate impacts at site-specific facilities, the EPA model AERMOD can be used. AERMOD uses meteorological data that is representative of the site, as well as multiple toxic emission source types, such as point, area, or volume to represent the emission sources (ESA June 2011).

For a screening analysis, cancer and non-cancer health risks can be calculated by applying algorithms given in the document published by California Office of Environmental Health Hazard Assessment (OEHHA) to calculate health risks (OEHHA 2003). For more accurate site specific risks, AERMOD can be run in conjunction with the CARB model “Hot Spots Analysis Reporting Program” (HARP) to estimate cancer and non-cancer health risks that the public can be exposed to (CARB 2009). HARP uses the same toxicity values as are given in the OEHHA Risk Assessment Guidelines and incorporates multi-pathway uptake factors for the various toxic species to calculate risks.

The estimated cancer risks from facility emissions are then compared to the applicable BAAQMD significance thresholds to determine if the impacts from the alternatives evaluated might result in significant impacts to the public. In addition, Hazard Quotients are estimated for noncarcinogens in HARP to determine if the modeled exposure levels exceed established health thresholds, called Reference Exposure Levels (RELs), to test for significance. The estimated risks for the various digester, gasification or export alternatives can then be used to estimate health risks, and for those alternatives with unacceptable risks, mitigation measures are applied to determine if the alternatives can achieve acceptable health risks to the public. Due to the unknown site specific exposure and information that is needed to quantify and evaluate health risk associated with AD, gasification and export facilities, this impact is considered potentially significant (ESA June 2011).

The health impacts from exposure to toxic emissions associated with the construction and operation of AD facilities was identified as a significant impact in the Statewide AD Facilities EIR. The impact was considered less than significant following implementation of the identified mitigation measures.

To ensure health impacts from exposure to toxic emissions remain less than significant, the following mitigation measure included in the Statewide AD Facilities EIR shall be implemented.

**Mitigation Measure 4**

Based on the Air Quality Technical Report (specified in the Mitigation Measure in response to question [b] above), if the health risk is determined to be significant on a project-by-project basis with DPM as a major contributor, then control measures shall be implemented such that the AD, gasification or biosolids export facility health risk would be below the BAAQMD threshold, which may include implementation of one or more of the following requirements, where feasible and appropriate:

- Use either new diesel engines that are designed to minimize DPM emissions (usually through the use of catalyzed particulate filters in the exhaust) or retrofit older engines with catalyzed particulate filters (which will reduce DPM emissions by 85%);
- Use electric equipment to be powered from the grid, which would eliminate local combustion emissions;
- Use alternative fuels, such as compressed natural gas (CNG) or liquefied natural gas (LNG);
- Hydrogen sulfide (H2S) contained in the biogas shall be scrubbed (i.e., via iron sponge or other technology) before emission to air can occur.

**e) Create objectionable odors affecting a substantial number of people?**
Less Than Significant With Mitigation Incorporated. As bacterial decomposition proceeds, odoriferous compounds are generated. The major contribution to odors comes from two groups of compounds: the first group is dominated by esters and organosulfurs, and the second group consists of alkyl benzenes and limonene.

The sensory perception of odorants has four major dimensions: detectability, intensity, character, and hedonic tone. Odor detectability consists of a detection threshold and a recognition threshold. The detection threshold is the lowest concentration of an odorant that will elicit a sensory response in 50 percent of the population. There is an awareness of the presence of an added substance, but not necessarily an odor sensation. The detection thresholds are determined using human subjects and sophisticated dilution equipment. Detection thresholds are published for more than 900 chemicals. The recognition threshold is the minimum concentration that is recognized as having a characteristic odor quality by a segment of the population.

Odor intensity refers to the perceived strength of the odor sensation, and odorant character is what the substance smells like (e.g., fishy, rancid, hay, sewer, turpentine, ammonia, etc.). Hedonic tone is a category judgment of the relative pleasantness or unpleasantness of the odor, and is influenced by factors such as subjective experience and frequency of occurrence. For example, roses have been demonstrated to possess an odor with pleasant hedonic tone. Garbage has been demonstrated to possess an odor with an unpleasant hedonic tone.

Offensive odors rarely cause any physical harm and no requirements for their control are included in state or federal air quality regulations.

Factors that affect odor impacts include the AD or gasification facility design, sensitive receptor proximity, and exposure duration. Anaerobic digestion is the biological decomposition of organic matter in the absence of molecular oxygen. As a result, odorous compounds, such as ammonia and H₂S, are generated and could be released into the environment. The anaerobic digestion process occurs naturally in marshes, wetlands and is the principal decomposition process in landfills. However, in the operation of AD facilities, the digestion process occurs in a closed system. Volatile organic compounds are broken down through the anaerobic digestion process, and exhaust is generally processed in a more controlled environment.

However, the collection transport, storage, and pre-processing activities of the potentially odiferous organic substrates for digestion and the resultant digestate could produce nuisance odors at the AD facility. In addition, these digester facilities could lead to objectionable odors at off-site receptors in the vicinity.

For the biosolids export facilities at the RWQCP, odors would be generated during material handling and storage activities, and during truck loading operations.

Potential exposure of the public to objectionable odors was identified as a significant impact in the Statewide AD Facilities EIR. The impact was considered less than significant following implementation of the identified mitigation measures.

To ensure the objectionable odor impacts remain less than significant, the following mitigation measure included in the Statewide AD Facilities EIR shall be implemented.

Mitigation Measure 5

The AD, gasification, and/or biosolids export facilities shall comply with the City of Palo Alto’s land use plans, policies, and regulations, including applicable setbacks and buffer areas from sensitive land uses for potentially odoriferous processes.

If the AD, gasification or biosolids export facilities handle compostable material and are classified as a compostable material handling facility, the facility must develop an Odor Impact Minimization Plan (OIMP) pursuant to 14 CCR 17863.4. Otherwise, an Odor Management Plan (OMP) shall be developed and
implemented that incorporates equivalent odor reduction controls for facility operations. Odor control strategies that can be incorporated into these plans include, but are not limited to, the following:

- A list of potential odor sources.
- Identification and description of the most likely sources of odor.
- Identification of potential, intensity, and frequency of odor from likely sources.
- A list of odor control technologies and management practices that could be implemented to minimize odor releases. These management practices shall include the establishment of the following criteria:

  - Require substrate haulage to the AD, gasification or export facility within sealed containers.
  - Establish time limit for on-site retention of undigested substrates (i.e., substrates must be put into the digester or gasification facility within 24 hours of receipt or hauled off site within 48 hours).
  - Provide enclosed, negative pressure buildings for indoor receiving and preprocessing. Treat collected foul air in a biofilter or air scrubbing system.
  - Establish contingency plans for operating downtime (e.g., equipment malfunction, power outage).
  - Manage delivery schedule to facilitate prompt handling of odorous substrates.
  - Handle digestate within enclosed building and/or directly pump to sealed containers for transportation.
  - Protocol for monitoring and recording odor events.
  - Protocol for reporting and responding to odor events.
## 2.4 BIOLOGICAL RESOURCES

<table>
<thead>
<tr>
<th>IV. Biological Resources. Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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<tbody>
<tr>
<td>a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?</td>
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<td>b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?</td>
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<td>c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?</td>
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<td>d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?</td>
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<td>e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?</td>
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<td>f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?</td>
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### ENVIRONMENTAL SETTING

The landfill and RWQCP sites are located within the Palo Alto Baylands Nature Preserve. The Preserve encompasses the San Francisco Bay shoreline areas east of Highway 101 between the cities of East Palo Alto and Mountain View. The City of Palo Alto has maintained and managed this open space for recreation and wildlife habitat preservation since the 1920s. The 2,100-acre Preserve is the largest tract of undisturbed marshland remaining in the San Francisco Bay, and contains a unique mixture of tidal and freshwater habitats supporting a variety of plant and animal communities and a number of threatened and endangered species. The Mayfield Slough, located adjacent to the landfill site, is also included within the Preserve.
Several sensitive species, including the Salt Marsh Harvest Mouse and the Burrowing Owl, have been identified in the areas surrounding the landfill site. The habitat on the landfill site is limited to non-native grasses and several eucalyptus trees. The majority of the landfill site has been disturbed by landfilling activities and the majority of the RWQCP site has been disturbed by the development of the treatment plant. No sensitive species habitat is present on either site.

**DISCUSSION**

a) **Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?**

**Less Than Significant With Mitigation Incorporated.** The proposed alternatives do not include any construction activities or habitat modification within sensitive habitats. However, the development of the landfill or RWQCP site could have adverse indirect impacts on sensitive habitats within the Palo Alto Baylands Nature Preserve including the introduction of new light and noise sources, which could disrupt existing species use patterns. The construction on the landfill site could also alter existing local wildlife use corridors within the Nature Preserve. The impacts may depend upon the final design of the E/C Facility or biosolids export facilities. The installation of light shielding and compliance with City noise standards could minimize the potential to affect sensitive habitats within the Palo Alto Baylands Nature Preserve.

Additional analysis will be necessary in the EIR to determine if the proposed alternatives have the potential to adversely affect candidate, sensitive or special-status species or important habitat identified by resource agencies in the local area. The following mitigation measure is recommended to minimize this impact.

**Mitigation Measure 6**

A biological study shall be conducted when more detail is available regarding the design characteristics of the E/C Facility or biosolids export facilities to determine if the development of the facilities has the potential to adversely affect sensitive species or important habitat in the Palo Alto Baylands Nature Preserve. The study shall include the identification of appropriate mitigation measures to reduce any potentially significant biological resource impacts.

b) **Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?**

**No Impact.** The proposed alternatives would not disturb any riparian habitat or other sensitive natural community. The proposed alternatives do not include any construction activities or habitat modification that would disturb riparian habitat or other sensitive natural communities. Therefore, the proposed alternatives would have no effect on riparian habitat or other sensitive natural communities.

c) **Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

**No Impact.** The proposed alternatives do not include construction within any wetland or other jurisdictional Waters of the U.S and no impacts on these resources would be anticipated with implementation of the proposed alternatives.
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less Than Significant With Mitigation Incorporated. The landfill and RWQCP sites have historically been developed for either landfill or wastewater treatment purposes and are not expected to be located within broad movement corridors for native resident or migratory wildlife species. However, the landfill site may provide a corridor for local wildlife movement within the Palo Alto Baylands Nature Preserve. Additional analysis will be necessary in the EIR of the proposed alternatives to determine if development of the landfill site could adversely affect native resident or migratory wildlife movement corridors or nursery sites. The implementation of the mitigation measure identified under question a) above is recommended to minimize this impact.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. The development of the landfill site as an E/C Facility would likely require the removal of several existing mature eucalyptus trees, located adjacent to the RWQCP, along the landfill site’s northwestern boundary. The trees are not considered “Regulated Trees”, as defined in the City’s Tree Technical Manual (Municipal Code Chapter 8.10.030), and are therefore, not subject to the City’s removal permit requirements. Thus, none of the proposed alternatives would be anticipated to conflict with applicable tree preservation policies or ordinances.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. The proposed alternatives are not located within an adopted Habitat Conservation Plan or Natural Communities Conservation Plan area and would not conflict with such plans.
2.5 CULTURAL RESOURCES

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<thead>
<tr>
<th>ENVIRONMENTAL ISSUES</th>
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<tr>
<td>V. Cultural Resources. Would the project:</td>
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<tr>
<td>a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?</td>
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<tr>
<td>b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?</td>
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<tr>
<td>c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?</td>
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<td>d) Disturb any human remains, including those interred outside of formal cemeteries?</td>
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ENVIRONMENTAL SETTING

Historic and Unique Archaeological Resources

Under CEQA, historical resources and “unique archaeological resources” are recognized as a part of the environment (Public Resources Code Sections 21001(b), 21083.2, 21084(e), 21084.1). In 1992, the Public Resources Code was amended as it affects historical resources. The amendments included creation of the California Register of Historical Resources (Public Resources Code Sections 5020.4, 5024.1 and 5024.6). While the amendments became effective in 1993, it was not until January 1, 1998, that the implementing regulations for the California Register were officially adopted (Public Resources Code Section 4850 et seq.).

