City of San Diego

CONTRACTOR'S NAME: Stearns, Conrad & Schmidt, Consulting Engineers, Inc.
ADDRESS: 3900 Kilroy Airport Way, Suite 100, Long Beach, CA 90806
CITY CONTACT Juan E. Espindola**, Contract Specialist, Email:** JEEspindola@sandiego.gov
TELEPHONE NO: (619) 533-4491
L. Campos / J. Borja / LJI

PROPOSAL DOCUMENTS

e - Bidding

FOR

AERATED STATIC PILE SYSTEM

RFP NO.: **K-18-1590-DB1-3-A**
SAP NO. (WBS/IO/CC): **S-16053**
CLIENT DEPARTMENT: **2115**
COUNCIL DISTRICT: **6**
PROJECT TYPE: **FA**

THIS CONTRACT IS SUBJECT TO THE FOLLOWING:

- PHASED-FUNDING
- THE CITY'S SUBCONTRACTING PARTICIPATION REQUIREMENTS FOR SLBE PROGRAM
- PREVAILING WAGE RATES: STATE ☒ FEDERAL ☐
- APPRENTICESHIP

PROPOSALS DUE:
12:00 NOON
NOVEMBER 16, 2017
CITY OF SAN DIEGO
PUBLIC WORKS CONTRACTS
1010 SECOND AVENUE, 14th FLOOR, MS 614C
SAN DIEGO, CA 92101
ATTN: CONTRACT SPECIALIST

DEPUTY CITY ENGINEER

The engineering Specifications and Special Provisions contained herein have been prepared by or under the direction of the following Registered Engineer:

_____	10-9-17	Seal:
Registered Engineer For City Engineer	Date	

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REQUEST FOR PROPOSAL

1. INTRODUCTION AND PROJECT OVERVIEW

1.1. SOLICITATION

1.1.1. This is the City of San Diego's (City) solicitation process to acquire Design-Build services for the **Aerated Static Pile System** Design-Build project.

1.1.2. This RFP describes the Project, the required Scope of Work and Services, the Design-Builder selection process, the minimum information that shall be included in the Proposal for this Project and the terms and conditions governing the Work. Failure to submit all requested information in accordance with the requirements of this Request for Proposal (RFP) may be cause for disqualification.

1.1.3. Each Proposal, properly executed as required by this RFP, shall constitute a firm offer which may be accepted by the City within the time specified in the Proposal.

1.1.4. This RFP will not commit the City to award a contract, to defray any costs incurred in the preparation of a Proposal pursuant to this RFP, or to procure or contract for the Work.

1.1.5. Selection announcements, contract awards, and all data provided by the City shall be protected by the Design-Builder from public disclosure. The Design-Builders desiring to release information to the public, shall receive prior written approval from the City.

1.1.6. The Design-Builder, by submitting a response to this RFP, agrees to provide the required services for the terms and conditions noted in this RFP and its exhibits if awarded by the City. The agreement and other terms and conditions are included in the Design-Build Contract and The GREENBOOK, The WHITEBOOK, and the Supplementary Special Provisions (SSP).

1.1.7. Any architectural firms, engineering firms, specialty consultants, or individuals retained by the City to assist in drafting the RFPs or the Project's preliminary design may not be eligible to participate in the competition with any Design-Build Entity without the prior written consent of City.

1.2. SUMMARY OF WORK: This is the City's solicitation process to acquire Design-Build services for a Design-Build project of an **Aerated Static Pile System**. For additional information refer to Attachment A.

1.3. FULL AND OPEN COMPETITION: This contract is open to full competition and may be bid on by Contractors who are on the City's current Prequalified Contractors' List. For information regarding the Contractors Prequalified list visit the City's web site: http://www.sandiego.gov.

1.4. PROPOSAL DUE DATE AND TIME IS: November 16, 2017 at 12:00 PM.

1.5. ESTIMATED PROJECT COST: The City's estimated cost for this project is **$3,250,000**.

1.6. LICENSE REQUIREMENT: The City has determined that the following licensing classification is required for this contract: **A**

1.7. CONTRACT PERIOD: The Project shall be completed within **220 Working Days** from the Notice to Proceed (NTP).

1.8. PREVAILING WAGE RATES APPLY TO THIS CONTRACT: Refer to Attachment D.

1.9. PHASED FUNDING: For Phased Funding Conditions, see Attachment B.

1.10. CONTRACTOR LICENSE AND PREQUALIFICATION STATUS:

1.10.1. The Design-Builder must possess a Class "A" California State Contractor's license.

1.10.2. The Design-Builder must, at the time of submission of the proposal, be prequalified at an amount equal to or greater than the total amount proposed, including any alternates or options.

1.10.3. The Design-Builder's California State License and City of San Diego prequalification status as specified herein must be valid at time of submission.

1.11. PRE-PROPOSAL MEETING AND SITE VISIT:

1.11. PRE-PROPOSAL MEETING AND SITE VISIT:

1.11.1. Those wishing to submit a Proposal are **encouraged** to attend the Pre-Proposal Meeting. The purpose of the meeting is to discuss the scope of the Project, submittal requirements, the prequalification process and any Equal Opportunity Contracting Program requirements and reporting procedures. To request a sign-language or oral interpreter for this visit, call the Public Works Contracts Division at (619) 533-3450 at least 5 Working Days prior to the meeting to ensure availability. The Pre-Proposal meeting is scheduled as follows:

Date:	**November 1, 2017**
Time:	**10:00 AM**
Location:	**1010 Second Ave, Suite 1400, San Diego, CA 92101 (Large Conference Room)**

1.11.2. PRE-PROPOSAL SITE VISIT: All those wishing to submit a Proposal are **encouraged** to visit the Work Site with the Engineer. The purpose of the Site visit is to acquaint the Proposers with the Site conditions. To request a sign language or oral interpreter for this visit, call the Public Works Contracts at (619) 533-3450 at least 5 Working Days prior to the meeting to ensure availability. The Pre-Proposal Site Visit is scheduled as follows:

Time: 11:30 AM
Date: November 1, 2017
Location: Miramar Landfill, 5180 Convoy Street., San Diego, CA 92111

2. SUBCONTRACTING PARTICIPATION PERCENTAGES: Subcontracting participation percentages apply to this contract.

2.1. The City has incorporated mandatory SLBE-ELBE subcontractor participation percentages to enhance competition and maximize subcontracting opportunities. For the purpose of achieving the mandatory subcontractor participation percentages, a recommended breakdown of the SLBE and ELBE subcontractor participation percentages based upon certified SLBE and ELBE firms has also been provided to achieve the mandatory subcontractor participation percentages:

1.	SLBE participation	**2.5 %**
2.	ELBE participation	**4.3 %**
3.	Total mandatory participation	**6.8 %**

2.2. The Proposal will be declared non-responsive if the Proposer fails to meet the following mandatory requirements:

2.2.1. Proposer's inclusion of SLBE-ELBE certified subcontractors at the overall mandatory participation percentage identified in this document; **OR**

2.2.2. Proposer's submission of Good Faith Effort documentation, saved in searchable Portable Document Format (PDF) and stored on Compact Disc (CD) or Digital Video Disc (DVD), demonstrating the Proposer made a good faith effort to outreach to and include SLBE-ELBE Subcontractors required in this document within 3 Working Days of the Proposal due date if the overall mandatory participation percentage is not met.

3. SELECTION AND AWARD SCHEDULE:

3.1. The City anticipates that the process for selecting a Design-Builder and awarding the contract will be according to the following tentative schedule. Dates are subject to change:

3.2.	Pre-Proposal Meeting	**November 1, 2017**
3.3.	Proposal Due Date	**November 16, 2017**
3.4.	Selection and Notification	**December 15, 2017**
3.5.	Limited Notice to Proceed	**January 22, 2018**

INSTRUCTIONS TO PROPOSERS AND GENERAL CONDITIONS

1. PREQUALIFICATION OF CONTRACTORS AND CALIFORNIA STATE LICENSE:

1.1. The Design-Builder's California State License and City of San Diego prequalification status as specified herein must be valid at time of submission. Failure to comply with these requirements may result in the proposal being deemed non responsive and ineligible for further consideration.

1.2. Contractors submitting proposals must be pre-qualified for the total amount proposed, inclusive of all alternate items or specified Task Order limits prior to the date of submittal. Proposals from contractors who have not been pre-qualified as applicable and Proposals that exceed the maximum dollar amount at which contractors are pre-qualified may be deemed **non-responsive** and ineligible for award. Complete information and links to the on-line prequalification application are available at:

http://www.sandiego.gov/cip/bidopps/prequalification.shtml

1.3. The completed application must be submitted online **no later than two (2) weeks prior to the Proposal due date**. For additional information or the answer to questions about the prequalification program, contact David Stucky at 619-533-3474 or dstucky@sandiego.gov.

1.4. Due to the City's responsibility to protect the confidentiality of the contractors' information, City staff will not be able to provide information regarding contractors' prequalification status over the telephone. Contractors may access real-time information about their prequalification status via their vendor profile on PlanetBids™.

2. ELECTRONIC FORMAT RECEIPT AND OPENING OF PROPOSALS: Proposals will be received

in **electronic format (eBids) EXCLUSIVELY** at the City of San Diego's electronic bidding (eBidding) site, at: http://www.sandiego.gov/cip/bidopps/index.shtml and are due by the date, and time shown on the cover of this solicitation.

2.1. **PROPOSERS MUST BE PRE-REGISTERED** with the City's bidding system and possess a system-assigned Digital ID in order to submit and electronic proposal.

2.2. The City's bidding system will automatically track information submitted to the site including IP addresses, browsers being used and the URLs from which information was submitted. In addition, the City's bidding system will keep a history of every login instance including the time of login, and other information about the user's computer configuration such as the operating system, browser type, version, and more. Because of these security features, Contractors who disable their browsers' cookies will not be able to log in and use the City's bidding system.

2.3. Upon entry of their proposal, the system will ensure that all required fields are entered. **The system will not accept a proposal for which any required information is missing.** This includes all necessary pricing, subcontractor listing(s) and any other essential documentation and supporting materials and forms requested or contained in these solicitation documents.

2.4. **PROPOSALS REMAIN SEALED UNTIL DUE DATE AND TIME**. eBids and eProposals are transmitted into the City's bidding system via hypertext transfer protocol secure (https) mechanism using SSL 128-256 bit security certificates issued from Verisign/Thawte which encrypts data being transferred from client to server. Proposals submitted prior to the Due Date and Time are not available for review by anyone other than the submitter, who will have until the Due Date and Time to change, rescind or retrieve its proposal should they desire to do so.

2.5. **PROPOSALS MUST BE SUBMITTED BY DUE DATE AND TIME**. Once the deadline is reached, no further submissions are accepted into the system. Once the Due Date and Time has passed, bidders, proposers, the general public, and City staff are able to immediately see the results on line. City staff may then begin reviewing the submissions for responsiveness, Equal Opportunity Contracting Program (EOCP) compliance and other issues.

2.6. **TECHNICAL PROPOSAL AND PRICE PROPOSAL ARE TO BE SEPARATE**. The proposer is to submit two separate proposal PDFs by the due date and time.

1. The Technical proposal, which should contain the items detailed below and in Attachment G. There is to be **NO PRICING** information within this proposal. If a Technical proposal contains pricing information, the submission may be deemed non-responsive and ineligible for further consideration, and

2. The Price proposal, which should detail the cost structure and include any forms as required herein.

2.7. **RECAPITULATION OF THE WORK.** Proposals shall not contain any recapitulation of the Work. Conditional proposals may be rejected as being **non-responsive**. Alternative proposals will not be considered unless called for.

2.8. **PROPOSALS MAY BE WITHDRAWN** by the Proposer prior to, but not after, the time set as Due Date and Time.

2.8.1. **Important Note:** Submission of the electronic proposal into the system may not be instantaneous. Due to the speed and capabilities of the user's internet service provider (ISP), bandwidth, computer hardware and other variables, it may take time for the proposer's submission to upload and be received by the City's eBidding system. It is the proposer's sole responsibility to ensure their proposals are received on time by the City's eBidding system. The City of San Diego is not responsible for proposals that do not arrive by the required date and time.

2.9. ACCESSIBILITY AND AMERICANS WITH DISABILITIES ACT (ADA) COMPLIANCE. : To request a copy of this solicitation in an alternative format, contact the Public Works Contract Specialist listed in the cover of this solicitation at least five (5) working days prior to the Proposal due date to ensure availability.

3. ELECTRONIC SUBMISSIONS CARRY FULL FORCE AND EFFECT

3.1. The proposer, by submitting its electronic proposal, acknowledges that doing so carries the same force and full legal effect as a paper submission with a longhand (wet) signature.

3.2. By submitting an electronic proposal, the proposer certifies that the proposer has thoroughly examined and understands the entire Contract Documents (which consist of the plans and specifications, drawings, forms, affidavits and the solicitation documents), and that by submitting the eBid as its proposal, the proposer acknowledges, agrees to and is bound by the entire Contract Documents, including any addenda issued thereto, and incorporated by reference in the Contract Documents.

3.3. The Proposer, by submitting their electronic proposal, agrees to and certifies under penalty of perjury under the laws of the State of California, that the certification, forms and affidavits submitted as part of this proposal are true and correct.

4. PROPOSALS ARE PUBLIC RECORDS: Upon receipt by the City, proposals shall become public records subject to public disclosure. It is the responsibility of the respondent to clearly identify any confidential, proprietary, trade secret or otherwise legally privileged information contained within the proposal's General references to sections of the California Public Records Act (PRA) will not suffice. If the Contractor does not provide applicable case law that clearly establishes that the requested information is exempt from the disclosure requirements of the PRA, the City shall be free to release the information when required in accordance with the PRA, pursuant to any other applicable law, or by order of any court or government agency, and the Contractor will hold the City harmless for release of this information.

5. JOINT VENTURE CONTRACTORS: Provide a copy of the Joint Venture agreement and the Joint Venture license to the City within 10 Working Days after receiving the Contract forms. See 7-6, "The Contractors Representative" in The GREENBOOK and 7-6.1 in The WHITEBOOK.

6. Each properly signed Proposal shall constitute a firm offer that may be accepted by the City within the time frame specified herein.

7. This RFP will not commit the City to award a contract, to defray any costs incurred in the preparation of a Proposal pursuant to this RFP, or to procure or contract for the Work.

8. Selection announcements, contract awards, and all data provided by the City shall be protected by the Design-Builder from public disclosure. The Design-Builders desiring to release information to the public shall receive prior written approval from the City.

9. Design-Builders who submit a response to this RFP agree to provide the required services in accordance with the terms and conditions noted in this RFP and its attachments upon award by the City. The agreement and other terms and conditions are included in the Design-Build Contract, The GREENBOOK, The WHITEBOOK, and the Supplementary Special Provisions (SSP).

10. Any architectural firms, engineering firms, specialty consultants, or individuals retained by the City to assist in drafting the RFPs or the Project's preliminary design may not be eligible to participate in the competition with any Design-Build Entity without the prior written consent of City. Any architectural firms, engineering firms, specialty consultants, or individuals retained by the City to assist in drafting any Reference Documents, such as the Water Department's Master Plan and any other document that was not prepared specifically for this contract, are considered to be eligible to participate.

11. EQUAL OPPORTUNITY CONTRACTING

11.1. As set forth in this RFP, the City is dedicated to the principles of equal opportunity in the workplace and in subcontracting. It is the City's expectation that firms doing business with the City have, and are able to demonstrate, the same level of commitment.

11.2. The Design-Builders are encouraged to take positive steps to diversify and expand their subcontractor solicitation base and to offer contracting opportunities to all eligible certified Subcontractors in accordance with the City's EOCP requirements included in the Contract Documents.

11.3. Design-Builder's Work Force

11.3.1. The Design-Builders shall submit with its Proposal a Work Force Report (EOC Form BB05) and prior to award of contract, the successful Design-Builder shall submit to the City's EOCP office an updated Work Force Report or an Equal Employment Opportunity (EEO) Plan.

11.3.2. If under representations are noted in the Work Force Report when compared to County Labor Force Availability data, the Design-Builder shall submit an Equal Opportunity Plan. Any Equal Employment Opportunity Plan submitted shall include the elements as outlined in the EOCP Requirements included in The WHITEBOOK.

11.3.3. The specified Equal Opportunity Contracting Program (EOCP) forms are available for download from the City's web site at:

http://www.sandiego.gov/eoc/forms/index.shtml

11.4. Nondiscrimination Ordinance (Municipal Code §§ 22.2701-22.2708)

11.4.1. The Design-Builder shall not discriminate on the basis of race, gender, gender expression, gender identity, religion, national origin, ethnicity, sexual orientation, age or disability in the solicitation, selection, hiring or treatment of the Subcontractors and Suppliers. The Design-Builder shall provide equal opportunity for Subcontractors to participate in subcontracting opportunities. The Design-Builder understands and agrees that violation of this clause shall be considered a material breach of the contract and may result in contract termination, debarment or other sanctions.

11.4.2. This language shall be in contracts between the Design-Builder and any Subcontractors and Suppliers.

11.4.3. As part of its Proposal, the Design-Builder shall provide to the City a list of all instances within the last 10 years where a complaint was filed or pending against Design-Builder in a legal or administrative proceeding alleging that Design-Builder discriminated against its employees, the Subcontractors, or Suppliers, and a description of the status or resolution of that complaint, including any remedial action taken. If there have not been any complaints filed or pending against Design-Builder, a written statement from the Design-Builder to confirm shall be included in the Proposal.

11.5. Contractor Registration and Electronic Reporting System

11.5.1. Prior to the award of the Contract, the Design-Builder, Subcontractors, and Suppliers must register with the City's web-based vendor registration and bid management system, BidsOnline, hosted by PlanetBids System. For additional information go to:

http://www.sandiego.gov/purchasing/bids-contracts/vendorreg.shtml.

11.5.2. The City may not award the contract until registration of all subcontractors and suppliers is complete. In the event this requirement is not met within the time frame specified in the Notice of Intent to Award letter, the City reserves the right to rescind the Notice of Award / Intent to Award and to make the award to the next responsive and responsible bidder / proposer

11.5.3. Following the award of the Contract, the Design-Builder will be required to use the City's web-based contract compliance application for EOCP reporting purposes e.g., Weekly Certified Payroll, Monthly Employment Utilization, and Monthly Payments. Online tutorials are available at:

http://stage.prismcompliance.com/etc/vendortutorials.htm

11.5.4. The City may retain progress payments if:

11.5.4.1. The non-registered Design-Builder, Subcontractors or Suppliers fail to register.

11.5.4.2. EOCP reporting is delinquent or inadequate.

11.5.4.3. Underpayment has occurred.

12. PRE-PROPOSAL ACTIVITIES

12.1. Submission of Questions

12.1.1. The Director (or designee) of the Public Works Department is the officer responsible for opening, examining, and evaluating the competitive Proposals submitted to the City for the acquisition, construction, and completion of any public improvement except when otherwise set forth in these documents. All questions related to this solicitation shall be submitted to:

Public Works Contracts
1010 Second Avenue, 14th Floor, MS 614C
San Diego, California, 92101
Attention: Contract Specialist listed on the front cover of this RFP.

OR:

To the Email address of the Contract Specialist listed on the front cover of this RFP.

12.1.2. Questions received less than 14 Days prior to the Proposal due date may not be considered.

12.1.3. Questions or clarifications deemed by the City to be material shall be answered via issuance of an addendum and posted to the City's online bidding service.

12.1.4. Only questions answered by formal written addenda shall be binding. Oral and other interpretations or clarifications shall be without legal effect. It is the Design-Builder's responsibility to be informed of any Addenda that have been issued and to adjust its Proposal accordingly.

12.2. Revisions to the RFP

The City, at its option, may respond to any or all questions submitted in writing via the City's eBidding web site in the form of an addendum. No other responses to questions, oral or written, shall be of any force or effect with respect to this solicitation.

Any changes to the Contract Documents through addendum are made effective as though originally issued with the Proposal. The Design-Builders shall acknowledge the receipt of Addenda at the time of Proposal submission.

13. EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE OF WORK

13.1. Contract Documents may be obtained by visiting the City's website: http://www.sandiego.gov/cip/ Plans and Specifications for this contract are also available for review in the office of Public Works Contracts.

13.2. The Design-Builders shall carefully examine the Project Site, the Plans and Specifications, and other materials as described in or referenced by this RFP. The submission of a Proposal shall be conclusive evidence that the Design-Builder has investigated and is satisfied as to the conditions to be encountered, as to the character, quality, and scope of work, the quantities of materials to be furnished, local conditions, and as to the requirements of the Contract Documents.

14. CHANGES TO THE SCOPE OF WORK: Once a proposal has been accepted by the City and the award has been made, the Design-Builder shall immediately notify the City in writing of any proposed or anticipated change in the scope, contract amount, or contract time; and shall obtain the City's written consent to the change(s) prior to affecting them. In no event shall the City's consent be construed to relieve the Design-Builder from its duty to render all work and services in accordance with applicable laws and accepted industry standards

15. DESIGN SUBMITTALS: The **C**ity's review of the Design-Builder's Design Submittals shall not relieve the Design-Builder from its responsibilities under the Contract, or be deemed to be an acceptance or waiver by City of any deviation from, or of the Design-Builder's failure to comply with, any provision or requirement of the Contract Documents, unless such deviation or failure has been identified as such in writing in the document submitted for acceptance by the Design-Builder and accepted by City. Where approval or acceptance by City is required, it is understood to be general approval only, and does not relieve the Design-Builder of responsibility for complying with all applicable laws and good professional practices as the Design-Builder shall be the Engineer of Record.

16. BONDS AND INSURANCE: Prior to the award of the Contract (or Task Order), the Design-Builders shall submit evidence of separate bonds and insurance as specified in Sections 2-4, "CONTRACT BONDS," 7-3, "LIABILITY INSURANCE," and 7-4, "WORKERS' COMPENSATION INSURANCE" of the City's standard specifications for public works constructions unless specified otherwise in the Contract Documents.

17. SUBMITTAL REQUIREMENTS: PROPOSALS MUST BE RECEIVED NO LATER THAN THE DUE DATE AND TIME. Proposals may be withdrawn by the Design-Builder only up to the proposal due date and time.

IMPORTANT NOTE: Submission of the electronic proposals into the system may not be instantaneous. Due to the speed and capabilities of the user's internet service provider (ISP), bandwidth, computer hardware and other variables, it may take time for the bidder's submission to upload and be received by the City's eBidding system. It is the bidder's sole responsibility to ensure that their bids / proposals are received on time by the City's eBidding system. The City of San Diego is not responsible for bids / proposals that do not arrive by the required date and time.

17.1. TECHNICAL PROPOSAL REQUIREMENTS: Technical Proposals **s**ubmitted in response to this RFP shall be in the following order and shall include:

- Legal name of company.
- Legal form of entity (partnership, corporation, joint venture, or other). If joint venture, identify the members of the joint venture, and provide all information required under this section for each member.
- Year of establishment of entity.
- If company is subsidiary of a parent company, identify the parent company.
- Address of main office.
- Address of San Diego satellite office if applicable.
- Contact information for firm, including name, title, email address and telephone number.
- Number of employees in San Diego County.
- Applicable License(s):
- City of San Diego Business License Number, including expiration date.
- State Contractor's License Number including expiration date, and all classifications. Professional Engineering/Architect License Number, including expiration date
- Failure to provide all required information may result in the Proposal being considered non-responsive and ineligible for further consideration.

17.1.1. The Technical Proposal shall be concise, well organized, and demonstrate the Design-Builder's qualifications and experience applicable to the Project. The Technical Proposal shall be limited to 50 one-sided pages ($8^{1/2''}$ x 11"), exclusive of resumes, graphics, forms, pictures, photographs, dividers, front and back cover, etc., that address the T^{echn}ical Proposal contents; and of Equal Opportunity Contracting documentation. Font Type shall be Times New Roman in a minimum 12 Point font size, with a minimum 1" margin for text pages. A cover letter may be submitted but shall not contain any information that is a required element of the Technical Proposal. Any Technical Proposal that does not comply with these formatting standards may not be considered.

17.1.2. The Technical Proposals submitted in response to this RFP shall be in accordance with the requirements listed in ATTACHMENT G. The contents of the Technical Proposal shall be organized consistent with the format in Attachment G.

17.1.3. Design elements which deviate from the Scope of Work, City's design guidelines, or material substitutions which differ from the Approved Material List shall be highlighted in accordance with Attachment G.

17.1.4. Failure to comply with this section may render the Design-Builder's submittal non-responsive and ineligible for further consideration.

17.2. PRICE PROPOSAL REQUIREMENTS

17.2.1. A clearly marked, signed PDF of the Price Proposal is to be submitted in a separate PDF. This **is not** to be included with the Technical proposal. Refer to Attachment H of this RFP for any Price Proposal forms required to be used.

17.2.2. The Price Proposal shall be signed by an individual or individuals authorized to execute legal documents on behalf of the Design-Builder.

17.2.3. The lowest proposed price is not the determining factor for award of this contract. See Attachment G for the criteria by which the proposals will be evaluated.

17.2.4. In the event of any discrepancies, written numbers will govern over numerical. Also, the sum of all lump sum line items, unit price line items, allowance line items and any other priced items will govern over the "Total Design-Build Proposal" line item.

17.2.5. The required EOCP information such as Subcontractor and Supplier listings shall be submitted as part of the Price Proposal.

18. SELECTION CRITERIA AND SCORING

18.1. An evaluation Panel comprised of representatives from the City will be established for this Project. The Panel may also include other interested parties such as additional participating agencies, representative from the community and other appropriate agencies such as the State Water Resource Control Board.

18.2. Proposals will be ranked according to the selection criteria set forth in Attachment G.

18.3. The Panel will review all proposals received. Interviews or presentations will be conducted as needed in accordance with Attachment G.

18.4. Based upon this technical review, the Panel will rank the Design-Builders' proposals in accordance with the selection criteria set forth in Attachment G of this RFP.

18.5. Once the Technical Proposals have been ranked by the Panel, the Design-Builders' price proposals will be made available to the panel and forwarded to EOCP for review and scoring of subcontractor participation. The EOCP score will then be added to the Design-Builders' cumulative scores.

19. AWARD

19.1. After the Technical Proposals have been evaluated, scored and ranked; the Price proposals will be factored in according to the criteria set forth in Attachment G. A Design-Builder selection will then be made.

19.2. The City will announce in writing to all the RFP participants the selected Design-Builder. The announcement will show the results of the evaluation. This notification to the Design-Builders shall constitute the public announcement of the selected Design-Builder. In the event that the selected Design-Builder is subsequently deemed non-responsive or non-responsible, a new public announcement will be provided to all proposers with the name of the newly designated selected Design-Builder.

19.3. To obtain the price Proposal results, view the results on the City's web site, or request the results by U.S. mail and provide a self-addressed, stamped envelope. If requesting by mail, be sure to reference the Proposal name and number. The Proposal tabulations will be mailed to you upon their completion. The results will not be given over the telephone.

20. ADDITIONAL POLICIES, PROCEDURES, TERMS AND CONDITIONS

20.1. The Program's Selection Process is based on the policies, procedures and guidelines set forth in the City Municipal Code Chapter 2, Article 2, Division 33.

20.2. **Protests.** A Design-Builder may protest the award of the Contract to another Design-Builder in accordance with San Diego Municipal Code.