The California Register is an authoritative listing and guide for state and local agencies and private groups and citizens in identifying historical resources. This listing and guide indicates which resources should be protected from substantial adverse change.

Under CEQA Guidelines Section 15064.5, an “historical resource” includes: (1) a resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in, the California Register of Historical Resources; (2) a resource listed in a local register of historical resources or identified in a historical resource survey meeting the requirements in Section 5024.1(g) of the Public Resources Code; and (3) any object, building, structure, site, area, place, record, or manuscript that a lead agency determines is historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the determination is supported by substantial evidence in light of the whole record; or a resource determined by a lead agency to be “historical,” as defined in Public Resources Code Sections 5020.1(j) or 5024.1.

CEQA is also concerned with effects of a project on “unique archaeological resources.” If an archaeological site meets the definition of a unique archaeological resource (Public Resources Code Section 21083.2), then the site must be treated in accordance with the special provisions for such resources, which include time and cost limitations for implementing mitigation. “Unique archaeological resource” is defined as “an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets the following criteria:
If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. Examples of that treatment are described in the code. To the extent that unique archaeological resources are not preserved in place or left in an undisturbed state, mitigation measures shall be required as provided in the code. The code also places limitations on the extent, cost and timing of mitigation measures that can be required by the lead agency.

**DISCUSSION**

a) **Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?**

_No Impact_. The Palo Alto Landfill has been extensively disturbed by past waste disposal activities and does not include any structures or historic resources. The RWQCP site has also been extensively disturbed by the original construction of the plant and no historic resources are located on this site. Therefore, no impacts to historical resources, as defined in Section 15064.5 of the State CEQA Guidelines, are anticipated to occur with implementation of the proposed alternatives.

b) **Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?**

_No Impact_. The majority of the landfill site contains the existing landfill mound. Because the placement of municipal solid waste within the landfill mound typically would have included excavating below the ground surface prior to waste placement, any subsurface cultural resources would have been destroyed when the area was converted to landfill uses. The RWQCP site was also disturbed during the original land grading conducted during construction of the plant. Therefore, there is little potential that subsurface archaeological resources are located at either the landfill site or the RWQCP site.

A cultural survey was conducted during the preparation of an Initial Study for the Palo Alto Recycled Water Project in 2007 (RMC March 2009), which included the RWQCP site. The RWQCP was included in the cultural survey because components of the Recycled Water Project were located at the plant. The cultural survey included a records search of the California Inventory of Historic Resources (1976), the Historic Property Directory (Office of Historic Preservation current computer list), Northwest Information Center records of archaeological sites and surveys, GLO Plats, historic maps, and other pertinent historic data available at the Northwest Information Center for Santa Clara County. Based on this records search, no previously recorded archaeological sites exist within the immediate area of the RWQCP (RMC March 2009).

A field reconnaissance was conducted for the proposed Recycled Water Project as part of the cultural survey that included the RWQCP. No historical or prehistoric cultural resources were observed within the Recycled Water Project’s area of potential effect. The Native American Heritage Commission was contact by letter on August 31, 2007 requesting information on sacred lands and a contact list of local tribal representatives or most likely descendents. A response was received from the Commission on September 14, 2007 noting, “A record search of the sacred land file has failed to indicate the presence of Native American cultural resources in the immediate
project area.” The list of Native American contacts identified in the Commission letter were all contacted and no responses were received (RMC March 2009).

Because there is little to no potential for archaeological resources to be located on either the landfill or the RWQCP sites, no impacts to archaeological resources, as defined in Section 15064.5 of the State CEQA Guidelines, are anticipated to occur with implementation of the proposed alternatives.

c) **Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

**No Impact.** For the reasons discussed above in answers to questions a) and b), there is little to no potential for unique paleontological resources to be located on either the landfill or the RWQCP sites. Neither site includes unique geologic features nor has the topography of the sites been disturbed by prior development. The proposed alternatives do not include any activities that could disturb paleontological resources or unique geologic features. Therefore, no impacts to paleontological resources or unique geologic features are anticipated to occur with implementation of the proposed alternatives.

d) **Disturb any human remains, including those interred outside of formal cemeteries?**

**No Impact.** No formal or informal cemeteries are located near the landfill or the RWQCP sites. Therefore, no disturbance of human remains is anticipated to occur with implementation of the proposed alternatives.
2.6 GEOLOGY AND SOILS

<table>
<thead>
<tr>
<th>ENVIRONMENTAL ISSUES</th>
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VI. **Geology and Soils. Would the project:**

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)

ii) Strong seismic ground shaking?

iii) Seismic-related ground failure, including liquefaction?

iv) Landslides?

b) Result in substantial soil erosion or the loss of topsoil?

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial risks to life or property?

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

ENVIRONMENTAL SETTING

The Santa Clara Plain forms the floor of the Santa Clara Valley, which contains the San Francisco Bay. The plain is a broad, flat to undulating, gently sloping alluvial fan that extends northeast from the base of the foothills of the Santa Cruz Mountains to the salt evaporators that now occupy the marshes that formerly bordered San Francisco Bay. The plain drops gently across 3.5 miles to about five feet above mean sea level at the Bay margin and is incised by streams.

The City of Palo Alto is in the San Andreas Fault System, which is approximately 44 miles wide in the Bay Area. The principal active faults, those on which there is evidence of displacement during Holocene time (the last 11,000 years), include the San Gregorio, San Andreas, Hayward, Calaveras, and Greenville faults. The City of Palo Alto is in one of the most active seismic regions in the United States. Each year, low and moderate magnitude earthquakes occurring in or near the Bay Area are felt by residents of the City of Palo Alto. Since the
mid-nineteenth century, about 2,000 earthquakes have affected Santa Clara County. The April 1906 earthquake on the San Andreas Fault, estimated at 8.3 on the Richter scale, probably was the largest seismic event felt in the City. Most recently, the 7.1 Loma Prieta earthquake of October 1989 on the San Andreas Fault caused severe damage throughout the Bay Area.

**DISCUSSION**

a) **Exposure to potential substantial adverse effects, including the risk of loss, injury, or death involving:**

i) **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?** (Refer to California Geological Survey Special Publication 42.)

**No Impact.** Surface rupture is an actual cracking or breaking of the ground along a fault during an earthquake. Structures built over an active fault can be torn apart if the ground ruptures. Surface rupture along faults is generally limited to a linear zone a few meters wide. The Alquist-Priolo Act was created to prohibit the location of structures across the traces of active faults, thereby reducing the loss of life and property from an earthquake. No Alquist Priolo zones have been established on or adjacent to the project area. Therefore, the proposed alternatives would not be expected to be affected by the rupture of a known earthquake fault.

ii) **Strong seismic ground shaking?**

**Less-Than-Significant Impact.** Ground shaking occurs as a result of energy released during faulting, which could potentially result in the damage or collapse of buildings and other structures, depending on the magnitude of the earthquake, the location of the epicenter, and the character and duration of the ground motion.

The components of the proposed alternatives at the landfill and RWQCP are located in an area of notable seismic activity. Seismic ground shaking generated from earthquakes on major Bay Area fault systems (i.e., the San Andreas or Hayward) could cause varying intensities of ground shaking at the sites. Ground shaking from a regional earthquake will likely occur within the life of the project.

The proposed alternatives would be required to be designed consistent with California Building Code requirements that are intended to ensure the facilities withstand the seismic stresses that would be anticipated within the City of Palo Alto. Therefore, the proposed alternatives are not anticipated to result in significant ground-shaking impacts.

iii) **Seismic-related ground failure, including liquefaction?**

**Less-Than-Significant Impact.** The primary factors in determining liquefaction potential are soil type, the level and duration of seismic ground motions, and the depth to groundwater. Sandy, loose, or unconsolidated soils are susceptible to liquefaction hazards. Liquefaction and other seismically-induced forms of ground movement have historically occurred throughout California during major earthquake events. These phenomena generally consist of lateral movement, flow, or vertical settlement of saturated, unconsolidated soil in response to strong ground motion.

The soils in the Baylands area are known to be subject to liquefaction. The project sites are mapped as having a high potential for liquefaction on Map N-5 (Geotechnical Hazards) in the Palo Alto Comprehensive Plan. However, the majority of the soils at the landfill site were excavated with the original landfill development. The RWQCP has been extensively developed and has not been subjected to liquefaction. In addition, key facilities at
either site are anticipated to be supported by pilings, which would substantially diminish any liquefaction hazards. Therefore, implementation of the proposed alternatives would not be expected to expose facilities to liquefaction.

iv) Landslides?

**Less Than Significant with Mitigation Incorporated.** The lands in the Baylands area are generally flat and not subject to landslides. However, because the use of the landfill site for an E/C Facility would require excavation of the existing landfill mound and the installation of a retaining wall, the potential exists for the landfill mound to experience slope failure if not properly designed. The potential for the reconfigured landfill refuse slopes to shift or slump could create a hazard for site employees or visitors. This would be considered a potentially significant impact unless mitigation is incorporated. The following mitigation measure is recommended to ensure this impact is reduced to a less-than-significant level.

**Mitigation Measure 7**

If the landfill site is selected for development, a slope stability analysis and geotechnical report shall be prepared by an engineering geologist with landfill design expertise of the proposed landfill mound excavation. The report shall characterize any potential hazards, identify appropriate measures to minimize these hazards, and include detailed design recommendations to ensure the redesigned landfill refuse slopes would remain stable under both static and seismic loading conditions.

b) Result in substantial soil erosion or the loss of topsoil?

**Less Than Significant with Mitigation Incorporated.** Construction at the landfill site or the RWQCP site would result in potential soil erosion and loss of topsoil associated with excavation, stockpiling, and grading activities. This would be considered a potentially significant impact unless mitigation is incorporated. The following mitigation measure is recommended to ensure this impact is reduced to a less-than-significant level.

**Mitigation Measure 8**

A grading and erosion control plan shall be prepared by a California Registered Civil Engineer prior to issuance of grading permits. The plan shall comply with the City of Palo Alto Municipal Code requirements regarding construction grading. To ensure grading activities do not directly or indirectly discharge sediments into surface waters as a result of construction activities, the plan shall include the development of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP shall identify Best Management Practices that would be used to protect storm water runoff and minimize erosion during construction.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

**Less-Than-Significant Impact.** As discussed in response to question iii) above, the project sites are located in an area having a high potential for liquefaction. However, the majority of the soils at the landfill site were excavated with the original landfill development. Therefore, the proposed facilities would not be placed on expansive soils with the implementation of the proposed alternatives. The RWQCP has been extensively developed and has not been subjected to liquefaction.

Subsidence occurs when large amounts of groundwater have been withdrawn from certain types of soils (such as fine-grained sediments), and the soil loses support and collapses upon itself. Conditions that could potentially result in subsidence were not identified at the project site. Therefore, the potential for subsidence is low.
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial risks to life or property?

**Less-Than-Significant Impact.** The soils underlying the project sites are known to contain expansive soils. However, for the majority of the landfill site, any expansive soils would have been excavated with initial construction of the landfill fill area. If areas remain that contain expansive soils, specific treatments to eliminate the expansion potential include grouting (cementing the soil particles together), recompaction (watering and compressing the soils), and replacement with a non-expansive material (excavation of unsuitable soil followed by filling with suitable material), all of which are commonly used in the City of Palo Alto. In addition, key facilities at either site are anticipated to be supported by pilings, which would substantially diminish any liquefaction hazards.