20.3. **Changes to Key Personnel and Substitution of Subcontractors.** The Design-Builder shall not change or substitute any individual that is identified in its proposal as "key personnel" without the written consent of the City. The Design-Builder shall not change or substitute any material, supplier, or subcontractor identified in its Proposal without written consent of the City. The City's consent will not be unreasonably withheld.

20.4. **Project Team.** The Design-Builder shall maintain all representations, team members, and proposed tasks and work elements as valid, except for the schedule which may be adjusted as mutually agreed upon by the City and the Design-Builder.

20.5. **Submittal of "Or Equal" Items.** See 4-1.6, "Trade Names or Equals" in the SSP and as modified by the Scope of Work ATTACHMENT A.

20.6. **Subcontract Limitations.** The Design-Builder's attention is directed to Standard Specification for Public Works Construction, Section 2-3, "SUBCONTRACTS" which requires the Design-Builder to perform not less than the specified amount under this RFP. Failure to comply shall render the Proposal non-responsive.

20.7. San Diego Business Tax Certificate. All Contractors, including Subcontractors, not already having a City of San Diego Business Tax Certificate for the work contemplated shall secure the appropriate certificate from the City Treasurer, Civic Center Plaza, first floor, before the Contract can be executed.

20.8. City Standard Provisions. The work resulting from this RFP is subject to the following standard provisions. See The WHITEBOOK for details.

20.8.1. The City of San Diego Resolution No. R-277952 adopted on May 20, 1991 for a Drug-Free Workplace.

20.8.2. The City of San Diego Resolution No. R-282153 adopted on June 14, 1993 related to the Americans with Disabilities Act.

20.8.3. The City of San Diego Municipal Code §22.3004 for Pledge of Compliance.

20.8.4. The City of San Diego's Labor Compliance Program and the State of California Labor Code §§1771.5(b) and 1776.

20.8.5. Sections 1777.5, 1777.6, and 1777.7 of the State of California Labor Code concerning the employment of apprentices by contractors and subcontractors performing public works contracts.

20.8.6. The City's Equal Benefits Ordinance (EBO), Chapter 2, Article 2, Division 43 of The San Diego Municipal Code (SDMC).

20.8.7. The City's Information Security Policy (ISP) as defined in the City's Administrative Regulation 90.63.

20.9. Prevailing Wage Rates Apply: Refer to Attachment D.

20.10. Reference Standards: Except as otherwise noted or specified, the Work shall be completed in accordance with the following standards::

Title	Edition	Document Number
Standard Specifications for Public Works Construction ("The GREENBOOK") http://www.greenbookspecs.org/	2015	PWPI070116-01
City of San Diego Standard Specifications for Public Works Construction ("The WHITEBOOK")* https://www.sandiego.gov/publicworks/edocref/greenbook	2015	PWPI070116-02
City of San Diego Standard Drawings* https://www.sandiego.gov/publicworks/edocref/standarddraw	2016	PWPI070116-03
Citywide Computer Aided Design and Drafting (CADD) Standards https://www.sandiego.gov/publicworks/edocref/drawings	2016	PWPI092816-04
California Department of Transportation (CALTRANS) Standard Specifications – http://www.dot.ca.gov/des/oe/construction-contract-standards.html	2015	PWPI092816-05
CALTRANS Standard Plans http://www.dot.ca.gov/des/oe/construction-contract-standards.html	2015	PWPI092816-06
California Manual on Uniform Traffic Control Devices Revision 1 (CA MUTCD Rev 1) - http://www.dot.ca.gov/trafficops/camutcd/	2014	PWPIO92816-07
NOTE: *Available online under Engineering Documents and References at: http://www.sandiego.gov/publicworks/edocref/index.shtml		

ATTACHMENT A

PROJECT DESCRIPTION, SCOPE OF WORK, AND SPECIFICATIONS

ATTACHMENT A

PROJECT DESCRIPTION, SCOPE OF WORK, AND SPECIFICATIONS

1. Project Description:

Comprehensive Design, Planning, Equipment Procurement, Permitting, Construction, Start Up, Demonstration, and City Staff Training for an Aerated Static Pile (ASP) Composting System at the City's Miramar Greenery Operation (Greenery).

At completion, the project will effectively process 40,000 tons per year of organic waste and provide enhanced storm water quality and odor control. The proposed ASP project area is on the surface of the West Miramar landfill, within the existing limits of the Miramar Greenery which is permitted for the use of Aerated Static Piles for composting.

The project shall include integrated design and installation of semi-impermeable covers for covering organic material during composting, above-grade aeration, aeration blowers, oxygen and temperature sensors, controllers, computers, cover handling system, concrete barriers, training, start-up, demonstration, and all related equipment, appurtenances, and work for proper installation of an ASP system run on portable generator power to meet site constraints, as well as local, state, and federal standards.

The project may also include implementation of one or more of the following Additive Alternate bid items, if selected:

- #1 (dedicated electrical service)
- #2 (blower location option 2 and connection to existing electrical feed)
- #3 (as-needed repair services)
- #4 (additional 20,000 tons per year of organic waste processing)

If Additive Alternate bid items #1 or #2 are selected, the Contractor shall be required to coordinate with City staff, the Local Enforcement Agency (LEA), privatized power owner, and other oversight, or permitting agencies, including preparing and submitting detailed plan drawings to the City's Development Services Department (DSD) for permit approval, preparing and submitting a Health and Safety Plan and Community Health and Safety Plan to the LEA, service request submittal(s) to the power owner and other permitting agencies, to include any related supplemental reports, studies, and fees, to ensure a timely, well-coordinated, properly designed project and build out.

2. Scope of Work

2.1. The Contractor shall be responsible for the complete installation of an above-grade, covered Aerated Static Pile (ASP) System for composting at the City of San Diego's Miramar Greenery, 5180 Convoy Street, San Diego, CA 92111. The system will be operated on interim cover over previously landfilled area that will settle unevenly throughout the life of the system.

2.2. The Contractor shall provide all design, permitting, supervision, labor, programming, testing, equipment, materials, covers, piping, conduit, wiring, and accessories for a complete design and installation. The work shall be performed in accordance with the Request for Proposal, Contract Documents, and applicable federal, state, and local law.

2.3. Required Submittals:

The bidder shall submit with their proposal the following submittals for City review:

- Conceptual drawing(s) of the ASP system including layout of the proposed system, site specific selections, and system components as described in this RFP.
- Summary of the electrical requirements of the proposed system including load requirements, annual consumption, etc.

The successful bidder shall provide the following submittals for City Review at a minimum during the design and construction process.

- 30% Construction Documents, Final Construction Documents.

Submittals shall include site specific selections with capacities based on the project's design conditions.

2.4. The Contractor shall provide a 3-month demonstration period following initial startup and verify system's ability to create a stable and viable end-product.

2.5. The Contractor shall be responsible for site preparation which may include, but is not limited to, clearing, placement of concrete barriers, and work needed to maintain positive drainage of the project site during construction and throughout the project's life.

2.6. Project scope includes:

2.6.1. Site preparation;

2.6.2. Delivery of equipment and materials;

2.6.3. Covers, barriers, and piping installation;

2.6.4. Blowers and Controls for a complete and functional ASP system;

2.6.5. Full system commissioning including startup, demonstration, and training services for City Staff.

2.7. The electrical system shall be designed to allow for the direct connection of a portable diesel powered electrical generator, via dedicated lug connections in the event of a loss of power. Included in the Price Proposal is a line item for the monthly cost of the Contractor to provide a portable diesel powered generator for the proposed ASP system during the startup, demonstration, and training period, and, if selected, during initial coordination with the privatized power owner, before connection to on-site electrical infrastructure is complete via additive alternate.

2.8. The Contractor shall provide delivery of equipment and operating manual, installation, training and key activities to be completed for commissioning and ready to accept materials.

2.9. The Contractor shall review all documents before submitting a proposal. In case of questions or conflict between the requirements of the various documents, the Contractor shall, two weeks before the proposal due date, notify the City in writing of discrepancies in the proposal documents.

2.10. The Contractor shall coordinate with the City's Project Manager throughout the design phase of the project to ensure the ASP system will meet the City's requirements/expectations (functionality, sizing, layout, etc.).

2.11. Upon completion of the project, a complete set of duplicate approved drawing and permits shall be provided to Environmental Services Department for recordkeeping purposes at the Miramar Landfill Operations Station.

3. System Requirements

3.1. ASP System:

3.1.1. The system shall be a specialty fabric covered positive aeration static pile composting process controlled by temperature and oxygen feedback controllers which shall include components and services for a facility that meets or exceeds the requirements described herein.

3.1.2. The system shall be portable with no paving or poured-in-place concrete.

3.1.3. **Project Area:**

The ASP system shall be sized and configured not to exceed a footprint of seven (7) acres within the ten (10) acre project area shown in **Appendix G**. All components of the project are restricted to a max elevation of 485 feet above mean sea level (AMSL). Existing elevations within the Project Area range from 445' AMSL and do not exceed 465' AMSL, see **Appendix H** West Miramar Phase 1 Topography.

The remaining three (3) acres of the project area shall be reserved for potential future expansion of the ASP system for an additional 20,000 tons per year of throughput processing.

3.1.4. **Capacity:**

The system shall process a throughput of 40,000 tons per year of a mixture of organic wastes the Miramar Greenery is permitted to accept which may include source-separated green waste, landscaping and yard debris, wood, fibrous material (palms), branches, brush, leaves, grass and food waste.

3.1.4.1. The proposed ASP system shall be capable of processing a throughput mixture of 50% food waste by weight, up to 20,000 tons per year.

3.1.4.2. The proposed ASP system shall be utilized for the Process to Further Reduce Pathogens (PFRP) stage of composting and meet regulatory standards as set forth in, Chapter 3.1, Article 7.

3.1.4.3. The Contractor shall include in their proposal a description of the process, from raw material to mature compost, using their proposed covered ASP system meeting the requirements of this RFP. The description shall include the various stages and durations when material is required to be covered, aerated, and turned, if needed.

3.1.4.4. The Contractor shall provide typical feedstock requirements for the proposed ASP system including:

- Moisture content
- Particle Size
- Free Air Space (porosity)
- Carbon to Nitrogen ratio
- Bulk density

The greenery accepts between 7,000 to 10,000 tons per month of organic material the facility is permitted to accept. The amount of each type of material received fluctuates month to month. See monthly summary of incoming materials from July, 2016 to December, 2016 in **Appendix I**. Transaction Counts and Tons for Greenery by Day and Material Type.

3.1.5. **Cover:**

The system shall utilize fabric covers for windrows with a minimum specification:

3.1.5.1. Each cover must be of one piece and sufficient size to cover a trapezoidal shaped windrow with dimensions meeting the following criteria:

3.1.5.1.1. Minimum 50 feet in length

3.1.5.1.2. Maximum 26 feet in width

3.1.5.1.3. Maximum 20 feet in height

3.1.5.2. The covers must meet local air emission requirements for operation in San Diego County Air Pollution Control District's (APCD) jurisdiction as well as the requirements in San Joaquin Valley District Rule 4566 (Organic Material Composting Operations).

3.1.5.3. The covers shall have a system to secure them in place during aeration. The system must secure the covers around their entire perimeter and maintain drainage.

3.1.5.4. The covers shall prevent storm water contact with the rows throughout the composting process.

3.1.5.5. The covers must be designed to operate with a diesel powered Winding Machine. The Contractor shall be required to provide shop drawings of the loop locations to show that the proposed cover is compatible with the strapping ties for the Winding Machine.

3.1.5.6. Contractors must provide a Warranty for a minimum of four (4) years against failure of the covers.

3.1.6. **Control System:**

The control system shall consist of fully functional control systems which include blowers for positive aeration, oxygen and temperature sensors, all cabling, software, controllers, control logic and junction boxes with a minimum specification:

3.1.6.1. The control system shall be designed to continuously operate the blowers, control and log the composting process by means of connected temperature and oxygen measuring sensors.

3.1.6.2. The control system shall have the ability to automatically control air flow into the piles to maintain oxygen levels within the adjusted limits set by the operator.

3.1.6.3. The control system shall have adjustable oxygen limits for operation.

3.1.6.4. The control system shall allow for manual operation of blowers.

3.1.6.5. The control system shall be capable to be connected to any standard PC over USB or Ethernet (IP-Network) interface to allow the use of any standard computer.

3.1.6.6. Temperature Probe shall be:

3.1.6.6.1. Capable to measure at least five (5) temperature point continuous monitoring arranged over a depth of 40 inches within a solid/gas mixture up to a temperature of 212 º F.

3.1.6.6.2. Made of extremely robust materials especially suited for use in composting

3.1.6.6.3. Capable of field calibration

3.1.6.7. Oxygen Probe shall be:

3.1.6.7.1. Capable to measure between 0.1 to 25% volume O_2 using dynamic sensor continuous monitoring within a solid/gas mixture up to a temperature of 212 º F.

3.1.6.7.2. Capable of field calibration

3.1.7. **Above Grade Piping:**

3.1.7.1. The Contractor shall provide the above grade aeration system designed for the ASP system that meets the requirements of this RFP as described herein.

3.1.7.2. The Contractor shall provide all aeration system piping including all solid and perforated pipe, fittings, joints, and valves required for connection of perforated aeration piping to solid conveyance piping to the blowers.

3.1.7.3. The perforated aeration piping, providing air into the organic material, shall be capable of being disconnected and reconnected during the composting process. The point of connection shall be fixed by a concrete barrier, or other portable means.

3.1.7.4. The aeration piping shall be composed of high density polyethylene (HDPE).

3.1.7.5. The ASP system shall have the ability to provide aeration during incremental build out of compost rows. A capped solid pipe shall be utilized to cover exposed aeration piping perforations not yet covered during the build out of a compost row.

3.1.7.6. The Contractor shall implement measures to protect the landfill cover from air intrusion from aeration piping, if needed.