The California Building Code (CBC), administered by the City’s Municipal Code, requires that each construction location be evaluated to determine the particular treatment, if any, that would be most appropriate. The construction contractor responsible for building the facilities associated with the proposed alternatives would be required to comply with the Municipal Code’s requirements to ensure the site equipment and facilities are not adversely affected by expansive soils. Therefore, the potential for expansive soils to adversely affect the project sites is low and the potential impacts resulting from expansive soils would be considered less than significant.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

**No Impact.** The proposed alternatives do not require the use of septic systems or alternative waste water disposal systems. Therefore, the proposed alternatives would have no impact on these systems.
2.7 GREENHOUSE GAS EMISSIONS

<table>
<thead>
<tr>
<th>ENVIRONMENTAL ISSUES</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>VII. Greenhouse Gas Emissions. Would the project:</td>
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</tr>
<tr>
<td>a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?</td>
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</tr>
<tr>
<td>b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?</td>
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</table>

ENVIRONMENTAL SETTING

Global warming is an issue which has gained increased public attention over the last decade. Unlike emissions of criteria and toxic air pollutants, which have local or regional impacts, emissions contributing to global warming have a broader global impact. In 2006, California passed Assembly Bill 32 (AB32), which requires the CARB to conduct GHG inventories. Landfills are included in the CARB inventories, and account for 1.5% of California GHG emissions for 2009 in the most recent inventory (ESA June 2011).

Global climate change refers to observed changes in weather features that occur across the Earth as a whole, such as temperature, wind patterns, precipitation, and storms, over a long period (CAT, 2006; CEC, 2006; CEC, 2008; IPCC, 2007). Global temperatures are modulated by naturally occurring atmospheric gases, such as water vapor, carbon dioxide, methane, and nitrous oxide. These gases allow sunlight into the Earth’s atmosphere, but prevent radiant heat from escaping into outer space, thus altering Earth’s energy balance in a phenomenon called the “greenhouse effect”. Some greenhouse gases are short lived, such as water vapor, while others, such as sulfur hexafluoride, have a long lifespan in the atmosphere (ESA June 2011).

Earth has a dynamic climate that is evidenced by repeated episodes of warming and cooling in the geologic record. Consistent with a general warming trend, global surface temperatures have increased by 0.74°C ± 0.18°C over the past 100 years (IPCC, 2007). The recent warming trend has been correlated with the global Industrial Revolution, which resulted in increased urban and agricultural centers at the expense of forests and reliance on fossil fuels (CAT, 2006). Eleven of the past twelve years are among the twelve warmest years recorded since 1850 (CEC, 2006). Although natural processes and sources of greenhouse gases contribute to warming periods, recent warming trends are attributed to human activities as well (CAT, 2006; CEC 2006).

Potential global warming impacts may include, but are not limited to, loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years. Secondary effects are likely to include a global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity. While the possible outcomes and the feedback mechanisms involved are not fully understood, and much research remains to be done, the potential for substantial environmental, social, and economic consequences over the long term may be great.

GHGs include all of the following naturally-occurring and anthropogenic (man-made) gases: carbon dioxide (CO₂), methane, nitrous oxide (N₂O), sulfur hexafluoride, perfluorocarbons, hydrofluorocarbons, and nitrogen trifluoride (NF₃) (California Health and Safety Code §38505(g). In terms of Global Warming Potential (GWP), each of these gases varies substantially from one another. GWP is a measure of how much a given mass of GHG
will contribute to global warming, comparing one GHG to the same mass of CO₂ on a relative scale (CAT, 2006; IPCC, 2007). The GWP depends on the absorption of infrared radiation by a given species, the spectral location of its absorbing wavelengths, and the atmospheric lifetime of the species. GHG emissions are measured in units of pounds or tons of CO₂ equivalents (CO₂-e). As an example, HFC-23 contributes 14,800 times as much as CO₂ to the GWP over 100 years (ESA June 2011).

**DISCUSSION**

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

**No Impact.** The annual emission levels associated with the GHG-emitting activities that would occur under various alternatives were analyzed to determine their relative GHG impact. The first step in this process was the establishment of an “assessment boundary” to determine the type of GHG-emitting activities that were analyzed. Generally, the determination of which GHG-emitting activities were included in the model is consistent with the assessment boundary recommended in the Climate Action Reserve’s *Organic Waste Digestion Project Protocol*. Any deviations from this guidance relate to the fact that the Climate Action Reserve’s protocol addresses some processes that are not applicable to the City (e.g., manure handling).

The types of GHGs emitted by the aforementioned activities include carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). Emission levels were estimated for each of these activities using methodologies established by the California Air Resources Board, the California Climate Action Registry, the Climate Action Reserve, the U.S. Environmental Protection Agency, and/or the Intergovernmental Panel on Climate Change. The levels of GHGs associated with dry anaerobic digestion were based on information provided in a request for information circulated by the City of Palo Alto to potential facility operators. The level of GHGs associated with wet anaerobic digestion and incineration of biosolids were based on information provided by a recent study being performed for the City that evaluates options for handling biosolids from the RWQCP. The GHG model does not differentiate between biogenic and anthropogenic emissions. Emissions of CH₄ and N₂O were converted to units of carbon dioxide-equivalent (CO₂-e) according to their global warming potential.

In addition, emissions associated with the construction of new facilities under various alternatives (e.g., dry anaerobic digestion facility, wet anaerobic digestion facility) were estimated and then amortized over the projected operational life of the facility (i.e., 20 years). The emissions were also converted to CO₂-e, as needed, and included in the tally for the alternatives.

The total CO₂-e emissions were calculated to be lowest when all source separated organic waste and biosolids were subjected to dry AD processes. Generally, the more organic waste that is subject to anaerobic digestion, the lower the total CO₂-e level. The model also indicates that the incineration of biosolids generates a high level of CO₂-e emissions relative to other activities included in the model. This is largely due to the fact that the incineration of biosolids is energy-intensive, consuming high levels of natural gas, and because no methane is recovered and then used to produce renewable electricity.

For those alternatives that include dry and/or wet anaerobic digestion, the recovered biogas can be used in two beneficial ways. Biogas can be combusted to produce electricity. Electricity produced from biogas would be considered renewable and would displace the consumption of equal amounts of fossil fuel-based electricity from conventional sources, thereby resulting in a GHG reduction. Biogas can also be upgraded to pipeline-quality natural gas and used in place of conventional fossil-fuel based natural gas; however, the combustion of natural gas made from biogas would result in equal levels of GHG emissions as the consumption of fossil-fuel derived natural gas and, thus, no reduction would be achieved.

The Statewide AD Facilities EIR concluded that AD facilities would not pose any apparent conflict with the most recent list of the CARB early action strategies, operation of these facilities would divert organics out of landfills,
and they could also generate biogas to replace fossil fuels for electricity production or for vehicle transportation. For these reasons, the Statewide AD Facilities EIR concluded that the GHG impacts of these types of facilities would not have an adverse environmental impact (ESA June 2011). Additional analysis will be necessary in the EIR of the proposed alternatives to determine relative GHG impacts and whether mitigation measures would be necessary.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

No Impact. The Statewide AD Facilities EIR concluded that AD facilities would be expected to comply with applicable City or County plans, policies, or regulations adopted for the purpose of reducing the emissions of GHGs and that they would directly support several GHG reduction measures contained in AB 32 (increased renewables mix and high recycling/zero waste), which would also be beneficial in meeting any local jurisdiction reduction goals (ESA June 2011). Therefore, no impact would be anticipated with the implementation of AD facilities. Additional analysis will be necessary in the EIR of the proposed alternatives to determine relative GHG impacts and whether mitigation measures would be necessary.
### 2.8 HAZARDS AND HAZARDOUS MATERIALS

#### ENVIRONMENTAL ISSUES

<table>
<thead>
<tr>
<th>VIII. Hazards and Hazardous Materials. Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?</td>
<td>☐</td>
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<tr>
<td>b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?</td>
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<tr>
<td>c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?</td>
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<tr>
<td>d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?</td>
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<tr>
<td>e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?</td>
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<tr>
<td>f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?</td>
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<tr>
<td>g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?</td>
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<tr>
<td>h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?</td>
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#### ENVIRONMENTAL SETTING

**Hazardous Materials**

For the purposes of this analysis, the term “hazardous materials” refers to both hazardous materials and hazardous wastes. Under federal and State laws, any material, including wastes, may be considered hazardous if it is specifically listed by statute as such or if it is toxic (causes adverse human health effects), ignitable (has the ability to burn), corrosive (causes severe burns or damage to materials), or reactive (causes explosions or
generates toxic gases). The term “hazardous material” is defined as any material that, because of quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment.

**Potential Presence of Hazardous Materials in Soil and Groundwater**

Hazardous materials, including but not limited to pesticides and herbicides, heavy metals, volatile organic compounds, oil and gas, may be present in soil and groundwater in areas where land uses have resulted in leaking fuel or chemical storage tanks or other releases of hazardous materials have occurred.

Various federal, State, and local regulatory agencies maintain lists of hazardous materials sites where soil and/or groundwater contamination is known or suspected to have occurred, typically as a result of leaking storage tanks or other spills. These facilities are readily identified through regulatory agency database searches, such as the State Water Resources Control Board (SWRCB) GeoTracker online database, the California Environmental Protection Agency (CalEPA) Department of Toxic Substances Control (DTSC) Envirostor online database, and several other federal, State and local regulatory agency databases.

**Anaerobic Digester and Biogas Hazards**

Anaerobic digesters are confined spaces that pose a potential immediate threat to human life. They are designed to seal out oxygen making death by asphyxiation possible within seconds of entry. Further, gases such as hydrogen sulfide and ammonia accumulate inside a digester. Notably, Cal/OSHA is responsible for developing and enforcing workplace safety standards, including confined space and lockout procedures.

Biogas consists primarily of methane, carbon dioxide, with small amounts of hydrogen sulfide, and ammonia. Typically, biogas is saturated with water vapor and may have trace amounts of hydrogen, nitrogen, oxygen, dust and siloxanes. Theoretically, two-stage digester systems could be used to produce biogas richer in hydrogen if isolated after the first stage of the process, and a methane rich biogas after the second stage. Although the hydrogen rich biogas would have potentially greater concentrations of hydrogen than the typical biogas generated through anaerobic digestion, the hydrogen would still be in low concentrations and would not pose a substantial combustion hazard. There are no known commercial systems that are designed to produce hydrogen-rich biogas. However, biogas can be reformulated into hydrogen if fuel cells are used to generate heat and electricity. For the typical anaerobic digestion process, the majority of hydrogen is converted into methane through hydrogenotrophic methanogenesis. Methane is not toxic, but is classified as a simple asphyxiate, possessing a slight inhalation hazard. If breathed in high concentration, oxygen deficiency can result in serious injury or death. Biogas itself is not explosive and will not burn unless oxygen is available at low concentrations. Biogas is explosive when mixed with air in concentrations of 5 to 15 percent. A leak in a gas line can create a fire hazard if an ignition source is present and the concentration of flammable constituents is at a hazardous level, however, in open spaces biogas readily mixes with air reducing its potential to reach flammable concentrations. The risk of fire hazard is generally low because anaerobic digestion (AD) facilities and biogas transmission lines operate with very low pressures, similar to residential natural gas distribution lines. Typical construction standards for AD facilities include redundant fire safety relief valves to prevent over pressurizing, flame arresters, gas detectors and physical barriers to minimize fire and explosion hazards.

**Fire Hazards**

While all of California is subject to some degree of wildfire hazard, there are specific features that make certain areas more hazardous. The California Department of Forestry and Fire Protection (CAL FIRE) is required by law to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors (PRC 4201-4204 and Govt. Code 51175-89). Factors that increase an area’s susceptibility to fire hazards include slope, vegetation type and condition, and atmospheric conditions. CAL FIRE has created maps of each county that depict the fire hazard severity zoning of the area. These maps can be obtained at:
These maps identify high fire hazard areas that are subject to regulations designed to minimize fire potential and assist local planning agencies to develop policies and programs for these high risk areas.

Pathogens and Vectors

Pathogens are disease-causing organisms, such as certain bacteria, viruses and parasites. Vectors are organisms, such as flies, mosquitoes, rodents and birds that can spread disease by carrying and transferring pathogens. Vectors can transmit pathogens to humans and other hosts physically through contact or biologically by playing a specific role in the life cycle of the pathogen.