3.1.8. **Concrete Barriers**

3.1.8.1. The system shall utilize portable on-grade concrete barriers

3.1.8.2. The concrete barriers shall delineate the ASP system and compost rows.

3.1.8.3. The concrete barriers shall be utilized and placed to assist with preventing storm water runoff from contacting the compost rows.

3.1.9. **Mobile Winding Machine:**

3.1.9.1. The Contractor shall provide a mechanical handling device which shall be the mechanism designed for deployment of the covers onto the windrows per designed dimensions as described herein.

3.1.9.2. The equipment shall be delivered complete and ready for operation. It shall be new and the latest model and, except as otherwise specified, be standard in all respects. It shall be fueled with ultra-low sulfur California

Air Resources Board (CARB) verified diesel fuel and completely lubricated, and all pre-delivery services shall have been performed. Delivery time is Monday through Friday, 8:00 a.m. to 3:30 p.m.

3.1.9.3. The winding machine shall meet local, state, and federal emission requirements. The successful Bidder, upon receipt of a City Purchase Order, shall apply, pay for, and obtain air emissions permits to operate the equipment in San Diego County. Successful Bidder shall expeditiously apply for these permits in order that upon delivery of the equipment to Miramar landfill, authority to operate the equipment from air permitting agencies is in place.

3.1.9.4. If CARB or the local air district requires source testing and/or installation of a Particulate Matter Filter, then the successful bidder shall arrange and pay for this, as well as any other air permitting work necessary to gain approval to operate the equipment at the Miramar landfill.

3.2. **ASP System Service Requirement**

3.2.1. The Contractor shall provide a full written description of the proposed system and the method of operations. Reclaimed water is available within the Project Area via a 2 inch reclaimed water line and/or water trucks.

3.2.2. The Contractor shall provide a process flow diagram and mass balance calculation confirming system sizing and design to process 40,000 ton per year of throughput material.

3.2.3. **Startup, Demonstration, and Training**

3.2.3.1. Following completion of the design-build of the ASP system, the Contractor shall provide a startup, demonstration, and training period.

3.2.3.2. The duration will be for sixty (60) Working Days.

3.2.3.3. The Contractor shall provide all onsite personnel required for the startup, demonstration, and training period.

3.2.3.4. The startup, demonstration, and training period shall include, but not limited to, the following:

- Ensure proper startup of the proposed system;
- Direct the operation of the system;
- Demonstrate the ASP system's ability to manage the throughput as described in the written description and process flow diagram;
- Adjust and monitor system settings and performance;
- Reviewing feedstock preparation to ensure its preparation is meeting the proposed ASP system requirements;
- Provide training to City staff for all system components and processes.

3.2.3.5. During the startup, demonstration, and training period, the City shall provide:

- Visual inspection of incoming loads at the fee booths and greenery operations deck to ensure they do not contain incompatible or hazardous materials. If encountered, the City will manage handling and disposal of such material;
- Preparation of incoming feedstock using a tub grinder, horizontal wheeled grinder, wheeled loader for bucket mixing of green waste and food waste which are received as separate streams;
- Personnel for the ASP system to operate and be trained.

4. Price Proposal

4.1. The Contractor shall complete the Price Proposal contained in **Attachment H**. The proposal shall account for all requirements specified within the RFP document. Cost elements are categorized as follows:

4.1.1. "Bonds (Payment and Performance) (Entire Project)". This line item covers all costs associated with fulfilling bonding requirements stipulated primarily in Section 2-4 of the Greenbook and Whitebook (City Supplement) and as specified in the RFP.

4.1.2. "Water Pollution Control Plan (Development)". This line item covers all costs associated with developing storm water pollution control and prevention requirements stipulated primarily in Section 7-8.6 of the Greenbook and Whitebook (City Supplement), Section 801 of the Whitebook (City Supplement, and as specified in the RFP.

4.1.3. "Water Pollution Control Plan (Implementation)". This line item covers all costs associated with implementing storm water pollution control and prevention requirements stipulated primarily in Section 7-8.6 of the Greenbook and Whitebook (City Supplement), Section 801 of the Whitebook (City Supplement, and as specified in the RFP.

4.1.4. "Engineering and Design Services (Entire Project)". This line item covers all engineering, design, and permitting through the duration of the project required to provide a complete, fully functional ASP system installation as described in the RFP.

4.1.5. "Field Orders (EOCP Type II). This line item covers costs associated with changed conditions encountered during the project as stipulated primarily in Section 3-4 of the Greenbook, Section 9-3.5 of the Whitebook (City Supplement), and as specified in this RFP.

4.1.6. "Field Construction, Materials, and Project Management (ASP System)." This line item covers all costs associated with construction, materials, and installation of

the Aerated Static Pile system, excluding engineering and design costs (line item 4), specialty fabric cover costs (line item 7), and excluding the cost for the mobile winding machine (line item 9).

4.1.7. "Specialty Fabric Covers for Aerated Static Piles." This line item covers the cost for all specialty fabric covers for the proposed ASP system, meeting the requirements as described in the RFP.

4.1.8. "Monthly Generator Rental." This line item covers the monthly cost for the Contractor to provide a portable diesel powered generator for the proposed ASP system during the startup, demonstration, and training period, and, if selected, during initial coordination with the privatized power owner, before connection to on-site electrical infrastructure is complete via additive alternate. Any permitting and/or maintenance required to be provided by the Contractor. Diesel fuel and refueling services to be provided by City.

4.1.9. "Mobile Winding Machine". This line item covers the cost of a diesel-powered mobile winding machine and any associated costs for permitting the equipment in San Diego.

4.1.10. "Startup, Demonstration, and Training". This line item covers costs associated with startup, demonstration, and training as described in the RFP.

4.1.11. "Additive Alternate #1 – Dedicated Electrical Service for ASP System." This line item covers costs for the design and installation of a new dedicated electric service feed, poles, transformer, switchgear, meter for the ASP system, including all related equipment, appurtenances, work for proper installation of an ASP system run on the dedicated electrical service to meet site constraints and the requirements set forth in the RFP, as well as local, state, and federal standards. The dedicated service feed would be extended from existing electrical infrastructure southwest of the proposed project area, shown in **Appendix G**.

4.1.12. "Additive Alternate #2 – Connection of ASP System and Equipment to Existing Electrical Feed". This line item covers the cost for locating the ASP system's blowers and controls in the area identified as Option 2 in **Appendix G** to utilize an existing power feed located at the northeast side of the greenery, which would require installation of 3000 linear feet of conveyance piping to provide aeration to the ASP composting area within the Project Site Limits shown in **Appendix G**. This line item includes all design, engineering, and construction work for connection to the existing privatized power feed including all related equipment, appurtenances, work for proper installation to meet site constraints and the requirements set forth in the RFP, as well as local, state, and federal standards.

4.1.13. "Additive Alternate #3 - As-needed Repair Services". This line item covers the costs for as-needed (hourly labor rate while on site) repairs, inspections, and troubleshooting. Repair services to ensue after startup, demonstration, and training period.

4.1.14. "Additive Alternate #4 – ASP System Expansion". This line item covers the cost of expansion of the ASP composting system for an additional 20,000 tons per year of organic waste processing.

5. ESTIMATED CONSTRUCTION COST: The City's estimated construction cost for this project is **$3,250,000**.

6. LOCATION OF WORK: The location of the Work is as follows:

Miramar Greenery, 5180 Convoy Street, San Diego, CA 92111.

7. CONTRACT TIME: The Contract Time for completion of the Work shall be **160 Working Days** for the design-build of the Aerated Static Pile System followed by **60 Working Days** for the startup, demonstration, and training period for a total of **220 Working Days**.

If Alternate #**1** is awarded**, 120 Working Days** shall be added to the Contract Time for a total Contract Time of **340 Working Days**.

If Alternate #**2** is awarded, **120 Working Days** shall be added to the Contract Time for a total Contract Time of **340 Working Days**.

If Alternate #**3** is awarded, **240 Working Days** shall be added to the Contract Time for a total Contract Time of **460 Working Days**.

If Alternate #**4** is awarded, **90 Working Days** shall be added to the Contract Time for a total Contract Time of **310 Working Days**.

If a combination of additive alternates are awarded, then the total contract time will be the sum of base Bid Contract Time plus the highest number of working days of the additive alternates selected. Each additive alternate would be required to be completed within the base Bid Contract Time plus the added time specified for each. For example, if alternates #1 and #3 are awarded, the total contract time will be 480 days (**220 Working Days** plus **240 Working Days** of alternate #3). Additive alternate #1 would be required to be completed within 340 working days and additive alternate #3 completed within 460 days.

7.1. **CONTRACTOR'S LICENSE CLASSIFICATION:** In accordance with the provisions of California Law, the Contractor shall possess valid, appropriate license at the time that the Bid is submitted. Failure to possess the specified license may render the Bid as **non-responsive** and ineligible for award.

7.2. The City has determined that the following licensing classification is required for this contract:

- **CLASS A**

8. CalRecycle Organics Grant Program

The City applied and obtained grant funding from CalRecycle for the proposed ASP System project. The grant terms and conditions attached in **Appendix J** will apply for this project.

ATTACHMENT B

PHASED FUNDING PROVISIONS

PHASED FUNDING PROVISIONS

1. PRE-AWARD

1.1. Within 10 Working Days after the Bid Opening date, the Apparent Low Bidder must contact the Project Manager to discuss fund availability for each phase and shall also submit the following:

1.1.1. Construction Cost Loaded Schedule in accordance with 6-1, "CONSTRUCTION SCHEDULE AND COMMENCEMENT OF THE WORK" and 9-3, "PAYMENT.

1.2. Your failure to perform any of the following may result cancelling your award of the Contract:

1.2.1. Meeting with the City's Project Manager to discuss the Phased Funding Schedule.

1.2.2. Agreeing to a Phased Funding Schedule within 22 Working Days after meeting with the City's Project Manager.

2. POST-AWARD

2.1. Do not start any construction activities for the next phase until the NTP has been issued by the Engineer. The City will issue separate Notice to Proceed (NTP) documents for each phase.

2.2. If requested, the Engineer may issue the NTP for the next phase before the end of the current approved phase.

PHASED FUNDING SCHEDULE AGREEMENT

RFP NUMBER: K-18-1590-DB1-3-A

CONTRACT OR TASK TITLE: Aerated Static Pile System

CONTRACTOR: Stearns, Conrad, & Schmidt, Consulting Engineers, Inc.

Funding Phase	Phase Description	Phase Start	Phase Finish	Not-to-Exceed Amount
1	Bid Items 1-10	Notice to proceed	220 Working Days	$3,576,489.74
2	Additive Alternate 1 – Dedicated Electrical Service	Notice to Proceed	340 Working Days	$819,465.00
3	Additive Alternate 3 – Repair Services	220 Working days from NTP	Notice of Completion	$16,320.00
			Contract Total	$4,412,274.74

Notes:

1) WHITEBOOK section 9-3.6, "Phased Funding Compensation" applies.
2) The total of all funding phases shall be equal to the TOTAL BID PRICE as shown on BID SCHEDULE 1 - PRICES.
3) This PHASED FUNDING SCHEDULE AGREEMENT will be incorporated into the CONTRACT and shall only be revised by written modifications to the CONTRACT.

CITY OF SAN DIEGO

PRINT NAME: Luis Campos
Construction Manager

Signature:

Date: 4/2/18

PRINT NAME: Luis Campos
Project Manager

Signature:

Date: 4/2/18

CONTRACTOR

PRINT NAME: Steven P. Cooper

Title: Vice President/Regional Manager

Signature:

Date: 3-29-2018

ATTACHMENT C

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ATTACHMENT D

PREVAILING WAGES

ATTACHMENT D

PREVAILING WAGES

1. PREVAILING WAGE RATES: Pursuant to San Diego Municipal Code section 22.3019, construction, alteration, demolition, repair and maintenance work performed under this Contract is subject to State prevailing wage laws. For construction work performed under this Contract cumulatively exceeding $25,000 and for alteration, demolition, repair and maintenance work performed under this Contract cumulatively exceeding $15,000, the Contractor and its subcontractors shall comply with State prevailing wage laws including, but not limited to, the requirements listed below.

1.1. Compliance with Prevailing Wage Requirements. Pursuant to sections 1720 through 1861 of the California Labor Code, the Contractor and its subcontractors shall ensure that all workers who perform work under this Contract are paid not less than the prevailing rate of per diem wages as determined by the Director of the California Department of Industrial Relations (DIR). This includes work performed during the design and preconstruction phases of construction including, but not limited to, inspection and land surveying work.

1.1.1. Copies of such prevailing rate of per diem wages are on file at the City and are available for inspection to any interested party on request. Copies of the prevailing rate of per diem wages also may be found at http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm. Contractor and its subcontractors shall post a copy of the prevailing rate of per diem wages determination at each job site and shall make them available to any interested party upon request.

1.1.2. The wage rates determined by the DIR refer to expiration dates. If the published wage rate does not refer to a predetermined wage rate to be paid after the expiration date, then the published rate of wage shall be in effect for the life of this Contract. If the published wage rate refers to a predetermined wage rate to become effective upon expiration of the published wage rate and the predetermined wage rate is on file with the DIR, such predetermined wage rate shall become effective on the date following the expiration date and shall apply to this Contract in the same manner as if it had been published in said publication. If the predetermined wage rate refers to one or more additional expiration dates with additional predetermined wage rates, which expiration dates occur during the life of this Contract, each successive predetermined wage rate shall apply to this Contract on the date following the expiration date of the previous wage rate. If the last of such predetermined wage rates expires during the life of this Contract, such wage rate shall apply to the balance of the Contract.

1.2. Penalties for Violations. Contractor and its subcontractors shall comply with California Labor Code section 1775 in the event a worker is paid less than the prevailing wage rate for the work or craft in which the worker is employed.