Regulatory Requirements

There are numerous federal, State, and local laws, regulations, ordinances and guidance intended to protect public health and safety and the environment. The U.S. Environmental Protection Agency (U.S. EPA), CalEPA, DTSC, RWQCB, California Air Resources Board (CARB), federal and California Occupational Safety and Health Administration (OSHA), California Department of Resources Recycling and Recovery (CalRecycle), California Air Resources Board (CARB), federal and California Occupational Safety and Health Administration (OSHA), California Department of Resources Recycling and Recovery (CalRecycle), CAL FIRE and the local oversight agencies are the major federal, State, and regional agencies that enforce these regulations. The main focus of OSHA is to prevent work-related injuries and illnesses, including from exposures to hazardous materials. CalRecycle is mandated to reduce waste, promote the management of materials to their highest and best use, and protect public health and safety and the environment. CAL FIRE implements fire safety regulations. In accordance with Chapter 6.11 of the California Health and Safety Code (§ 25404, et seq.), local regulatory agencies enforce many federal and state regulatory programs through the Certified Unified Program Agency (CUPA) program, including:

- Hazardous materials business plans (Chapter 6.95 of the Health and Safety Code, §25501 et seq.).
- State Uniform Fire Code requirements (§80.103 of the Uniform Fire Code as adopted by the state fire marshal pursuant to Health and Safety Code §13143.9).
- Underground storage tanks (Chapter 6.7 of the Health and Safety Code, §25280 et seq.).
- Aboveground storage tanks (Health and Safety Code §25270.5[c]).
- Hazardous waste generator requirements (Chapter 6.5 of the Health and Safety Code, §25100 et seq.).

The following is a summary of how hazardous materials and public health and safety are regulated for AD facilities.

AD Facilities and Operations

CalRecycle regulates AD facilities as either compost facilities or transfer and processing facilities, depending upon whether the feedstock is compostable. Regulations regarding solid waste facilities and compostable materials handling, operations, and regulatory requirements are established in California Code of Regulations Title 14 and can be obtained at:


These regulations are overseen by CalRecycle and its designated local enforcement agencies (LEAs). These regulations include, but are not limited to, the following for compost facility operations: establishes permitting and inspection requirements; prohibits acceptance of hazardous wastes, liquids and sludges; outlines general
operating standards; provides for removal of contaminants from compost and feedstock; requires materials
handling in a manner that minimizes vectors and prevents unauthorized access by individuals and animals;
outlines pathogen reduction and sampling requirements; establishes recordkeeping and facility closure
requirements.

Specific regulations that provide LEAs the means to address issues regarding vectors, odor, and other nuisances
include the following for composting operations and transfer/processing operations respectively:

- “All handling activities shall be conducted in a manner that minimizes vectors, odor impacts, litter,
hazards, nuisances, and noise impacts; and minimizes human contact with, inhalation, ingestion, and
transportation of dust, particulates, and pathogenic organisms” (Composting Operating Standards in CA
Title 14, Division 7, Chapter 3.1, Article 6, Section 17867); and,

- “The operator shall take adequate steps to control or prevent the propagation, harborage and attraction of
flies, rodents, or other vectors, and animals, and to minimize bird attraction” (Minimum Standards for
Solid Waste Handling and Disposal are in CA Title 14, Division 7, Chapter 3. Article 6.1, Section
17410.4).

LEAs perform routine inspections to certify compliance with permit conditions to ensure that State programs are
effectively implemented. CalRecycle can also initiate enforcement actions in addition to, or in lieu of, the LEA.

**DISCUSSION**

a) *Create a significant hazard to the public or the environment through the routine
transport, use, or disposal of hazardous materials?*

**Construction**

**Less-Than-Significant Impact.** Construction activities would require use of limited quantities of hazardous
materials such as fuels for construction equipment, oils, and lubricants. The improper use, storage, handling,
transport or disposal of hazardous materials could result in accidental release of hazardous materials, thereby
exposing construction workers, the public and the environment, including soil and/or ground or surface water, to
hazardous materials contamination.

As discussed in the Regulatory Setting above, numerous laws and regulations govern the transport, use, storage,
handling and disposal of hazardous materials to reduce the potential hazards associated with these activities.
Cal/OSHA is responsible for developing and enforcing workplace safety standards, including the handling and
use of hazardous materials. Transportation of hazardous materials is regulated by the federal Department of
Transportation and Caltrans. Together, federal and State agencies determine driver-training requirements, load
labeling procedures, and container specifications designed to minimize the risk of accidental release. Construction
activities would also be required to comply with the California fire code to reduce the risk of potential fire
hazards. The local fire agency would be responsible for enforcing the provisions of the fire code.

The federal Clean Water Act prohibits discharges of storm water from construction projects unless the discharge
is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The State Water
Resources Control Board is the permitting authority in California and has adopted a Statewide General Permit for
Stormwater Discharges Associated with Construction Activity (Construction General Permit, Order No. 99-08)
that encompasses one or more acres of soil disturbance. Specific erosion control measures would be identified as
part of the NPDES permit and Storm Water Pollution Prevention Plan (SWPPP) required for construction. During
construction, erosion control measures would be implemented that utilize Construction Water Quality Best
Management Practices (BMPs) to avoid or minimize soil erosion and off-site sediment or hazardous materials
transport. Examples of typical construction BMPs include scheduling or limiting activities to certain times of the
year; installing sediment barriers such as silt fence and fiber rolls along the perimeter of the construction area; maintaining equipment and vehicles used for construction; developing and implementing a spill prevention and cleanup plan; and construction worker training. The SWPPP (and associated BMPs) would be prepared and implemented prior to commencing construction, and BMP effectiveness would be ensured through the sampling, monitoring, reporting, and record keeping requirements contained in the construction general permit.

Because numerous laws and regulations govern the transport, use, storage, handling and disposal of hazardous materials during construction activities to reduce the potential hazards, this construction impact would be less than significant.

**Operations**

Operation and maintenance of AD, gasification or biosolids export facilities would involve the transport, use, storage and disposal of hazardous materials such as fuels, lubricants and hydraulic fluids for vehicles and onsite equipment. The phases of operations are discussed below.

Pre-processing involves the activities necessary to prepare the feedstocks for delivery into the AD vessel. Pre-processing could include screens, picking lines or mechanical removal of glass and plastic, magnetic separation, eddy current separation, and wet separation.

As described in the project description, the alternatives evaluated include both dry digestion and wet digestion as well as gasification. These processes would take place within enclosed tanks or vessels.

Digestate: Upon completion of the digestion process, the digestate would probably undergo a solids separation process. The water could also be further processed for beneficial uses (recycled) or be routed to the RWQCP. The dewatered solid digestate could require additional aerobic curing (composting) to ensure stabilization and pathogen reduction. The Waste Discharge Requirements (WDRs) for the facility would set the specific criteria for digestate handling.

Biogas: The biogas resulting from the AD process would be used for internal combustion to generate electricity. If biogas conditioning is required for use either in a fuel cell or production of liquefied biogas, scrubber facilities would be needed to clean the biogas to remove sulfides. Flushing of the scrubbers would produce sulfide effluent that would require appropriate disposal. Biogas presents an inhalation hazard that, if breathed in high concentration, can result in serious injury or death. Biogas itself is not explosive and will not burn unless oxygen is available at low concentrations.

Handling of hazardous materials and hazardous wastes is covered by federal and State laws that minimize worker safety risks from both physical and chemical hazards in the workplace. Cal/OSHA is responsible for developing and enforcing workplace safety standards, including the handling and use of hazardous materials, including gases. Workers must be trained to understand the hazards and appropriate work procedures associated with confined spaces, flammable gases, etc. Businesses that use hazardous materials are required to submit a Hazardous Materials Business Plan to the local CUPA, which performs inspections to ensure compliance with hazardous materials labeling, training, and storage regulations. For example, hazardous materials must be stored in containers according to the manufacturer’s guidelines and appropriately labeled. The Material Safety Data Sheet for each chemical must be available for review. Employers must inform workers of the hazards associated with the materials they handle and maintain records documenting training. Hazardous wastes must be segregated, sampled and disposed of at appropriately licensed landfill facilities. Transportation of hazardous materials is regulated by the DOT and Caltrans. Together, federal and State agencies determine driver-training requirements, load labeling procedures, and container specifications designed to minimize the risk of accidental release.
Because numerous laws and regulations govern the transport, use, storage, handling and disposal of hazardous materials to reduce the potential hazards associated with these activities, this impact would be less than significant.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?

**Less Than Significant With Mitigation Incorporated.** Construction activities associated with development of the AD, gasification or biogas export facilities at the landfill or RWQCP would involve excavation and trenching. If hazardous materials, such as pesticides or herbicides, VOCs or other hazardous materials are present in excavated soil or groundwater, hazardous materials could be released to the environment resulting in the exposure of construction workers or the public to potential health risks depending on the nature and extent of any contamination encountered. Of particular concern associated with the landfill site is the existing municipal solid waste that would need to be excavated and reburied at a different area of the landfill. The exposure of these buried wastes could result in the dispersal of contaminated materials into the environment and the exposure of construction workers or the public to contaminants, potentially resulting in health and safety risks.

Hazardous materials exposed during construction could be managed appropriately according to applicable laws and regulations to reduce the risks associated with exposures to individuals or releases to the environment. Cal/OSHA regulations require the preparation and implementation of a site health and safety plan to protect workers who could encounter hazardous materials. These plans ensure that construction workers have specialized training and appropriate personal protective equipment. If groundwater dewatering is required for excavation of subsurface facilities, the groundwater may require treatment prior to discharge, in accordance with regulations.

To ensure the public health hazards associated with the exposure of workers or the public to hazardous materials remain less than significant, the following mitigation measure shall be implemented.

**Mitigation Measure 9**

During site excavation activities, construction workers that could be exposed to buried hazardous materials shall be properly equipped and trained to safely handle such materials. This includes ensuring appropriate construction personnel have received 40-hour HAZWOPER (Hazardous Waste Operations and Emergency Response) training and wear appropriate personal protection equipment (PPE).

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

**No Impact.** No existing or proposed schools are located within ¼ mile of either the landfill or the RWQCP. Therefore, the proposed alternatives would not emit or handle hazardous emissions within ¼ mile of an existing or proposed school.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?

**No Impact.** Based on a search conducted in March 2009 of the Department of Toxic Substances Control list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 including Federal Superfund Sites National Priorities List (NPL), State Response Sites, Voluntary Cleanup Sites, and School Cleanup Sites, the landfill and RWQCP sites are not located on a hazardous material site (RMC March 2009). Implementation of the proposed alternatives would not include any activity that would create a significant hazard to the public or the environment associated with a listed hazardous materials site.
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

Less Than Significant With Mitigation Incorporated. Potential aviation safety hazards were identified as a significant impact in the Statewide AD Facilities EIR for airports within five miles of new AD facilities due to their potential to attract scavenging birds. A small-scale airport operated by the County of Santa Clara (Palo Alto Airport) is located directly north of the RWQCP. This airport is located less than 3,000 feet from the landfill and RWQCP sites.

Increasing the number of birds near an airport could increase the risk of bird strikes for aircraft departing or approaching the airport. The FAA Advisory Circular 150/5200-33B recommends minimum separation criteria for various land use practices that attract wildlife in the vicinity of airports. For all airports, the FAA recommends a distance of five statute miles between the farthest edge of the airport’s air operations area and the hazardous wildlife attractant if the attractant could cause hazardous wildlife movement into or across the approach or departure airspace. The FAA discourages the development of waste disposal and other facilities located within 5,000/10,000-feet of airports serving piston-powered and turbine-powered aircraft, respectively. For projects that are located outside the 5,000/10,000-foot criteria but within five statute miles of the airport’s air operations area, the FAA may review development plans, proposed land-use changes or operational changes, to determine if such changes present potential wildlife hazards to aircraft operations and if further investigation is warranted. The mitigation from the Statewide AD Facilities EIR required facility operators to notify the FAA regarding proposed AD facilities. The impact was considered less than significant following implementation of the identified mitigation measures.

The proposed alternatives would include new facilities that process food scraps, which could attract scavenger birds to the site and result in a bird hazard for the Palo Alto Airport. The processing of all food scraps, yard trimmings and biosolids are proposed to occur within enclosed facilities with implementation of the proposed alternatives. Therefore, these facilities are not anticipated to attract scavenger birds. In addition, for facilities designated as compost facilities, California Code of Regulations Title 14, Chapter 3.1, Article 6, Section 17867 stipulates that “all activities shall be conducted in a manner that minimizes vectors, odor impacts, litter, hazards, nuisances and noise impacts…” If regulated as a transfer processing facility, the E/C Facility would be required to “take adequate steps to control or prevent the propagation, harborage and attraction of flies, rodents, or other vectors, and animals, and to minimize bird attraction” (CCR Title 14, Division 7, Chapter 3. Article 6.1, Section 17410.4). These regulations give the Local Enforcement Agency and CalRecycle broad discretion to ensure that the E/C Facility or export facilities minimize bird attraction. In addition, the facilities would be required to comply with Santa Clara County’s Airport Master Plan (2006) for the Palo Alto Airport.

To ensure bird strike hazards remain less than significant, the following mitigation measure included in the Statewide AD Facilities EIR shall be implemented.

Mitigation Measure 10

The facility operator shall notify the Federal Aviation Administration (FAA) Regional Airports Division office and the airport operator of the proposed facility as early in the process as possible. Any open air (outdoor) activities at the site must receive an FAA Determination of No Hazard prior to project approval.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

No Impact. The landfill and RWQCP sites are not located within the vicinity of a private airstrip. Therefore, no aviation-related safety impacts related to private airstrips for people residing or working in the project area are expected to result from the proposed alternatives.
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. The proposed alternatives would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Embarcadero Road is designated as a Primary Evacuation Route in the Palo Alto Comprehensive Plan and would be the principal ingress and egress route in the event of an emergency in the Palo Alto Baylands area.

The development components of the proposed alternatives would occur at the landfill and/or RWQCP. Both of these sites would be located at the end of Embarcadero Way. Therefore, any emergencies that occurred at these sites would not impair the use of Embarcadero Way or Embarcadero Road as an evacuation route for other surrounding land uses. The export trucks would use these roadways to access Highway 101. These roadways are of sufficient width that if a truck accessing or departing from the site was involved in an accident, it would be unlikely that the truck would completely block these roads. Embarcadero Road at its intersection with Embarcadero Way is four lanes wide. Therefore, evacuation would not be impeded.

h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

No Impact. The landfill and RWQCP sites are not located within a designated fire hazard area or where there is a significant risk of wildland fire. Therefore, no impacts associated with wildfires would be anticipated with project implementation.
### 2.9 HYDROLOGY AND WATER QUALITY

<table>
<thead>
<tr>
<th>ENVIRONMENTAL ISSUES</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
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<tr>
<td>IX. Hydrology and Water Quality. Would the project:</td>
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<tr>
<td>a) Violate any water quality standards or waste discharge requirements?</td>
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<td>b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?</td>
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<td>c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial on- or off-site erosion or siltation?</td>
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<td>d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in on- or off-site flooding?</td>
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<td>e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?</td>
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<td>f) Otherwise substantially degrade water quality?</td>
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<td>g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?</td>
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<td>h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?</td>
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<td>i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?</td>
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<td>j) Result in inundation by seiche, tsunami, or mudflow?</td>
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ENVIRONMENTAL SETTING

In 1987, Congress recognized the potential adverse effects of urban runoff on water quality and amended the Clean Water Act to require that National Pollutant Discharge Elimination System (NPDES) permits be obtained for urban storm water discharges. Permits require their holders to carry out State-approved management plans designed to control contaminants to the “maximum extent practicable.” The plans typically call for a broad range of best management practices (BMPs), primarily non-structural measures such as street sweeping, catch basin cleaning, litter control and public education programs.

Area-wide NPDES permits to discharge storm water from urban areas in Santa Clara County have been issued and reissued by the Regional Water Quality Control Board (Regional Board) since 1990. The City of Palo Alto is one of fifteen co-permittees comprising the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP), to whom the general permits have been issued. The other co-permittees consist of other municipalities within the valley, the Santa Clara Valley Water District, and the County of Santa Clara. To fulfill its obligations under the SCVURPPP, the City of Palo Alto developed its Urban Runoff Pollution Prevention Program, which contains implementation strategies and specific performance standards to address storm water pollution prevention in the following areas: 1) illicit connections/illegal dumping; 2) industrial/commercial dischargers; 3) public streets and roadways; 4) storm drain system operation and maintenance; 4) water utility operation and maintenance; 5) new development and construction controls/planning procedures; 6) pesticide, mercury and sediment control measures; and 7) corporation yards operation and maintenance.

DISCUSSION

a) Violate any water quality standards or waste discharge requirements?

No Impact. The landfill currently operates under waste discharge requirements (WDRs) issued by the Regional Water Quality Control Board. Storm water discharge from the RWQCP is required to comply with the site’s applicable NPDES permit. Compliance with these permits would ensure that water quality standards are not violated. Therefore, the proposed alternatives would not be expected to violate any water quality standards or waste discharge requirements.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?

No Impact. The proposed alternatives do not include the use of groundwater and would not be expected to substantially interfere with groundwater recharge. The landfill mound is designed to be impervious, thus, the development of the landfill site would not reduce groundwater recharge. Similarly for the RWQCP, much of the site has been developed so little change would be anticipated in groundwater recharge. Therefore, the proposed project would have no impact on groundwater resources.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial on- or off-site erosion or siltation?

Less Than Significant with Mitigation Incorporated. Changes in site drainage and flooding patterns associated with the construction of AD facilities were identified in the Statewide AD Facilities EIR as a significant impact requiring mitigation. The mitigation from the Statewide AD Facilities EIR required the preparation of a comprehensive drainage plan to ensure that, at a minimum, no net increase in storm water discharge would occur.
during a 10-year, 24-hour storm event. The impact was considered less than significant following implementation of the identified mitigation measures.

The proposed alternatives would alter the drainage characteristics of the landfill site by excavating areas of waste fill within the existing landfill mound and leveling the site to accommodate facility construction and operation. The excavation of the landfill mound would require the installation of a retaining wall to limit the mound area that would need to be excavated. The site excavation activities and facility construction would alter the site’s storm water system and would likely increase storm water discharge from the site, requiring the installation of new storm water drainage facilities. The proposed alternatives would also alter the drainage characteristics of the RWQCP site, although to a lesser degree than the landfill site. In order to ensure that the proposed E/C Facility or biosolids export facilities would not result in detrimental increases in storm water flow or flooding on the sites or downstream, the following mitigation measure included in the Statewide AD Facilities EIR shall be implemented.

Mitigation Measure 11

In order to ensure that the AD, gasification or biosolids export facilities would not result in detrimental increases in storm water flow or flooding on site or downstream, a comprehensive drainage plan (prior to construction) shall be prepared and implemented. The comprehensive drainage plan shall include engineered storm water retention facility designs, such as retention basins, flood control channels, storm drainage facilities, and other features, as feasible, to ensure that, at a minimum, no net increase in storm water discharge would occur during a 10-year, 24-hour storm event, as a result of project implementation. Alternatively, uncontaminated stormwater shall be routed to the City’s stormwater drainage system. Project related increases in storm water flows shall be assessed based on proposed changes in impervious surface coverage on site, as well as proposed grading and related changes in site topography.

The installation of facilities at the RWQCP would occur within an already developed area of the control plant. Therefore, changes to the existing storm water drainage system at the RWQCP would not be necessary and no significant impacts would be anticipated on storm water of flooding with the implementation of the proposed alternatives.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in on- or off-site flooding?

Less Than Significant with Mitigation Incorporated. As discussed in response to question c) above, the existing drainage pattern of the landfill site would be altered as a result of the proposed alternatives. However, with implementation of the mitigation above, significant changes in the drainage pattern of the site or area would not be anticipated.

The installation of facilities at the RWQCP would occur within an already developed area of the control plant. Therefore, changes to the existing storm water drainage system at the RWQCP would not be necessary and no significant impacts would be anticipated on storm water of flooding with the implementation of the proposed alternatives.

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less Than Significant with Mitigation Incorporated. As discussed in response to question c) above, the proposed alternatives would alter the drainage characteristics of the landfill site by excavating areas of waste fill within the existing landfill mound and leveling the site to accommodate facility construction and operation. The alteration of the landfill site’s drainage patterns could adversely affect existing or planned storm water drainage
systems and contribute additional sources of polluted runoff. However, with implementation of the identified mitigation measure above, this impact would be reduced to a less-than-significant level.

f) **Otherwise substantially degrade water quality?**

**Less Than Significant with Mitigation Incorporated.** The operation of AD, gasification or biosolids export facilities can cause environmental degradation of surface water and groundwater quality. The following discussion focuses primarily on the effects of AD facilities on water quality, although similar impacts would be anticipated with gasification facilities, and to a lesser degree, biosolids export facilities.

Reductions in groundwater quality could occur as a result of pre-processing, post-processing, and to a lesser extent, digestion operations. During pre-processing, digester feedstock is separated from incoming waste streams, stored, and transported to the anaerobic digester. Feedstocks could contain high levels of organic matter, sediment, nutrients, inorganic salts, and fugitive trash. Depending on the composition of the feedstock, other potential water quality pollutants may be present in small quantities, including heavy metals, hydrocarbons, and other species. During pre-processing, wash down of equipment, feedstock wetting, and handling operations may result in the loss of a small amount of feedstock material. Pollutants associated with pre-processing operations could be accidentally released from the alternative sites or discharged during storm events, and enter surface waters or leach into groundwater (ESA June 2011).

During the digestion process, digestion occurs within tanks that are designed to prevent leakage of feedstock or digestate. Therefore, potential effects on water quality during digestion would be limited to accidental spills or accidental releases of digestate. Accidental spills could occur as a result of digestion equipment malfunction, accidental release of materials from the anaerobic digester, or spills associated with the handling of chemicals used for the digestion process. Without mitigation, such spills or accidental releases could drain into surface waters or infiltrate to groundwater, either directly or during storm water runoff events, resulting in degradation of surface water or groundwater quality (ESA June 2011).

During post-processing, digestate is dewatered to separate residual solids and liquids. Residual solids are then disposed in a landfill, composted, or used as soil amendment for agriculture or other beneficial use. The liquid fraction of the digestate could potentially be discharged to the City’s municipal sewer system for treatment, treated and then discharged to either surface waters pursuant to an NPDES permit or to percolation or evaporation ponds, or used for other beneficial use. Therefore, potential effects on water quality depend upon the concentration of pollutants in the liquid and solid fractions of the digestate, and in the eventual end use or disposal method that is employed for digestate handling (ESA June 2011).

After digestion, residual solids may contain water quality pollutants. The type and concentration of pollutants in residual solids can vary substantially depending upon the feedstock and the digestion practices. In general, residual solids are expected to contain substantial amounts of organic matter and sediment, as well as significant levels of salt, nutrients, and in some cases, heavy metals, pathogens, and toxic organic and/or inorganic pollutants. Residual solids containing high levels of heavy metals or toxins would be required to be handled as a waste and disposed of in an appropriately managed landfill where they would not have a significant potential to adversely impact surface water or groundwater.

Composting and/or direct land application as soil amendment could be an alternative management option for residual solids. Residual solids used for composting or as a soil amendment could not contain high levels of heavy metals, or other toxins. Composting of residual solids would occur at an appropriately permitted composting facility that has undergone an environmental review, and therefore would not be likely to result in a significant increase in surface or groundwater quality pollution. However, unless properly managed, land application of residual solids and compost could adversely impact the quality of surface water and groundwater (ESA June 2011).
The volume and composition of liquid digestate is expected to depend substantially on the characteristics of the anaerobic digester feedstock and, to some degree, on the type of digestion process employed. In general, liquid digestate may contain elevated levels of nutrients (nitrogen and phosphorous compounds), salts (inorganic dissolved solids), microbes (some of which may be pathogenic), heavy metals, and other organic and inorganic constituents associated with the feedstock (e.g., biosolids). Liquid digestate flows having high concentrations of pathogenic microbes, heavy metals, and other toxic compounds could potentially be discharged to the City’s municipal sewer system for further treatment. Treatment at the wastewater treatment plant could reduce pollutant concentrations to levels consistent with the plant’s discharge permit, and therefore would not result in a significant decrease in water quality (ESA June 2011).