1.3. **Payroll Records.** Contractor and its subcontractors shall comply with California Labor Code section 1776, which generally requires keeping accurate payroll records, verifying and certifying payroll records, and making them available for inspection. Contractor shall require its subcontractors to also comply with section 1776. Contractor and its subcontractors shall submit weekly certified payroll records online via the City's web-based Labor Compliance Program. Contractor is responsible for ensuring its subcontractors submit certified payroll records to the City.

1.3.1. For contracts entered into on or after April 1, 2015, Contractor and their subcontractors shall furnish records specified in Labor Code section 1776 directly to the Labor Commissioner in the manner required by Labor Code section 1771.4.

1.4. **Apprentices.** Contractor and its subcontractors shall comply with California Labor Code sections 1777.5, 1777.6 and 1777.7 concerning the employment and wages of apprentices. Contractor is held responsible for the compliance of their subcontractors with sections 1777.5, 1777.6 and 1777.7.

1.5. **Working Hours.** Contractor and their subcontractors shall comply with California Labor Code sections 1810 through 1815, including but not limited to: (i) restrict working hours on public works contracts to eight hours a day and forty hours a week, unless all hours worked in excess of 8 hours per day are compensated at not less than 1½ times the basic rate of pay; and (ii) specify penalties to be imposed on design professionals and subcontractors of $25 per worker per day for each day the worker works more than 8 hours per day and 40 hours per week in violation of California Labor Code sections1810 through 1815.

1.6. **Required Provisions for Subcontracts.** Contractor shall include at a minimum a copy of the following provisions in any contract they enter into with a subcontractor: California Labor Code sections 1771, 1771.1, 1775, 1776, 1777.5, 1810, 1813, 1815, 1860 and 1861.

1.7. **Labor Code Section 1861 Certification.** Contractor in accordance with California Labor Code section 3700 is required to secure the payment of compensation of its employees and by signing this Contract, Contractor certifies that "I am aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this Contract."

1.8. **Labor Compliance Program**. The City has its own Labor Compliance Program authorized in August 2011 by the DIR. The City will withhold contract payments when payroll records are delinquent or deemed inadequate by the City or other governmental entity, or it has been established after an investigation by the City or other governmental entity that underpayment(s) have occurred. For questions or assistance, please contact the City of San Diego's Equal Opportunity Contracting Department at 619-236-6000.

1.9. Contractor and Subcontractor Registration Requirements. This project is subject to compliance monitoring and enforcement by the DIR. As of March 1, 2015, no contractor or subcontractor may be listed on a bid or proposal for a public works project unless registered with the DIR pursuant to Labor Code section 1725.5. As of April 1, 2015, a contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, or enter into any contract for public work, unless currently registered and qualified to perform public work pursuant to Labor Code section 1725.5 By submitting a bid or proposal to the City, Contractor is certifying that he or she has verified that all subcontractors used on this public work project are registered with the DIR in compliance with Labor Code sections 1771.1 and 1725.5, and Contractor shall provide proof of registration to the City upon request.

1.9.1. A Contractor's inadvertent error in listing a subcontractor who is not registered pursuant to Labor Code section 1725.5 in response to a solicitation shall not be grounds for filing a bid protest or grounds for considering the bid non-responsive provided that any of the following apply: (1) the subcontractor is registered prior to bid opening; (2) within twenty-four hours after the bid opening, the subcontractor is registered and has paid the penalty registration fee specified in Labor Code section 1725.5; or (3) the subcontractor is replaced by another registered subcontractor pursuant to Public Contract Code section 4107.

ATTACHMENT E

SUPPLEMENTARY SPECIAL PROVISIONS

SUPPLEMENTARY SPECIAL PROVISIONS

The following Supplementary Special Provisions (SSP) modifies the following documents:

1. The **2015 Edition** of the Standard Specifications for Public Works Construction (The "GREENBOOK").

2. The **2015 Edition** of the City of San Diego Standard Specifications for Public Works Construction (The "WHITEBOOK"), including the following:

   a) General Provisions (A) for all Contracts.

   b) General Provisions (C) for Design-Build Contracts.

SECTION 1 – TERMS, DEFINITIONS, ABBREVIATIONS, UNITS OF MEASURE, AND SYMBOLS

1-2 **TERMS AND DEFINITIONS.** To the "WHITEBOOK", item 54, "Normal Working Hours", ADD the following:

The **Normal Working Hours** are 7:00 AM to 4:30 PM.

SECTION 2 - SCOPE AND CONTROL OF WORK

2-3.2 **Self Performance.** To the "GREENBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. You shall perform, with your own organization, Contract Work amounting to at least 20% of the base Bid **AND** 20% of any alternates.

2-9.2 **Survey Service.** To the "GREENBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. Prior to the start of design, you shall submit a letter to the Engineer identifying the Licensed Land Surveyor or the Registered Civil Engineer authorized to practice land surveying within the State of California that will be performing the design phase survey services for the Project.
2. Prior to the start of construction, you shall submit a letter to the Engineer identifying the Licensed Land Surveyor or the Registered Civil Engineer authorized to practice land surveying within the State of California that will be performing the construction phase survey services for the Project.
3. You are responsible for performing and meeting the accuracy of surveying standards adequate for construction through a Licensed Land Surveyor or a

Registered Civil Engineer authorized to practice land surveying within the State of California.

4. Survey stakes shall be set and stationed by you for curbs, headers, water mains, sewers, storm drains, structures, rough grade, and any other structures and appurtenances that are needed for the Project. A corresponding cut or fill to finished grade (or flow line) shall be indicated on a grade sheet.

5. Surveys performed shall list the basis of bearings as tied to Record of Survey 14492 or equivalent, based on the California Coordinate System of 1983, Zone 6, U.S. Survey foot, epoch 1991.35, along with a completed calibration sheet (blank form will be supplied by City Surveys). The vertical datum used shall be NGVD 29 in accordance with the City of San Diego Vertical Bench Book.

6. You shall preserve construction survey stakes, control points, and other survey related marks for the duration of the Project. If any construction survey stakes are lost or disturbed and need to be replaced, such replacement shall be performed by the Engineer at your expense.

7. Survey Services shall be procured or performed by the Design Consultant.

2-9.2.1 Survey Files.

1. All Computer Aided Drafting (CAD) Work shall be done in accordance with the City of San Diego's Citywide Computer Aided Design and Drafting (CADD) Standards and shall be in City seed files (.job, .txt, .dgn, .alg, .raw, .fwd, .dtm, .pdf, .docx, .xlsx, .tif, and .jpg).

2. All survey files shall be completed in accordance with the City of San Diego's Citywide CADD Standards and shall adhere to the City's Microstation level and attribute structure.

3. The survey file deliverable will be either one Master .dgn file containing all xref's in geospatially referenced (and attached) models or one Master dgn with all xref's geospatially referenced (and attached) as dgn files. Resource files may be sent to you if requested.

4. Survey files shall include, but shall not be limited to, the following items:

    a) Street center line and (record width) right-of-way lines.

    b) Project geometry (.alg) files (this will be generated for use in InRoads).

    c) 3D surface model (.dtm, break line and spot elevation) file.

    d) Spot elevations of the new utility main at each intersection, midblocks, and for any change in grade.

    e) Monuments.

    f) Curb lines (top curb and gutter).

g) All other appurtenances including but not limited to water valves, meters, vaults, manholes, fire hydrants, utility boxes, cleanouts, and poles.

5. You shall use the survey information to produce red-lines drawings as described in Section 2-5.4 "Red-lines and Record Documents."

2-9.2.2 Submittal.

1. Survey files shall be submitted in accordance with 2-5.3, "Submittals" and 2-5.4, "Red-Lines and Record Documents". You shall provide the Survey Files, proposed Drawings, and/or Red-line Drawings on a CD/DVD to the Engineer and shall post the Survey Files, proposed Drawings, and/or Red-line Drawings to the following website:

   ftp://ftp.sannet.gov/IN/SURVEYS/

2. After the documents have been posted to the website, you shall send a confirmation email, which includes the hyperlink to the website, to the Engineer and to SurveyReview@sandiego.gov.

3. All survey Work and submittals which reveal non-compliance with the requirements of the Construction Documents shall be corrected as deemed necessary by the Engineer and the cost of the corrections to your survey submittals shall be at your expense.

2-9.2.3 Payment.

1. The payment for survey services Work shall be included in the Contract Price.

2-16 CONTRACTOR REGISTRATION AND ELECTRONIC REPORTING SYSTEM. To the "WHITEBOOK", item 1, DELETE in its entirety.

SECTION 3 – CHANGES IN WORK

3-5.1 Claims. To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

ADD:

3-5.1 Claims.

1. A Claim is a written demand by you that seeks an adjustment in the Contract Price, Contract Time, or other relief associated with a dispute arising under or relating to the Contract, including a breach of any provision thereof. A voucher, invoice, or other routine request for payment is not a Claim.

2. A Claim shall conform to these specifications and may be considered after the City has previously denied a request by you for a Change Order seeking the demanded relief.

3. You shall submit a Claim to the Engineer if a dispute occurs that arises from or relates to the Contract. The Claim shall seek all relief to which you assert you are entitled as a result of the event(s) giving rise to the dispute. Your failure to process a Claim in accordance with these specifications shall constitute a waiver of all relief associated with the dispute. Claims are subject to 6-11, "Right to Audit".

4. You shall continue to perform the Services and Work and shall maintain the Schedule during any dispute proceedings. The Engineer will continue to make payments for undisputed Services and Work.

5. The City's Claims process specified herein shall not relieve you of your statutory obligations to present claims prior to any action under the California Government Code.

3-5.1.1 Initiation of Claim.

1. You shall promptly, but no later than 30 Days after the event(s) giving rise to the Claim, deliver the Claim to the Engineer.

2. You shall not process a Claim unless the Engineer has previously denied a request by you for a Change Order that sought the relief to be pursued in the claim.

3-5.1.1.1 Claim Certification Submittal.

1. If your Claim seeks an increase in the Contract Price, the Contract Time, or both, submit with the Claim an affidavit certifying the following:

   a) The Claim is made in good faith and covers all costs and delays to which you are entitled as a result of the event(s) giving rise to the Claim.

   b) The amount claimed accurately reflects the adjustments in the Contract Price, the Contract Time, or both to which you believe you are entitled.

   c) All supporting costs and pricing data are current, accurate, and complete to the best of your knowledge. The cost breakdown per item of Work shall be supplied.

   d) You shall ensure that the affidavit is executed by an official who has the authority to legally bind you.

3-5.1.2 Initial Determination.

1. The Engineer will respond in writing to your Claim within 30 Days of receipt of the Claim.

3-5.1.3 Settlement Meeting.

1. If you disagree with the Initial Determination, you shall request a Settlement Meeting within 30 Days. Upon receipt of this request, the Engineer will schedule the Settlement Meeting within 15 Working Days.

3-5.1.7 City's Final Determination.

1. If a settle agreement is not reached, the City shall make a written Final Determination within 10 Working Days after the Settlement Meeting.
2. If you disagree with the City's Final Determination, notify the Engineer in writing of your objection within 15 Working Days after receipt of the written determination and file a "Request for Mediation" in accordance with 3-5.2, "Dispute Resolution Process".
3. Failure to give notice of objection within the 15 Working Days period shall waive your right to pursue the Claim.

3-5.1.8 Mandatory Assistance.

1. If a third party dispute, litigation, or both arises out of or relates in any way to the Services provided under the Contract, upon the City's request, you shall agree to assist in resolving the dispute or litigation. Your assistance includes, but is not limited to the following:
   a) Providing professional consultations.
   b) Attending mediations, arbitrations, depositions, trials, or any event related to the dispute resolution and litigation.

3-5.1.8.1 Compensation for Mandatory Assistance.

1. The City will reimburse you for reasonable fees and expenses incurred by you for any required assistance rendered in accordance with 3-5.1.8, "Mandatory Assistance" as Extra Work.
2. The Engineer will determine whether these fees and expenses were necessary due to your conduct or failure to act.
3. If the Engineer determines that the basis of the dispute or litigation in which these fees and expenses were incurred were the result of your conduct or your failure to act in part or in whole, you shall reimburse the City for any payments made for these fees and expenses.
4. Reimbursement may be through any legal means necessary, including the City's withholding of your payment.

3-5.2.3 Selection of Mediator. To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. A single mediator, knowledgeable in construction aspects and acceptable to both parties, shall be used to mediate the dispute.
2. To initiate mediation, the initiating party shall serve a Request for Mediation at the American Arbitration Association (AAA) on the opposing party.
3. If AAA is used, the initiating party shall concurrently file with AAA a "Request for Mediation" along with the appropriate fees, a copy of requested mediators marked in preference order, and a preference for available dates.

4. If AAA is selected to coordinate the mediation (Administrator), within 10 Working Days from the receipt of the initiating party's Request for Mediation, the opposing party shall file the following:

   a) A copy of the list of the preferred mediators listed in preference order after striking any mediators to which they have any objection.

   b) A preference for available dates.

   c) Appropriate fees.

5. If the parties cannot agree on a mediator, then each party shall select a mediator and those mediators shall select the neutral third party to mediate the matter.

3-5.3 **Forum of Litigation.** To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. It is the express intention that all legal actions and proceedings related to the Contract or Agreement with the City or to any rights or any relationship between the parties arising therefrom shall be solely and exclusively initiated and maintained in courts of the State of California for the County of San Diego.

SECTION 4 - CONTROL OF MATERIALS

4-1.3.1 **General.** To the "WHITEBOOK", ADD the following:

1. Steel pipe in sizes larger than 18 inches shall require inspection at the source of production.

2. City lab staff or a qualified inspection agency approved by the Engineer shall witness all welding, lining, coating, and testing. You shall incur additional inspection costs outlined in 4-1.3.3, "Inspection of Items Not Locally Produced".

3. All parts of production (including but not limited to product fabrication, welding, testing, lining, and coating of straight pieces and specials) shall be performed or produced in the United States.

4. Welding and all testing shall be performed by certified welders and testing staff with credentials traceable in the United States.