Potential degradation of surface water and groundwater quality was identified as a significant impact in the Statewide AD Facilities EIR. The impact was considered less than significant following implementation of the identified mitigation measures.

To ensure the degradation of surface water and groundwater quality remain less than significant, the following mitigation measure included in the Statewide AD Facilities EIR shall be implemented.

**Mitigation Measure 12**

During pre-processing, all water that contacts digester feedstock, including storm water from feedstock handling and storage facilities and water from equipment washdown and feedstock wetting, shall be contained until appropriately disposed or utilized. Best Management Practices (BMPs) may be used to reduce loading of sediment, nutrients, trash, organic matter, and other pollutants. These BMPs may include, but are not limited to, trash grates and filters, oil-water separators, mechanical filters such as sand filters, vegetated swales, settling ponds, and other facilities to reduce the potential loading of pollutants into surface waters or groundwater. All discharges of storm water are prohibited unless covered under the General Industrial Stormwater Permit, other National Pollutant Discharge Elimination System (NPDES) permit, or are exempted from NPDES permitting requirements. The NPDES permits will generally require implementation of management measures to achieve a performance standard of best available technology economically achievable (BAT) and best conventional pollutant control technology (BCT), as appropriate. The General Industrial Stormwater Permit also requires the development of a storm water pollution prevention plan (SWPPP) and a monitoring plan, in compliance with permit requirements. Other liquid and solid wastes may only be discharged pursuant to an NPDES permit or waste discharge requirement (WDR) order.

In order to minimize the amount of fugitive trash or feedstock released to surface waters, the following measures shall be implemented. When feasible, feedstocks shall be preferentially selected that contain minimal amounts of trash that could become entrained in surface water, either via direct contact with storm water flows or via other accidental release, such as due to wind. The facility operator shall ensure that (1) drainage from all feedstock loading, unloading, and storage areas is contained onsite or treated to remove trash and stray feedstock, and sediment prior to release; (2) in all feedstock loading and unloading areas, and all areas where feedstock is moved by front loaders or other uncovered or uncontained transport machinery, mechanical sweeping and/or equivalent trash control operational procedures shall be performed at least daily, during operations; and (3) the facility operator shall train all employees involved in feedstock handling so as to discourage, avoid, and minimize the release of feedstock or trash during operations.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

**No Impact.** The proposed alternatives are located within a 100-year flood zone, as shown on the Flood Insurance Rate Map and Palo Alto Comprehensive Plan. The proposed alternatives do not involve any new housing. Therefore, no housing would be placed within a 100-year floodplain with project implementation.
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?

**No Impact.** The proposed alternatives are located within a 100-year flood zone, as shown on the Flood Insurance Rate Map and Palo Alto Comprehensive Plan. The facilities proposed at the landfill and/or RWQCP would be designed and constructed so as not to redirect or impede flood flows, in accordance with the City of Palo Alto’s grading ordinance and/or building permit requirements. As the sites are located in a FEMA Flood Zone “AE”, and would be subject to inundation if overtopping or failure of bayfront levees occurred, the proposed structures would be constructed in conformance with FEMA standards for structures located in such areas.

i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?

**No Impact.** As discussed in response to question h) above, the proposed alternatives would be subject to inundation if overtopping or failure of bayfront levees occurred. However, the proposed structures would be constructed in conformance with FEMA standards for structures located in such areas. Therefore, implementation of the proposed alternatives would not expose people or structures to a significant risk of loss, injury, or death involving flooding.

j) Result in inundation by seiche, tsunami, or mudflow?

**No Impact.** The project sites are not located in an area subject to seiches, tsunamis or mudflow. Therefore, no impacts related to these events would be anticipated with project implementation.
2.10 LAND USE AND PLANNING

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<tr>
<th>ENVIRONMENTAL ISSUES</th>
<th>Potentially Significant Impact</th>
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<th>Less Than Significant Impact</th>
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<tr>
<td>X. Land Use and Planning. Would the project:</td>
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<tr>
<td>a) Physically divide an established community?</td>
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<td>b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?</td>
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<tr>
<td>c) Conflict with any applicable habitat conservation plan or natural community conservation plan?</td>
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ENVIRONMENTAL SETTING

Palo Alto Comprehensive Plan

Under California law, each city and county must have a Comprehensive Plan (also known as a General Plan) to guide its future growth and development. A Comprehensive Plan is a long-range document that includes goals, policies and programs for how a community will manage its land use, housing, circulation, natural resources, economics and public services.

The City of Palo Alto currently is undertaking a Comprehensive Plan Amendment that will cover the period through 2020. The purpose of the Amendment is to extend the horizon year of the existing Comprehensive Plan adopted in 1998 from 2010 to 2020, revise base conditions and growth projections, modify policies and programs, update the land use map and revise the Housing Element. An environmental impact report (EIR) will be prepared in 2013 to analyze the Comprehensive Plan Amendment.

The Comprehensive Plan serves as the guide for Palo Alto’s future development. The City Council and Planning and Transportation Commission use the Comprehensive Plan to evaluate land use changes and make funding and budget decisions, and City staff use it to regulate building and development and to inform its recommendations on projects (Palo Alto 2012).

The land use map for the Comprehensive Plan designates the landfill as “Public Park” and the RWQCP as “Major Institution/Special Features.” The Comprehensive Plan defines the Public Park land use designation as: “Open lands whose primary purpose is active recreation and whose character is essentially urban. These areas have been planted with non-indigenous landscaping and require a concerted effort to maintain recreational facilities and landscaping.” The Comprehensive Plan defines the Major Institution/Special Features land use designation as: “Institutional, academic, governmental, and community service uses and lands that are either publicly owned or operated as non-profit organizations. Examples are hospitals and City facilities.”

Palo Alto Zoning Regulations

The Palo Alto zoning map and zoning regulations govern the use of land, including the construction, alteration, movement, replacement, or maintenance of buildings; the conduct of residential, commercial, industrial, and
public service activities; the height, bulk, and placement of buildings and uses on each site; the provision of open space, amenities, off-street parking and loading; the relationships between buildings and uses on adjoining sites or within adjoining classes of districts; and such further aspects of land use and development as are appropriate to attain the purposes of the zoning regulations. The purposes of the zoning regulations are to promote and protect the public health, safety, peace, morals, comfort, convenience, and general welfare of the community of Palo Alto (Palo Alto 2012a). The zoning designation for both the landfill and RWQCP site is PF(D), Public Facilities District/Site and Design Review Combining District.

**DISCUSSION**

a) **Physically divide an established community?**

**No Impact.** The proposed alternatives would not physically divide an established community. The proposed alternatives include components that are located at either the Palo Alto Landfill or the RWQCP within the City limits of Palo Alto. The proposed alternatives would be constructed within a 10-acre area of the landfill specifically designated for such uses in Measure E, which was passed by the citizens of Palo Alto in November 2011. This area is located directly southeast of the RWQCP and has historically been used as a municipal solid waste disposal area. The proposed alternatives would be constructed entirely within the boundaries of the existing landfill or the RWQCP. The biosolids export facilities at the RWQCP would use existing roadways to access Highway 101. Therefore, the proposed alternatives would not result in a disruption, physical division, or isolation of existing land uses and no impacts on established communities would occur with project implementation.

b) **Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?**

**No impact.** The proposed alternatives would be constructed on land owned by the City of Palo Alto. The landfill is located on land designated in the Palo Alto Comprehensive Plan as Public Park. However, the proposed alternatives would be constructed within a 10-acre area of the landfill specifically designated for such uses in Measure E. The land use designation for the RWQCP is Major Institution/Special Features. The construction of the proposed alternatives on the RWQCP would be consistent with this land use designation.

The landfill and RWQCP sites are zoned PF(D), Public Facilities District/Site and Design Review Combining District. The Site and Design Review Combining District is intended to provide a process for review and approval of development in environmentally and ecologically sensitive areas in order to assure that use and development will be harmonious with other uses in the general vicinity, will be compatible with environmental and ecological objectives, and will be in accord with the Palo Alto Comprehensive Plan (Palo Alto Municipal Code, Section 18.30[G].010) (Palo Alto 2012a).

The City’s process for projects within this District requires the submittal of a site plan and elevations to the Palo Alto Planning Commission. If approved by the planning commission, the site plan and elevations are forwarded to the architectural review board for review. The site plan and elevations, as approved by the planning commission and architectural review board are then submitted with recommendations to the Palo Alto City Council for final action (Palo Alto Municipal Code, Section 18.30[G].055) (Palo Alto 2012a).

In conducting their review, the planning commission shall recommend changes as it may deem necessary to accomplish the following objectives:

(a) To ensure construction and operation of the use in a manner that will be orderly, harmonious, and compatible with existing or potential uses of adjoining or nearby sites.
(b) To ensure the desirability of investment, or the conduct of business, research, or educational activities, or other authorized occupations, in the same or adjacent areas.

(c) To ensure that sound principles of environmental design and ecological balance shall be observed.

(d) To ensure that the use will be in accord with the Palo Alto Comprehensive Plan (Palo Alto Municipal Code, Section 18.30[G].060) (Palo Alto 2012a).

Compliance with these City regulations would ensure that the proposed alternatives would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project area. Based on this compliance, the proposed uses for the proposed alternatives would be consistent with the existing surrounding land uses, would not conflict with the land use or zoning designations for the landfill or the RWQCP, and would not conflict with a policy or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, the proposed alternatives would have no adverse impacts on applicable land use plans, policies or regulations.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact. The proposed alternatives would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan. As stated above, the proposed alternatives would be constructed within existing developed areas zoned for public facilities. For this reason, no impact is expected.
2.11 MINERAL RESOURCES

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<table>
<thead>
<tr>
<th>XI. Mineral Resources. Would the project:</th>
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<tbody>
<tr>
<td>a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?</td>
</tr>
<tr>
<td>b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?</td>
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ENVIRONMENTAL SETTING

The project sites include a closed landfill and an active wastewater treatment plant operation. These sites do not include mineral resources.

DISCUSSION

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. No known mineral resources are present at the landfill site, which has been used for solid waste disposal since the 1930’s, or at the RWQCP. Therefore, the proposed alternatives would not result in the loss of known mineral resources of value to the region or residents of the state. No adverse effect on mineral resources would be anticipated.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

No Impact. The proposed alternatives would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. Therefore, the proposed alternatives would have no effect on locally important mineral resource recovery sites.
2.12 NOISE

<table>
<thead>
<tr>
<th>ENVIRONMENTAL ISSUES</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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<tr>
<td>XII. Noise. Would the project result in:</td>
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<tr>
<td>a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
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<tr>
<td>b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?</td>
<td>☐</td>
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</tr>
<tr>
<td>c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?</td>
<td>☐</td>
<td>☒</td>
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</tr>
<tr>
<td>e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?</td>
<td>☐</td>
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<tr>
<td>f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?</td>
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</table>

ENVIRONMENTAL SETTING

Noise is generally defined as sound that is loud, disagreeable, unexpected, or unwanted. Sound is mechanical energy transmitted in the form of a wave because of a disturbance or vibration, and as any pressure variation in air that the human ear can detect.

Because of the ability of the human ear to detect a wide range of sound-pressure fluctuations, sound-pressure levels are expressed in logarithmic units called decibels (dB) to avoid a very large and awkward range in numbers. The sound-pressure level in decibels is calculated by taking the log of the ratio between the actual sound pressure and the reference sound pressure squared. The reference sound pressure is considered the absolute hearing threshold (California Department of Transportation 1998). Use of this logarithmic scale reveals that the total sound from two individual 65-dBA sources is 68 dBA, not 130 dBA (i.e., doubling the source strength increases the sound pressure by 3 dBA).

Vibration is the periodic oscillation of a medium or object. The rumbling sound caused by the vibration of room surfaces is called structureborne noise. Sources of groundborne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or human-made causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, such as factory machinery, or transient, such as explosions. As is the case with airborne sound, groundborne vibrations may be described by amplitude and frequency.
Vibration amplitudes are usually expressed in peak particle velocity (PPV) or root mean squared (RMS), as in RMS vibration velocity. The PPV and RMS velocity are normally described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used in monitoring of blasting vibration because it is related to the stresses that are experienced by buildings (FTA 2006; Caltrans 2002). Caltrans has established a recommended standard for vibration levels of 0.2 inches per second PPV (Caltrans 2002).

**Existing Noise Environment**

The principal noise source in the vicinity of the project site consists primarily of overflight aircraft noise from the Palo Alto Airport. Traffic noise from Highway 101 and Embarcadero Road also contribute to the ambient noise environment.

**DISCUSSION**

a) **Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?**

**Less Than Significant With Mitigation Incorporated.** Operations of the proposed alternative at the landfill and/or RWQCP would generate noise levels that would be perceptible off of the sites. The City of Palo Alto Noise Ordinance requires that noise levels produced on public property not exceed the local ambient noise levels by more than fifteen decibels at a distance of twenty-five feet or more. The project is not expected to exceed this threshold, as the amount of noise-generating equipment proposed with the project alternatives would not be substantially greater than the equipment historically used at the landfill site. Closure activities will be ongoing at the landfill. In addition, the proposed facilities at the landfill and RWQCP are anticipated to be enclosed, which would substantially diminish noise levels. However, operational noise levels could be disruptive for Byxbee Park users in the future due to the proximity of the landfill and RWQCP to the park. The expected noise levels would depend upon the ultimate design and operational characteristics of the facilities at the landfill and RWQCP.

Operational activities associated with the proposed alternatives that would generate noise include preprocessing, vehicle circulation, and the operation of certain mechanical equipment such as stationary pumps, motors, compressors, fans, generators, and other equipment. Pre-processing activities include noise generating steps such as sorting and grinding. Some equipment such as electrical generators operate 24-hours a day, creating operational noise during night time hours.

The biosolids export component would generate increased noise levels associated with material loading as well as increased truck traffic at the RWQCP and along the local haul route accessing Highway 101.

Operational noise impacts were identified as a significant impact in the Statewide AD Facilities EIR. The impact was considered less than significant following implementation of the identified mitigation measures.

To ensure noise impacts associated with operational components of the proposed alternatives remain less than significant, the following mitigation measure included in the Statewide AD Facilities EIR shall be implemented.

**Mitigation Measure 13**

AD facilities located within 2,000 feet of a sensitive receptor shall conduct a site specific noise study. If operational sound levels would exceed local regulations (i.e., the City’s industrial noise level standard of 70 to 85 dBA), or 45 dBA at a sensitive receptor (if no regulations are available), additional sound-proofing such as enclosures, muffling, shielding, or other attenuation measures shall be installed to meet the required sound level.
b) **Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?**

**No Impact.** Operations of the proposed alternatives at the landfill and/or RWQCP would generate some groundborne vibration during construction activities. However, following construction, no substantial groundborne vibration sources would be anticipated. Therefore, the proposed alternatives would not be expected to expose persons to or generate excessive groundborne vibration or groundborne noise levels.

c) **A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?**

**Less Than Significant With Mitigation Incorporated.** The operational components of the proposed alternatives have the potential to increase ambient noise levels in the project vicinity, as discussed in response to question a) above. A noise mitigation measure has been identified in response to this impact that includes the preparation of a noise study. The noise study would identify specific noise impacts for the proposed alternatives and would recommend appropriate mitigation measures to minimize noise generation from facility operations. With implementation of these mitigation measures, the proposed alternatives would not be expected to result in substantial permanent increases in ambient noise levels in the project vicinity above levels existing without the proposed alternatives.

d) **A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?**

**Less Than Significant With Mitigation Incorporated.** The construction components of the proposed alternatives would result in temporary increases in noise at the landfill site and at the RWQCP site. The construction noise would be generated from onsite construction vehicles and equipment as well as from trucks delivering materials to the site. Periodic increases in noise levels would likely occur during site operations as well, particularly during material delivery. These temporary or periodic noise increases would primarily affect the users of Byxbee Park. As discussed in the answer to question a) above, these noise impacts would be minimized with the implementation of the identified mitigation measures. More detailed analysis of these impacts will be provided in the EIR for the proposed alternatives.

Construction-related noise impacts were identified as a significant impact in the Statewide AD Facilities EIR. The impact was considered less than significant following implementation of the identified mitigation measures.

To ensure noise impacts associated with the construction components of the proposed alternatives remain less than significant, the following mitigation measure included in the Statewide AD Facilities EIR shall be implemented.

**Mitigation Measure 14**

Construction activities shall be limited to the hours established by the City of Palo Alto, which are identified in the Palo Alto Noise Ordinance as between 8:00 a.m. and 6:00 p.m., Monday through Friday, and between 9:00 a.m. and 6:00 p.m. Saturday.

Construction equipment noise shall be minimized by muffling and shielding intakes and exhaust on construction equipment to a level no less effective than the manufacturer’s specifications, and by shrouding or shielding impact tools.

Construction contractors within 750 feet of sensitive receptors shall locate fixed construction equipment, such as compressors and generators, and construction staging areas as far as possible from nearby sensitive receptors.
Construction contractors shall comply with all local noise ordinances and regulations.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

**No Impact.** Although the project sites are currently exposed to elevated noise levels associated with aircraft operation from the Palo Alto Airport, the proposed alternatives would not increase the noise levels associated with aircraft operations and would not substantially increase the number of people exposed to this noise source. Therefore, the proposed alternatives would not substantially increase the exposure of people residing or working in the project area to excessive noise levels associated with airport operations.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

**No Impact.** The project sites are not located in the vicinity of a private airport. Therefore, the proposed alternatives would not expose people residing or working in the project area to excessive noise levels associated with private airstrip operations.
2.13 POPULATION AND HOUSING

<table>
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<tr>
<th>ENVIRONMENTAL ISSUES</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
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<th>No Impact</th>
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<tbody>
<tr>
<td><strong>XIII. Population and Housing. Would the project:</strong></td>
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<tr>
<td>a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?</td>
<td>☐</td>
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<tr>
<td>b) Displace substantial numbers of existing homes, necessitating the construction of replacement housing elsewhere?</td>
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<tr>
<td>c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?</td>
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</table>

ENVIRONMENTAL SETTING

The proposed alternatives include the location of facilities at the Palo Alto Landfill and at the RWQCP within the northeastern portion of the City of Palo Alto. Population growth and projected housing needs within the City area are addressed in the Palo Alto Comprehensive Plan.

DISCUSSION

a) **Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

No Impact. An increase in the number of employees necessary to manage the City’s organic waste and biosolids would be required for the proposed alternatives. Facility construction would temporarily increase the employment base. However, the number of employees necessary to construct and operate the proposed alternatives would not be expected to directly result in substantial population growth in the city.

The proposed alternatives would not include the construction of any roads or infrastructure that would indirectly induce substantial population growth. The extension of Embarcadero Way would be necessary to develop the landfill site; however, this extension would result in Embarcadero Way dead ending at the site. Therefore, it would not provide opportunities for new homes or businesses that would induce substantial population growth. No impact regarding substantial population growth in the area is anticipated.

b) **Displace substantial numbers of existing homes, necessitating the construction of replacement housing elsewhere?**

No Impact. No homes would be displaced by the implementation of the proposed alternatives. Therefore, no housing impacts would be anticipated with implementation of the alternatives.
c) **Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?**

**No Impact.** No homes would be displaced by implementation of the proposed alternatives; therefore, no people would be displaced.
2.14 PUBLIC SERVICES

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<tr>
<th>ENVIRONMENTAL ISSUES</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
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<th>No Impact</th>
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IX. Public Services. Would the project:

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

- Fire protection?
- Police protection?
- Schools?
- Parks?
- Other public facilities?

**ENVIRONMENTAL SETTING**

Public services include fire and police protection, schools and other public facilities. Fire and police protection is provided to the landfill and RWQCP by the City of Palo Alto Fire and Police Departments. The Palo Alto Fire Department has 115 personnel and seven fire stations. The Department also provides transport ambulance service for Palo Alto and Stanford University. The Palo Alto Police Department has 169 personnel. The Palo Alto Unified School District, which serves the project area, consists of twelve elementary schools, three middle schools and two high schools. The closest school to the project sites is the Ohlone Elementary School, which is located more than a mile to the southwest across Highway 101.

**DISCUSSION**

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

- Fire protection?

**No Impact.** The proposed alternatives would not directly or indirectly increase the local population. New employees associated with implementation of the alternatives are assumed to derive from the local population base. The proposed alternatives would not extend the service area of the fire department or require additional fire protection facilities be constructed. Therefore, no adverse fire protection impacts would be anticipated with project implementation.
Police protection?

**No Impact.** Implementation of the proposed alternatives would not require an increase in police protection services or the construction of additional police facilities. Therefore, no police protection impacts would be anticipated with project implementation.

Schools?

**No Impact.** Implementation of the proposed alternatives does not include any uses that would increase the demands on local schools. Therefore, no school facility impacts would be anticipated with project implementation.

Parks?

**No Impact.** Implementation of the proposed alternatives does not include any uses that would increase the demands on local parks. The landfill site is designated as Byxbee Park but the area identified for the proposed alternatives has been historically used as a landfill disposal area and its conversion to E/C Facility uses would not reduce the active parkland within the City. Therefore, no increase in park facility demands would be anticipated with project implementation.

Other public facilities?

**No Impact.** Implementation of the proposed alternatives would not change the demand for public facility services as compared to existing conditions. Therefore, no public facility impacts would be anticipated with project implementation.
2.15 RECREATION

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<tr>
<th>ENVIRONMENTAL ISSUES</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
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<tr>
<td>XV. Recreation. Would the project:</td>
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<tr>
<td>a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?</td>
<td>☐</td>
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</table>

ENVIRONMENTAL SETTING

The two primary recreational facilities in the project area include Byxbee Park and the Palo Alto Golf Course. The proposed landfill site is located entirely on Byxbee Park. The RWQCP is located directly northwest of the park. The Palo Alto Golf Course is located to the northwest of the RWQCP across Embarcadero Road.

DISCUSSION

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact. The entire closed landfill is designated as Byxbee Park and portions of the landfill have been converted to park uses. However, the portion of the park identified for use by the proposed alternatives has not been converted to park uses. Its use for the proposed alternatives would either delay or preclude its ultimate conversion to park uses. However, because the proposed site is not currently used as a park, its conversion from landfill uses to other uses would not directly affect the existing public use of Byxbee Park. The acreage of Byxbee Park currently used as a public park would not change with implementation of the project alternatives. Therefore, the proposed alternatives would not increase the use of the existing public park components of Byxbee Park such that substantial physical deterioration of the park would occur or be accelerated.

The development of the landfill site could alter the experience of park users by introducing a new type of waste management activity within the park boundaries. The effects experienced by park users, such as changes in the noise, lighting and odors generation from the site, are discussed in other sections of this checklist. However, none of these effects would be expected to increase the demands on the public use areas within Byxbee Park.