4-1.3.2 **Inspection by the Agency**. To the "GREENBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. The City will provide inspection and testing laboratory services within the continental United States within a 200-mile radius of the geographical limits of the City.

4-1.3.3 **Inspection of Items Not Locally Produced**. To the "WHITEBOOK", DELETE in its entirety.

ADD:

4-1.3.3 **Inspection of Items Not Locally Produced**. To the "GREENBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. When you intend to purchase materials, fabricated products, or equipment from sources located more than 200 miles (321.9 km) outside the geographical limits of the City, City Lab staff or a qualified inspection agency approved by the Engineer, shall be engaged at your expense to inspect the materials, equipment, or process.

2. This approval shall be obtained before producing any material or equipment. City Lab staff or inspector shall evaluate the materials for conformance with the requirements of the Plans and Specifications. You shall forward reports required by the Engineer. No materials or equipment shall be shipped nor shall any processing, fabrication or treatment of such materials be done without proper inspection by City Lab staff or the approved agent. Approval by said agent shall not relieve you of responsibility for complying with the requirements of the Contract Documents.

3. The Engineer may elect City Lab staff to perform inspection of an out-of-town manufacturer. You shall incur additional inspection costs of the Engineer including lodging, meals, and incidental expenses based on Federal Per Diem Rates, along with travel and car rental expenses. If the manufacturing plant operates a double shift, a double shift shall be figured in the inspection costs.

   a) At the option of the Engineer, full time inspection shall continue for the length of the manufacturing period. If the manufacturing period will exceed 3 consecutive weeks, you shall incur additional inspection expenses of the Engineer's supervisor for a trip of 2 Days to the site per month.

   b) When the Engineer elects City Lab staff to perform out-of-town inspections, the wages of staff employed by the City shall not be part of the additional inspection expenses paid by you.

   c) Federal Per Diem Rates can be determined at the location below:

      https://www.gsa.gov/portal/content/104877

4-1.3.6 **Preapproved Materials.** To the "WHITEBOOK", ADD the following:

3. You shall submit in writing a list of all products to be incorporated in the Work that are on the AML.

4-1.6 **Trade Names or Equals.** To the "WHITEBOOK", ADD the following:

12. You shall submit your list of proposed substitutions for an "equal" item **no less than 15 Working Days prior to the Proposal due date** and on the City's Product Submittal Form available at:

    http://www.sandiego.gov/publicworks/edocref/index.shtml

SECTION 5 – UTILITIES

5-6 COOPERATION. To the "GREENBOOK", ADD the following:

1. Notify SDG&E at least 10 Working Days prior to excavating within 10 feet of SDG&E Underground High Voltage Transmission Power Lines (69 KV and higher).

SECTION 6 - PROSECUTION, PROGRESS AND ACCEPTANCE OF WORK

ADD:

6-3.2.1.1 Environmental Document.

1. The City of San Diego has prepared a **Conformance Memo and Final Mitigated Negative Declaration** for **Aerated Static Pile System**, Project No. **542935**, as referenced in the Contract Appendix. You shall comply with all requirements of the **Conformance Memo** as set forth in Appendix **A**.

2. Compliance with the City's environmental document shall be included in the Contract Price, unless separate bid items have been provided.

SECTION 7 - RESPONSIBILITIES OF THE CONTRACTOR

7-3 INSURANCE. To the "GREENBOOK", DELETE in its entirety and SUBSTITUTE with the following:

7-3 INSURANCE.

1. The insurance provisions herein shall not be construed to limit your indemnity obligations contained in the Contract.

7-3.1 Policies and Procedures.

1. You shall procure the insurance described below, at its sole cost and expense, to provide coverage against claims for loss including injuries to persons or damage to property, which may arise out of or in connection with the performance of the Work by you, your agents, representatives, officers, employees or Subcontractors.

2. Insurance coverage for property damage resulting from your operations is on a replacement cost valuation. The market value will not be accepted.

3. You shall maintain this insurance for the duration of this Contract and at all times thereafter when you are correcting, removing, or replacing Work in accordance with this Contract. Your liabilities under the Contract, e.g., your indemnity obligations, is not deemed limited to the insurance coverage required by this Contract.

4. The payment for insurance shall be included in the Contract Price as bid by you. Except as specifically agreed to by the City in writing, you are not entitled to any additional payment. Do not begin any Work under this Contract until you have provided and the City has approved all required insurance.

5. Policies of insurance shall provide that the City is entitled to 30 Days (10 Days for cancellation due to non-payment of premium) prior written notice of cancellation or non-renewal of the policy. Maintenance of specified insurance coverage is a material element of the Contract. Your failure to maintain or renew coverage or to provide evidence of renewal during the term of the Contract may be treated by the City as a material breach of the Contract.

7-3.2 Types of Insurance.

7-3.2.1 Commercial General Liability Insurance.

1. Commercial General Liability Insurance shall be written on the current version of the ISO Occurrence form CG 00 01 07 98 or an equivalent form providing coverage at least as broad.

2. The policy shall cover liability arising from premises and operations, XCU (explosions, underground, and collapse), independent contractors, products/completed operations, personal injury and advertising injury, bodily injury, property damage, and liability assumed under an insured's contract (including the tort liability of another assumed in a business contract).

3. There shall be no endorsement or modification limiting the scope of coverage for either "insured vs. insured" claims or contractual liability. You shall maintain the same or equivalent insurance for at least 10 years following completion of the Work.

4. All costs of defense shall be outside the policy limits. Policy coverage shall be in liability limits of not less than the following:

General Annual Aggregate Limit	Limits of Liability
Other than Products/Completed Operations	$2,000,000
Products/Completed Operations Aggregate Limit	$2,000,000
Personal Injury Limit	$1,000,000
Each Occurrence	$1,000,000

7-3.2.2 Commercial Automobile Liability Insurance.

1. You shall provide a policy or policies of Commercial Automobile Liability Insurance written on the current version of the ISO form CA 00 01 12 90 or later version or equivalent form providing coverage at least as broad in the amount of $1,000,000 combined single limit per accident, covering bodily

injury and property damage for owned, non-owned, and hired automobiles ("Any Auto").

2. All costs of defense shall be outside the limits of the policy.

7-3.3 **Rating Requirements.** Except for the State Compensation Insurance Fund, all insurance required by this Contract as described herein shall be carried only by responsible insurance companies with a rating of, or equivalent to, at least "A-, VI" by A.M. Best Company, that are authorized by the California Insurance Commissioner to do business in the State, and that have been approved by the City.

7-3.3.1 **Non-Admitted Carriers.** The City will accept insurance provided by non-admitted, "surplus lines" carriers only if the carrier is authorized to do business in the State and is included on the List of Approved Surplus Lines Insurers (LASLI list).

All policies of insurance carried by non-admitted carriers shall be subject to all of the requirements for policies of insurance provided by admitted carriers described herein.

7-3.4 **Evidence of Insurance.** Furnish to the City documents e.g., certificates of insurance and endorsements evidencing the insurance required herein, and furnish renewal documentation prior to expiration of this insurance. Each required document shall be signed by the insurer or a person authorized by the insurer to bind coverage on its behalf. We reserve the right to require complete, certified copies of all insurance policies required herein.

7-3.5 **Policy Endorsements.**

7-3.5.1 **Commercial General Liability Insurance.**

7-3.5.1.1 **Additional Insured.**

1. You shall provide at your expense policy endorsement written on the current version of the ISO Occurrence form CG 20 10 11 85 or an equivalent form providing coverage at least as broad.
2. To the fullest extent allowed by law e.g., California Insurance Code §11580.04, the policy shall be endorsed to include the City and its respective elected officials, officers, employees, agents, and representatives as additional insured.
3. The additional insured coverage for projects for which the Engineer's Estimate is $1,000,000 or more shall include liability arising out of:
    a) Ongoing operations performed by you or on your behalf,
    b) your products,
    c) your Work, e.g., your completed operations performed by you or on your behalf, or
    d) premises owned, leased, controlled, or used by you.

4. The additional insured coverage for projects for which the Engineer's Estimate is less than $1,000,000 shall include liability arising out of:

   a) Ongoing operations performed by you or on your behalf,

   b) your products, or

   c) premises owned, leased, controlled, or used by you.

7-3.5.1.2 **Primary and Non-Contributory Coverage.** The policy shall be endorsed to provide that the coverage with respect to operations, including the completed operations, if appropriate, of the Named Insured is primary to any insurance or self-insurance of the City and its elected officials, officers, employees, agents and representatives. Further, it shall provide that any insurance maintained by the City and its elected officials, officers, employees, agents and representatives shall be in excess of your insurance and shall not contribute to it.

7-3.5.1.3 **Project General Aggregate Limit.** The policy or policies shall be endorsed to provide a Designated Construction Project General Aggregate Limit that will apply only to the Work. Only claims payments which arise from the Work shall reduce the Designated Construction Project General Aggregate Limit. The Designated Construction Project General Aggregate Limit shall be in addition to the aggregate limit provided for the products-completed operations hazard.

7-3.5.2 **Commercial Automobile Liability Insurance.**

7-3.5.2.1 **Additional Insured.** Unless the policy or policies of Commercial Auto Liability Insurance are written on an ISO form CA 00 01 12 90 or a later version of this form or equivalent form providing coverage at least as broad, the policy shall be endorsed to include the City and its respective elected officials, officers, employees, agents, and representatives as additional insured, with respect to liability arising out of automobiles owned, leased, hired or borrowed by you or on your behalf. This endorsement is limited to the obligations permitted by California Insurance Code §11580.04.

7-3.6 **Deductibles and Self-Insured Retentions.** You shall pay for all deductibles and self-insured retentions. You shall disclose deductibles and self-insured retentions to the City at the time the evidence of insurance is provided.

7-3.7 **Reservation of Rights.** The City reserves the right, from time to time, to review your insurance coverage, limits, deductibles and self-insured retentions to determine if they are acceptable to the City. The City will reimburse you, without overhead, profit, or any other markup, for the cost of additional premium for any coverage requested by the Engineer but not required by this Contract.

7-3.8 **Notice of Changes to Insurance.** You shall notify the City 30 Days prior to any material change to the policies of insurance provided under this Contract.

7-3.9 **Excess Insurance.** Policies providing excess coverage shall follow the form of the primary policy or policies e.g., all endorsements.

7-3.10 Architects and Engineers Professional Insurance (Errors and Omissions Insurance).

1. For Contracts with required engineering services (e.g., Design-Build, preparation of engineered Traffic Control Plans (TCP), and etc) by you, you shall keep or require all of your employees or Subcontractors, who provide professional engineering services under this contract, Professional Liability coverage with a limit of $**1,000,000** per claim and $**2,000,000** annual aggregate in full force and effect.

2. You shall ensure the following:

   a) The policy retroactive date is on or before the date of commencement of the Project.

   b) The policy will be maintained in force for a period of 3 years after completion of the Project or termination of this Contract, whichever occurs last. You agree that for the time period specified above, there will be no changes or endorsements to the policy that affect the specified coverage.

3. If professional engineering services are to be provided solely by the Subcontractor, you shall:

   a) Certify this to the City in writing and

   b) Agree in writing to require the Subcontractor to procure Professional Liability coverage in accordance with the requirements set forth above.

7-4 NOT USED. To the "GREENBOOK", DELETE in its entirety and SUBSTITUTE with the following:

7-4 WORKERS' COMPENSATION INSURANCE AND EMPLOYERS LIABILITY INSURANCE.

1. In accordance with the provisions of §3700 of the California Labor Code, you shall provide at your expense Workers' Compensation Insurance and Employers Liability Insurance to protect you against all claims under applicable state workers compensation laws. The City, its elected officials, and employees will not be responsible for any claims in law or equity occasioned by your failure to comply with the requirements of this section.

2. Limits for this insurance shall be not less than the following:

Workers' Compensation	Statutory Employers Liability
Bodily Injury by Accident	$1,000,000 each accident
Bodily Injury by Disease	$1,000,000 each employee
Bodily Injury by Disease	$1,000,000 policy limit

3. By signing and returning the Contract you certify that you are aware of the provisions of §3700 of the Labor Code which requires every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the provisions of that code and you shall comply with such provisions before commencing the Work as required by §1861 of the California Labor Code.

7-4.1 **Waiver of Subrogation.** The policy or policies shall be endorsed to provide that the insurer will waive all rights of subrogation against the City and its respective elected officials, officers, employees, agents, and representatives for losses paid under the terms of the policy or policies and which arise from Work performed by the Named Insured for the City.

7-8.6 **Water Pollution Control.** To the "WHITEBOOK", ADD the following:

11. Based on a preliminary assessment by the City, this Contract is subject to **WPCP**.

7-20 **ELECTRONIC COMMUNICATION.** To the "WHITEBOOK", ADD the following:

2. Virtual Project Manager shall be used on this Contract.

7-21.1 **General.** To the "WHITEBOOK", item 3, DELETE in its entirety and SUBSTITUTE with the following:

3. During the construction phase of projects, the minimum waste management reduction goal is 90% of the inert material (a material not subject to decomposition such as concrete, asphalt, brick, rock, block, dirt, metal, glass, and etc.) and 65% of the remaining project waste. You shall provide appropriate documentation, including a Waste Management Form attached as an appendix, and evidence of recycling and reuse of materials to meet the waste reduction goals specified.

SECTION 10 – GREEN BUILDINGS AND STORM WATER MANAGEMENT

ADD:

10-3 **STORM WATER MANAGEMENT DISCHARGE CONTROL.**

1. You shall comply with Chapter 4, Article 3, Division 3 of the San Diego Municipal Code, Storm Water Management and Discharge Control, Municipal Storm Water Permit (MS4), California Regional Water Quality Control Board Order No. R9-2013-0001 (amended by R9-2015-0001 and R9-2015-0100), Storm Water Standards Manual, as amended from time to time, and any and all Best Management Practice (BMP) guidelines and pollution elimination requirements as may be established by the Enforcement Official. You warrant and certify that any and all Plans, reports, and specifications prepared for the City in accordance with this agreement shall meet all requirements of the San Diego Municipal Code and Storm Water Standards Manual. You understand that while the City will be reviewing your designs for storm water permit compliance prior to

acceptance of Design-Builder's designs, you shall also understand and agree that the City's Storm Water review process and its acceptance of your designs in no way limits the your obligations under this agreement to prepare designs that comply with all requirements of the San Diego Municipal Code and MS4 Permit.