If the proposed alternatives are constructed on the RWQCP site and the landfill site is not used for source separated organic material or biosolid processing, then the landfill site could more rapidly be converted to park uses. However, this conversion would not be expected to increase the demands on the public use areas such that substantial physical deterioration of the park would occur. Therefore, no recreational facility impacts would be anticipated with implementation of the proposed alternatives.
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

No Impact. The proposed alternatives do not include proposed recreational facilities nor do they require the construction or expansion of recreational facilities. Therefore, no impacts associated with recreational facilities would be anticipated with implementation of the proposed alternatives.
## 2.16 TRANSPORTATION/TRAFFIC

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<tr>
<th>ENVIRONMENTAL ISSUES</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
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<tr>
<td>XVI. Transportation/Traffic. Would the project:</td>
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<td>a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?</td>
<td>☐</td>
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<tr>
<td>b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?</td>
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<tr>
<td>c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?</td>
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<tr>
<td>d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?</td>
<td>☐</td>
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<tr>
<td>e) Result in inadequate emergency access?</td>
<td>☐</td>
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<tr>
<td>f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?</td>
<td>☐</td>
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### ENVIRONMENTAL SETTING

The primary roadways in the project vicinity include Highway 101, Embarcadero Road and Embarcadero Way. Highway 101 is an eight-lane freeway with one lane in each direction designated for carpools. The Highway 101/Embarcadero Road interchange has a typical cloverleaf design with Embarcadero Road crossing over the top of the highway. The four-lane Embarcadero Road extends slightly less than ½ mile to its intersection with Embarcadero Way. Embarcadero Way provides direct access to the RWQCP. Embarcadero Road reduces to three lanes and then two lanes as it continues to the east and then turns to the southeast around the boundary of the RWQCP, terminating at the landfill entrance. A short roadway extends east from Embarcadero Road to a small parking lot used to access Byxbee Park.

### DISCUSSION

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant...
components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

**Less-Than-Significant Impact.** The proposed alternatives would result in an increase in the overall number of vehicles traveling to and from the sites, as compared with current RWQCP uses. The biosolids export alternative would result in the greatest increase in traffic of the proposed alternatives. The construction associated with the proposed alternatives would result in temporary increases in vehicle traffic on local roadways. However, the proposed alternatives would not be expected to cause a substantial increase in traffic on the local roadway system, or result in an exceedance of the level of service standard established by the county congestion management agency due to the relatively high capacity of the existing roadway system and the majority of the trips occurring outside of the typical peak travel periods (i.e., peak hours).

The intersection that would be the most directly affected by project traffic is the intersection of Embarcadero Road and East Bayshore Road, located approximately ½ mile west of the site. As Embarcadero Road provides the only access to the site from Highway 101 and the rest of Palo Alto west of Highway 101, all project traffic would pass through the intersection. The Palo Alto Comprehensive Plan identifies this intersection as a key intersection to be monitored for growth management, in association with the East Bayshore and Edgewood Plaza Growth Monitoring Areas.

At this time, the specific number of trips anticipated with each of the alternatives has not been determined and additional analysis of traffic impacts will be necessary in the EIR prepared for the proposed alternatives. Each of the alternatives would add some vehicle trips to the existing roadway network, which could degrade the capacities of the roadways accessing the sites during peak periods. However, because the proposed alternatives are anticipated to generate relatively low levels of vehicle trips in comparison to the capacities of the roadways accessing the sites and the majority of the trips would be expected to occur outside of peak periods, significant traffic impacts would not be anticipated.

b) **Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?**

**No Impact.** The vehicles accessing the landfill and RWQCP sites for the proposed alternatives would use Embarcadero Road to access Highway 101. This four-lane roadway has sufficient capacity to accommodate the existing industrial, commercial and recreational uses northeast of Highway 101 as well as the truck traffic associated with implementation of the proposed alternatives. Therefore, no conflicts with applicable congestion management programs would be anticipated with implementation of the proposed alternatives.

c) **Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?**

**No Impact.** A small-scale airport operated by the County of Santa Clara (Palo Alto Airport) is located directly north of the RWQCP. This airport is located less than 3,000 feet from the landfill and RWQCP sites. However, the proposed alternatives do not include any uses that would change air traffic patterns. Therefore, no impact on air traffic patterns would be anticipated with implementation of the proposed alternatives.

d) **Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

**No Impact.** The proposed alternatives would not alter the design of the existing roadways accessing either the landfill or the RWQCP sites, other than extending Embarcadero Way onto the landfill site. Trucks accessing both sites from Highway 101 would use Embarcadero Road and Embarcadero Way, both of which are well maintained.
and relatively straight roadways that do not have any unusual design features. These roadways are designed to accommodate the existing industrial, commercial and recreational uses in the project area. Therefore, no roadway hazard impacts would be anticipated.

e) **Result in inadequate emergency access?**

**No Impact.** The proposed alternatives would not result in inadequate emergency access at either the landfill or the RWQCP site. Embarcadero Road is designated as a Primary Evacuation Route in the Palo Alto Comprehensive Plan and would be the principal ingress and egress route in the event of an emergency at either site. Both sites would be accessible from Embarcadero Road to the northeast and from Embarcadero Way to the southwest. Embarcadero Road connects directly to Highway 101 and is four lanes wide from its intersection with Embarcadero Way to Highway 101. With two separate access points during an emergency, adequate access would be provided to both sites. Therefore, the proposed alternatives would not result in inadequate emergency access.

f) **Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?**

**No Impact.** The proposed alternatives do not include elements that would conflict with adopted policies, plans, or programs supporting alternative transportation. For the proposed alternatives, vehicle access from Highway 101 would be provided to the landfill and RWQCP by way of Embarcadero Road and Embarcadero Way. No changes to these roadways are proposed, other than extending Embarcadero Way to the landfill site. Therefore, the proposed alternatives would have no effect on alternative modes of transportation.
### 2.17 UTILITIES AND SERVICE SYSTEMS

<table>
<thead>
<tr>
<th>ENVIROMENTAL ISSUES</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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<tbody>
<tr>
<td>XVII. Utilities and Service Systems. Would the project:</td>
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<tr>
<td>a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?</td>
<td>✗</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?</td>
<td>✗</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?</td>
<td>✗</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?</td>
<td>✗</td>
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<td>e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project’s projected demand, in addition to the provider’s existing commitments?</td>
<td>✗</td>
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<tr>
<td>f) Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?</td>
<td>✗</td>
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<tr>
<td>g) Comply with federal, state, and local statutes and regulations related to solid waste?</td>
<td>✗</td>
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**ENVIRONMENTAL SETTING**

The Palo Alto Landfill has an existing storm water drainage system that is required to comply with the Waste Discharge Requirements issued for the site by the San Francisco Bay Regional Water Quality Control Board. The RWQCP also has a storm water drainage system that is regulated by the San Francisco Bay Regional Water Quality Control Board. The City of Palo Alto Utilities provides the water supply and waste water treatment services for the project area.

**DISCUSSION**

a) **Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?**

**Less Than Significant Impact.** The proposed alternatives could include the generation of wastewater from the AD and gasification facilities that would require treatment. Wastewater from AD facilities could include ammonia that might require additional treatment facilities at the RWQCP or the pre-treatment prior to discharging to the RWQP. The installation and operation of these ammonia treatment facilities would be required to comply with
the RWQCP’s applicable permitting requirements. Therefore, the construction of these facilities would not be expected to exceed wastewater treatment requirements of the San Francisco Bay Regional Water Quality Control Board.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less Than Significant Impact. As discussed in response to question a) above, the proposed alternatives could include the generation of wastewater from the AD facilities that may require additional treatment facilities at the RWQCP or the pre-treatment prior to discharging to the RWQCP. The installation and operation of these ammonia treatment facilities would be expected to occur within the boundaries of the developed RWQCP, which has sufficient space to accommodate these uses. Therefore, the construction of these facilities would not be expected to cause significant environmental effects.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less Than Significant With Mitigation Incorporated. Changes in site drainage and flooding patterns were identified in the Statewide AD Facilities EIR as a significant impact requiring mitigation. The mitigation from the 2011 EIR required the preparation of a comprehensive drainage plan to ensure that, at a minimum, no net increase in storm water discharge would occur during a 10-year, 24-hour storm event. The impact was considered less than significant following implementation of the identified mitigation measures.

As discussed in Section 2.7, Hydrology and Water Quality, the proposed alternatives would alter the drainage characteristics of the landfill site by excavating areas of waste fill within the existing landfill mound and leveling the site to accommodate facility construction and operation. The excavation of the landfill mound would require the installation of a retaining wall to limit the mound area that would need to be excavated. The site excavation activities and facility construction would alter the site’s storm water system and would likely increase storm water discharge from the site, requiring the installation of new storm water drainage facilities. In order to ensure that the proposed alternatives would not result in detrimental increases in storm water flow or flooding on the sites or downstream, mitigation measures are identified in Section 2.7 to minimize these impacts.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Less Than Significant Impact. The proposed alternatives would be provided water from Palo Alto Utilities. The quantity of water needed for the proposed alternatives would depend upon the specific technology selected. However, the water demand would not be expected to be excessive or to exceed available capacities. Less-than-significant water supply impacts would be anticipated with implementation of the proposed alternatives.

e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project’s projected demand, in addition to the provider’s existing commitments?

No Impact. The treatment of wastewater from the dry and wet AD facilities associated with the proposed alternatives could require the installation of additional ammonia treatment facilities at the RWQCP. However, these ammonia treatment facilities would not be expected to diminish the treatment plant’s existing capacities. Also, because the volume of wastewater generated from the AD facilities is expected to be relatively small, the ability of the RWQCP to continue to meet the City’s demands for wastewater treatment is not expected to be diminished with implementation of the proposed alternatives. Therefore, significant wastewater facility impacts would not be anticipated with implementation of the proposed alternatives.
f) Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?

No Impact. The proposed alternatives are intended to improve the City’s management of food scraps, yard trimmings, and biosolids. With implementation, the alternatives would reduce landfill disposal when compared to current conditions by diverting food scraps from the municipal solid waste stream. Some solid waste would be generated during construction activities. However, due to the relatively small size of the proposed facilities, substantial solid waste generation from construction activities would not be anticipated. The excavation of the landfill mound necessary to accommodate development would require the relocation of previously disposed waste to another portion of the landfill. Relocating previously disturbed waste at the landfill would not alter the permitted capacity of an operating landfill, as the Palo Alto Landfill is in the process of being permanently closed. Therefore, no adverse solid waste disposal facility impacts would be anticipated with project implementation.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

No Impact. As an existing permitted solid waste facility, the activities at the Palo Alto landfill are required to comply with all applicable federal, state, and local statutes and regulations related to solid waste. In order to implement the proposed alternatives, any facility would be required to comply with all applicable statutes and regulations whether it was located at the landfill or the RWQCP. Therefore, the proposed alternatives would not be expected to conflict with any solid waste statutes or regulations.
2.18 MANDATORY FINDINGS OF SIGNIFICANCE

<table>
<thead>
<tr>
<th>ENVIRONMENTAL ISSUES</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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<tbody>
<tr>
<td>XVIII. Mandatory Findings of Significance.</td>
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<tr>
<td>a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?</td>
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<tr>
<td>b) Does the project have impacts that are individually limited, but cumulatively considerable? (&quot;Cumulatively considerable&quot; means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)</td>
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<tr>
<td>c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?</td>
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Authority: Public Resources Code Sections 21083 and 21087.

DISCUSSION

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?

No Impact. Implementation of the proposed alternatives would include development at the closed landfill and/or at the RWQCP. Both of these sites have been disturbed by prior site development and do not contain sensitive species or habitats. For the potential offsite biological resource impacts identified in this checklist, mitigation measures have been identified that would ensure these impacts remain less than significant. As discussed in the other sections of this checklist, the proposed alternatives would not substantially reduce the habitat of a fish or wildlife species, cause fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of rare or endangered plants or animals, or eliminate examples of California history or prehistory.
b) **Does the project have impacts that are individually limited, but cumulatively considerable?** ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

**No Impact.** The proposed alternatives would not add considerably to any cumulative impacts in the region, as discussed in other sections of this checklist. No other projects that would create cumulatively considerable environmental impacts are proposed in the project vicinity. The proposed sites for the alternatives are surrounded by Byxbee Park and existing commercial land uses that have been fully developed. Therefore, the implementation of the proposed alternatives would not contribute to cumulative impacts.

c) **Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?**

**No Impact.** As discussed in other sections of this checklist and in the responses to questions a) and b) above, the proposed alternatives would not be expected to cause substantial adverse effects on human beings, either directly or indirectly.
3 REFERENCES