2. You shall complete and update the Storm Water Applicability Checklist (DS-560) to confirm the project's appropriate storm water requirements. For all applicable projects, and to the maximum extent practicable, you shall incorporate and include Source Control and Low Impact Development (LID) design features or Site Design BMPs on the construction plans. Additionally, for Priority Development projects, you shall prepare a Storm Water Quality Management Plan (SWQMP) in accordance with the requirements of the Storm Water Standards Manual. You shall prepare a SWQMP Drainage Management Area Map showing all LID site design, source control and treatment control BMPs, hydromodification management plan facilities, and tabulated calculations. Include sufficient details and cross sections for construction. The Drainage Management Area Map shall be included as part of the construction Plans in addition to the Storm Water Infrastructure cover sheet. A template of the Storm Water Infrastructure cover sheet will be provided by the City.

3. You shall attend the Pre-construction meeting. If applicable, you shall inspect and confirm that the permanent BMP was installed in accordance with the details on the Plans and that the permanent BMP functions meet the requirements of the MS4 Permit. Upon notification by the Engineer, the Design-Builder Engineer of Work shall sign and stamp the Permanent BMP Self Certification on the Plans or the Permanent BMP Self Certification Form (DS-563) prior to final acceptance by the City.

4. For projects requiring soil-disturbance Work such as geotechnical borings, street coring, and potholing as component of the design, you shall complete a Minor Water Pollution Control Plan (DS-570), if applicable.

SECTION 209 – PRESSURE PIPE

209 PRESSURE PIPE. To the "WHITEBOOK", ADD the following:

2. PVC products, specifically type C900 and C905, as manufactured or distributed by J-M Manufacturing Company or JM Eagle shall not be used on the Contract for pressurized pipe.

SECTION 217 – BEDDING AND BACKFILL MATERIALS

217-2.2 **Stones, Boulders, and Broken Concrete.** To the "GREENBOOK", Table 217-2.2, DELETE in its entirety and SUBSTITUTE with the following:

TABLE 217-2.2

Zone	Zone Limits	Maximum Size (greatest dimension)	Backfill Requirements in Addition to 217-2.1
Street or Surface Zone	From ground surface to 12" (300 mm) below pavement subgrade or ground surface	2.5" (63 mm)	As required by the Plans or Special Provisions.
Street or Surface Zone Backfill of Tunnels beneath Concrete Flatwork		Sand	Sand equivalent of not less than 30.
Trench Zone	From 12" (300 mm) below pavement subgrade or ground surface to 12" (300 mm) above top of pipe or box	6" (150 mm)	
Deep Trench Zone (Trenches 3' (0.9 m) wide or wider)	From 60" (1.5 m) below finished surface to 12" (300 mm) above top of pipe or box	Rocks up to 12" (300 mm) excavated from trench may be placed as backfill	
Pipe Zone	From 12" (300 mm) above top of pipe or box to 6" (150 mm) below bottom of pipe or box exterior	2.5" (63 mm)	Sand equivalent of not less than 30 or a coefficient of permeability greater than 1-½ inches/hour (35 mm per hour).
Overexcavation	Backfill more than 6" (150 mm) below bottom of pipe or box exterior	6" (150 mm)	Sand equivalent of not less than 30 or a coefficient of permeability greater than 1-½ inches/hour (35 mm per hour). Trench backfill slurry (100-E-100) per 201-1 may also be used.

SECTION 302 – ROADWAY SURFACING

302-7.4 **Payment.** To the "WHITEBOOK", item 1, last sentence, DELETE in its entirety and SUBSTITUTE with the following:

Payment shall not be made for additional fabric for overlapped areas.

SECTION 304 –METAL FABRICATION AND CONSTRUCTION

304-5 **PAYMENT.** To the "WHITEBOOK", REVISE section "**304-5**" to "**304-6**".

EQUAL OPPORTUNITY CONTRACTING PROGRAM (EOCP) SECTION A – GENERAL REQUIREMENTS

4.1 **Nondiscrimination in Contracting Ordinance.** To the "WHITEBOOK", subsection 4.1.1, paragraph (2), sentence (1), DELETE in its entirety and SUBSTITUTE with the following:

You shall not discriminate on the basis of race, gender, gender expression, gender identity, religion, national origin, ethnicity, sexual orientation, age, or disability in the solicitation, selection, hiring, or treatment of subcontractors, vendors, or suppliers.

END OF SUPPLEMENTARY SPECIAL PROVISIONS (SSP)

SUPPLEMENTARY SPECIAL PROVISIONS

APPENDICES

APPENDIX A

CONFORMANCE MEMO AND FINAL MITIGATED NEGATIVE DECLARATION

THE CITY OF SAN DIEGO

M E M O R A N D U M

DATE: June 22, 2017

TO: Luis Campos, Associate Engineer –Environmental Services
FROM: Helene Deisher, Development Project Manager, Development Services Department, MS - 302

SUBJECT: ESD Composting System PPA, Public Project Assessment, Project No. 542935, WBS S-16053.01.02

The Development Services Department has completed its environmental and permit assessment review for the above mentioned project. The project proposes installation of a Aerated Static Pile Composting System within no more than seven acres within the Miramar Greenery. The project is located within the landfill and is part of the Greenery Expansion approved under PTS and MND No. 159323.

The review of the proposed project and supporting documentation has determined that the proposed improvements do not require a discretionary permit. The review also supported an environmental determination that the project's proposed addition of the Aerated Static Pile (ASP) method of composting to Miramar Greenery's operations is consistent with the 2009 Final MND/Initial Study for the Greenery Expansion.

If you have any questions, please contact me at (619) 446-5223 or via e-mail at HMDeisher@sandiego.gov

_____
Helene Deisher
Development Project Manager

Attachment:
1.) Cycle Issues Report No.6

cc: Project File
Reviewing Staff
Lisa Wood, Senior Planner, Environmental Services Department

Rev: HMD 11-9-16

City of San Diego
Development Services

ENTITLEMENTS DIVISION
(619) 446-5460

Project No.159323
SCH No. TBD

SUBJECT: Greenery Expansion: MAYORAL APPROVAL for a 45-acre expansion of the existing 29.46-acre Miramar Greenery. The proposed expansion would include additional windrows to accommodate increased feedstocks and associated processing equipment, such as a tub grinder, trommel and colorizer, as well as the addition of manure and grease feedstocks to composting operations. The proposed expansion would continue daily greenery facility operations, which would include the production of mulch, compost and woodchips. The project site is located wholly within the existing footprint of the Miramar Landfill within the City-leased area on the southern portion of Marine Corps Air Station Miramar, north of State Route 52, east of Interstate 805, and west of Interstate 15 at 5180 Convoy Street (APN 349-020-0200 & -0300). Applicant: City of San Diego, Environmental Services Department.

I. PROJECT DESCRIPTION: See attached Initial Study.

II. ENVIRONMENTAL SETTING: See attached Initial Study.

III. DETERMINATION:

The City of San Diego has conducted an Initial Study and determined that the proposed project will not have a significant environmental effect and the preparation of an Environmental Impact Report will not be required.

IV. DOCUMENTATION:

The attached Initial Study documents the reasons to support the above Determination.

V. MITIGATION, MONITORING AND REPORTING PROGRAM:

None required.

VI. PUBLIC REVIEW DISTRIBUTION:

Draft copies or notice of this Negative Declaration were distributed to:

Federal Government:
Commanding Officer, MCAS Miramar Air Station (13)
US Environmental Protection Agency (19)
US Fish and Wildlife Service (23)

State Government:
Caltrans Planning (31)
California Department of Fish and Game (32)
California Integrated Waste Management Board (35)
California Environmental Protection Agency (37A)
Department of Toxic Substances Control (39)
Resources Agency (43)
California Regional Water Quality Control Board (44)
State Clearinghouse (46)
California Air Resources Board (49)

County Government:
Air Pollution Control District (65)
Environmental Coordinator (68)
Department of Public Works (70)
San Diego County Water Authority (73)
Department of Environmental Health (75)

City of San Diego:
Mayor Sanders (MS 11A)
Council President Hueso (MS 10A)
Councilmember Faulconer (MS 10A)
Councilmember DeMaio (MS 10A)
Councilmember Young (MS 10A)
Councilmember Emerald (MS 10A)
Councilmember Frye (MS 10A)
Councilmember Gloria (MS 10A)
Councilmember Lightner (MS 10A)
City Attorney's Office (MS 59)
Environmental Analysis Section, Anne Jarque (MS 501)
Environmental Analysis Section, James Arnhart (MS 501)
Environmental Services Department, Lisa Wood (MS 1102A)
Water Department, Chris Gascon (MS 908A)
Local Enforcement Agency, Jacquie Adams (MS 606L)
Metropolitan Waste Water Department, Alejandro Ruiz (MS 22)
San Diego Fire Department, Mike Benoit (MS 603)
San Diego Police Department, Jerry Hara (MS 711)
Steve Fontana, Environmental Services Department (80)
Central Library (81A)
Balboa Branch Library (81B)
Tierrasanta Branch Library (81II)
University Community Branch Library (81JJ)
Real Estate Assets Department (85)
General Services (92)

Others:
SANDAG (108)
San Diego County Regional Airport Authority (110)
SDGE (114)
Sierra Club (165)
San Diego Audubon Society (167)
Mr. Jim Peugh (167A)
Environmental Health Coalition (169)
California Native Plant Society (170)
Center for Biological Diversity (176)
Endangered Habitats League (182A)
Community Planners Committee (194)
Town Council Presidents Association (197)
Community Planners Council (198)
Clairemont Mesa Planning Committee (248)
Clairemont Chamber of Commerce (249)
Clairemont Town Council (257)
Kearny Mesa Community Planning Group (265)
Marian Bear Recreation Council (267A)
Tierrasanta Community Council (462)
University City Community Planning Group (480)
University City Community Association (486)

VII. RESULTS OF PUBLIC REVIEW:

( ) No comments were received during the public input period.

( ) Comments were received but did not address the draft Negative Declaration finding or the accuracy/completeness of the Initial Study. No response is necessary. The letters are attached.

(X) Comments addressing the findings of the draft Negative Declaration and/or accuracy or completeness of the Initial Study were received during the public input period. The letters and responses follow.

Copies of the draft Negative Declaration and Initial are available in the office of the Entitlements Division for review, or for purchase at the cost of reproduction.

Anne B. Jarque, Senior Planner
Development Services Department

December 26, 2008
Date of Draft Report

February 4, 2009
Date of Final Report

Analyst: James Arnhart

Linda S Adams
Secretary for
Environmental Protection

Department of Toxic Substances Control

Maureen F Gorsen, Director
5796 Corporate Avenue
Cypress, California 90630

Arnold Schwarzenegger
Governor

January 26, 2009

Mr. James Arnhart
City of San Diego Development Services Center
1222 First Avenue, MS 501
San Diego, California 92101
DSDEAS@sandiego.gov

DRAFT MITIGATED NEGATIVE DECLARATION (ND) FOR MCAS MIRAMAR GREENERY EXPANSION (SCH# 2008121119)

Dear Mr. Arnhart:

The Department of Toxic Substances Control (DTSC) has received your submitted document for the above-mentioned project. As stated in your document: "MAYORAL APPROVAL for a 45-acre expansion of the existing 29. 46-acre Miramar Greenery. The proposed expansion would include additional windrows to accommodate increased feedstocks and associated processing equipment, such as a tub grinder, trammel and colorizer, as well as the addition of manure and grease feedstocks to composing operations. The proposed expansion would continue daily greenery facility operations, which would include the production of mulch, compost and woodchips. The project site is located wholly within the existing footprint of the Miramar Landfill within the City-leased area on the southern portion of Marine Corps Air Station Miramar, north of State Route 52, east of Interstate 805, and west of Interstate 15 at 5180 Convoy Street".

Based on the review of the submitted document DTSC has the following comments:

1) The ND should identify and determine whether current or historic uses at the project area may have resulted in any release of hazardous wastes/substances.

2) The document states that the ND would identify any known or potentially contaminated sites within the proposed project area. For all identified sites, the ND should evaluate whether conditions at the site may pose a threat to human health or the environment. Following are the databases of some of the regulatory agencies:

1. In accordance with the California Environmental Quality Act (CEQA), the City's Environmental Analysis Section (EAS) performs an Initial Study during the initial review of projects requiring discretionary approval in order to determine if the project would have the potential to result in a significant impact(s) to the environment or whether the project is exempt from further environmental review. As part of the Initial Study review process, EAS completes an Initial Study Checklist, which includes determining whether a project would result in potential impacts to human health and safety (see Mitigated Negative Declaration No. 118907, Initial Study Checklist, Section VIII, A-F).

- National Priorities List (NPL): A list maintained by the United States Environmental Protection Agency (U.S.EPA).
- EnviroStor, a database primarily used by the California Department of Toxic Substances Control, at www. Envirostor.dtsc.ca.gov.
- Resource Conservation and Recovery Information System (RCRIS): A database of RCRA facilities that is maintained by U.S. EPA.
- Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS): A database of CERCLA sites that is maintained by U.S.EPA.
- Solid Waste Information System (SWIS): A database provided by the California Integrated Waste Management Board which consists of both open as well as closed and inactive solid waste disposal facilities and transfer stations.
- Leaking Underground Storage Tanks (LUST) / Spills, Leaks, Investigations and Cleanups (SLIC): A list that is maintained by Regional Water Quality Control Boards.
- Local Counties and Cities maintain lists for hazardous substances cleanup sites and leaking underground storage tanks.
- The United States Army Corps of Engineers, 911 Wilshire Boulevard, Los Angeles, California, 90017, (213) 452-3908, maintains a list of Formerly Used Defense Sites (FUDS).

3) The ND should identify the mechanism to initiate any required investigation and/or remediation for any site that may be contaminated, and the government agency to provide appropriate regulatory oversight. If hazardous materials or wastes were stored at the site, an environmental assessment should be conducted to determine if a release has occurred. If so, further studies should be carried out to delineate the nature and extent of the contamination, and the potential threat to public health and/or the environment should be evaluated. It may be necessary to determine if an expedited response action is required to reduce existing or potential threats to public health or the environment. If no immediate threat exists, the final remedy should be implemented in compliance with state laws, regulations and policies.

The Department of Toxic Substances Control (DTSC) Envirostor, which provides a current list of hazardous wastes and substances sites, listed Naval Air Station Miramar as a Military Evaluation Site. The Miramar Landfill was not listed on the DTSC Envirostor.

A search of the County of San Diego Department of Environmental Health's Site Assessment and Mitigation (SAM) case listings (11/5/08) identified three previous case listings for the Miramar Landfill. Two cases were opened in 1989 and the third case in 1991. All three cases have since been closed, the most recent case closure occurring on September 7, 2006. No SAM cases are currently open on the Miramar Landfill.

2. No known or potentially contaminated sites were identified within the Miramar Landfill, which includes the Miramar Greenery. See Comment No. 1.

3. No hazardous materials are known to have been stored on-site, and the site is not listed as a hazardous waste and substances site (see Comments No. 1-2). Therefore, no further studies are required.

4) The project construction may require soil excavation and soil filling in certain areas. Appropriate sampling is required prior to disposal of the excavated soil. If the soil is contaminated, properly dispose of it rather than placing it in another location. Land Disposal Restrictions (LDRs) may be applicable to these soils. Also, if the project proposes to import soil to backfill the areas excavated, proper sampling should be conducted to make sure that the imported soil is free of contamination.

4. No grading or filling is proposed.

5) Human health and the environment of sensitive receptors should be protected during the construction or demolition activities. A study of the site overseen by the appropriate government agency might have to be conducted to determine if there are, have been, or will be, any releases of hazardous materials that may pose a risk to human health or the environment.

5. No construction or demolition activities are proposed. The project is an expansion of an existing greenery facility.

6) If during construction/demolition of the project, soil and/or groundwater contamination is suspected, construction/demolition in the area should cease and appropriate health and safety procedures should be implemented. If it is determined that contaminated soil and/or groundwater exist, the ND should identify how any required investigation and/or remediation will be conducted, and the appropriate government agency to provide regulatory oversight.

6. No construction or demolition activities are proposed.

7) If weed abatement occurred, onsite soils may contain herbicide residue. If so, proper investigation and remedial actions, if necessary, should be conducted at the site prior to construction of the project.

7. No weed abatement has occurred. Therefore, no risk of herbicide residue exists.

8) If it is determined that hazardous wastes are, or will be, generated by the proposed operations, the wastes must be managed in accordance with the California Hazardous Waste Control Law (California Health and Safety Code, Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (California Code of Regulations, Title 22, Division 4.5). If it is determined that hazardous wastes will be generated, the facility should also obtain a United States Environmental Protection Agency Identification Number by contacting (800) 618-6942. Certain hazardous waste treatment processes or hazardous materials, handling, storage or uses may require authorization from the local Certified Unified Program Agency (CUPA). Information about the requirement for authorization can be obtained by contacting your local CUPA.

8. Comment noted. No significant amount of hazardous waste would be generated by the proposed project. Please see Initial Study Discussion, Section IV – Public Health and Safety for additional information. The Miramar Greenery would be required to comply with all applicable local, state and federal laws.

9) DTSC can provide guidance for cleanup oversight through an Environmental Oversight Agreement (EOA) for government agencies that are not responsible parties, or a Voluntary Cleanup Agreement (VCA) for private parties. For additional information on the EOA or VCA, please see

9. Comment noted.

LINDA S. ADAMS
SECRETARY FOR ENVIRONMENTAL PROTECTION

CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD

ARNOLD SCHWARZENEGGER
GOVERNOR

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(916) 341-6035

January 16, 2008

Mr. James Arnhart, Environmental Planner
City of San Diego
Development Services Center
1222 First Avenue, MS 501
San Diego, CA 92101

Subject: SCH No. 2008121119: Proposed Initial Study/Negative Declaration for expansion of the Miramar Greenery, Solid Waste Facility Permit No. 37-AB-0003, San Diego County

Dear Mr. Arnhart:

California Integrated Waste Management Board (Board) staff has reviewed the environmental document cited above and offers the following project description, analysis and recommendations for the proposed project. If the Board's project description varies substantially from the project as understood by the Lead Agency, Board staff requests notification of any significant differences before adoption of the Negative Declaration and approval of the project.

The City of San Diego Local Enforcement Agency, acting as Lead Agency, is proposing the expansion of the existing Miramar Greenery by 45 acres, from 29.46 acres to 74.46 acres, increasing peak tonnage from 460 tons per day to 690 tons per day, adding two additional feed stocks, manure and grease and adding a tub grinder, trammel screen and colorizer.

Current and Proposed Entitlements
Miramar Greenery

	Current Entitlements	Proposed Entitlements
Facility Area	29.46 acres	74.46 acres
Days and Hours of Operation Receipt of Compostable Material	Monday thru Friday 7:00 am to 4:30 pm Saturday and Sunday 7:30 am to 4:30 pm	No change
Days and Hours of Operation Ancillary Operations	Dawn to Dusk	No change
Peak Tonnage	460 tons per day (1550 cubic yards)	690 tons per day (2325 cubic yards)
Peak Vehicle Count	NA	NA
Site Capacity	240,000 cubic yards	301,000 cubic yards

No new impacts were identified and no new mitigation measures proposed as a result of this expansion.

CIWMB COMMENTS AND QUESTIONS

For clarity and convenience, questions and comments that Board staff is seeking a specific response to will be *italicized* so the reader can more easily locate and respond to them. Board staff will also make statements that in their opinion are fact, if those statements are incorrect or unclear please notify Board staff. By the environmental document not specifically prohibiting an action or activity does not give tacit approval for the proponent to perform that action or activity.

Pile Size

10. Historically the Miramar Greenery has experienced pile fires and based on Board staff's knowledge they have generally been small and extinguished in a prompt and timely manner with a minimum of impact to the site. *Piles should be of a size and design to reduce the risk of fires through spontaneous combustion or other sources of ignition and in the unlikely occurrence of a fire or hot spot be designed for easy access by the fire department of other responders.* Board staff would like to bring Title 14 California Code of Regulations Section 17867(a)(8) to your attention:

> Section 17867(a)(8) The operator shall provide fire prevention, protection and control measures, including, but not limited to, temperature monitoring of windrows and piles, adequate water supply for fire suppression, and the isolation of potential ignition sources from combustible materials. Firelanes shall be provided to allow fire control equipment access to all operation areas.

Sampling Requirements

11. It has come to the attention of Board staff that some composters are selling compost after selecting samples for testing but before the test results have been received from the laboratory. *All composting facilities or operations that sell or give away more than 1000 cubic yards of compost per year are required to meet specific testing requirements and should not sell or give away compost until they are certain that their compost meets the standards set forth in 14CCR Section 17868.1.*

SUMMARY

While responses to our comments are not required by statue or regulation, by responding, it will increase Board staff's understanding of your project and facilitate the review of future permits submitted for concurrence by the Board.

Board staff requests copies of any subsequent environmental documents including the Report of Composting Site Information, any Addendums, copies of public notices and any Notices of Determination for this project are sent to the Permitting and LEA Support Division. Refer to 14CCR Section 15075(d) that states: "If the project requires a discretionary approval from any state agency, the local lead agency shall also, within five working days of this approval, file a copy of the notice of determination with the Office of Planning and Research [State Clearinghouse]."

10. The Report of Composting Site Information (RCSI) for the Miramar Greenery Composting Facility does not provide specific restrictions for size and design of stock piles on-site. However, the RCSI does address fire control.

Temperatures of stockpiled mulch are taken, at minimum, on a weekly basis and at a minimum of one temperature reading per quadrant to reduce possible risks of spontaneous combustion. Windrow temperatures and moisture content are monitored daily during the pathogen reduction process (minimum of 15 days) and weekly thereafter. At least one temperature reading is taken per every 150 feet of windrow. The moisture content in the active compost is maintained at 40-60 percent. Moisture content is determined by field experience, visual/hands-on examination, and verified periodically by laboratory analysis. Copies of all test results and monitoring activities are kept on-site for inspection by the Local Enforcement Agency (LEA) and other regulatory agencies. Additional process and end-product monitoring is carried out in compliance with California Integrated Waste Management Board (CIWMB) requirements, and as requested by the LEA.

In addition, all employees are trained in safety procedures. Fire prevention for equipment and vehicles is provided by frequent and daily removal of debris and dust from under carriages and engine compartments, checking for and repairing oil and fuel leaks. Portable fire extinguishers are also provided for equipment. The operation has two 3,800-gallon water trucks and access to a 5,000-gallon water tanker and two 10,000-gallon water tanks. Minimum 10-foot wide fire lanes are maintained between the windrows and around the stockpiles for fire access. Bulldozers and loaders are also available for fire control. All landfill gas wells and piping on the facility are clearly delineated and protected as necessary.

The Miramar Greenery is required to comply with California Code of Regulations (CCR), Title 14, Section 17867(a)(8) and all other applicable code sections. Based upon the RSCI, the Miramar Greenery has provided standardized daily procedures to adequately meet CCR, Title 14 regulation requirements. Failure to implement these procedures would result in enforcement action by the LEA and other applicable regulatory agencies.

12. If the environmental document is adopted during a public hearing, Board staff request ten days advance notice of this hearing. If the document is adopted without a public hearing, Board staff requests ten days advance notification of the date of the adoption and project approval by the decision-making body. Board staff also requests ten days advance notification of the time, date and location of any hearings conducted pursuant to AB 1497.

If you have any questions regarding these comments, please contact me at 916.341.6728 or email me at rseamans@ciwmb.ca.gov.

Sincerely,

Raymond M. Seamans
Waste Compliance and Mitigation Program
Permitting and LEA Support Division
South Branch Permitting
California Integrated Waste Management Board

cc: Lillian Conroe, Supervisor
William Marciniak
Waste Compliance and Mitigation Program
Permitting and LEA Support Division
South Branch Permitting, Region 4
California Integrated Waste Management Board

Susan Markie, Branch Manager
Waste Compliance and Mitigation Program
Permitting and LEA Support Division
South Branch Permitting
California Integrated Waste Management Board

Bill Prinz, Program Manager
City of San Diego
Development Services Department
1010 Second Avenue, Suite 600 MS 606L
San Diego CA 92101-4998

11. All compost is tested and analyzed prior to sale. The Miramar Greenery is required to comply with CCR, Title 14 regulation requirements. Failure to implement these procedures would result in enforcement action by the LEA and other applicable regulatory agencies.

12. Comment noted. The City of San Diego's Environmental Services Department will provide 10-day advance notification of any hearings or adoption and project approval by the decision-making body (i.e. Mayor), as requested.

Arnhart, James

From: Alzaga CIV Myrna P [myrna.alzaga@usmc.mil]
Sent: Monday, January 26, 2009 9:15 AM
To: DSD EAS
Cc: Moog CIV William C; Hall LtCol Brinley M III; Wood, Lisa; Jarman CIV Virginia B
Subject: Miramar landfill Compost Facility Project No. 159323
Signed By: There are problems with the signature. Click the signature button for details.

Follow Up Flag: Follow up
Flag Status: Blue

Attachments: Comment Matrix Miramar landfill Proj. No. 159323.doc


Comment Matrix Miramar landfil...

Good morning! Attached is the matrix for MCAS Miramar's comments on the Negative Declaration-CEQA study on the Miramar Land fill-45 acre expansion of the existing 29.46 acre Miramar Greenery. Please return this matrix with your responses on each comment.

Thank you for working with us.

Respectfully,
Myrna P. Alzaga
Director, Program Support Division
Environmental Management Department
MCAS Miramar
PO Box 452001, Bldg 6022
San Diego, Ca. 92145-2001
Work: (858) 577-6115
FAX: (858) 577-4200
E-Mail: myrna.alzaga@usmc.mil

COMMENT MATRIX
CEQA NEGATIVE DECLARATION 13JAN2009

	#	Page	Section/ Line	Reviewer	Comments for Formal Transmittal	
13.	1.	General		CP&L	The proposed project is consistent with Air Installation Compatible Use Zone (AICUZ) noise and safety compatibility guidelines if the following AICUZ recommendations are addressed and incorporated by the project proponent: 1) hearing protection devices should be worn by employees at all times; 2) under no circumstances are residential buildings permitted; and 3) activities at the site should not produce smoke, glare, or involve explosives.	
14.	2.	General		CP&L	The site is located directly south of the main runway and no man-made structures or natural growth should penetrate the Federal Aviation Administration (FAA) Part 77 Inner Horizontal Surface and/or any Terminal Instrument Procedures (TERPS) Surfaces.	
15	3.	General		CP&L	This location will experience noise impacts from both fixed- and rotary-wing operations on a routine basis. Employees will routinely see and hear military aircraft and experience varying degrees of noise and vibration. Consequently, we are recommending full disclosure of noise and visual impacts to all initial and subsequent lessees or other potential occupants.	
16.	4.	2	VI	Counsel	PUBLIC REVIEW DISTRIBUTION SECTION. "Commanding General," MCAS Miramar should be changed to "Commanding Officer," MCAS Miramar.	
	5.					
	6.					
	7.					
	8.					
	9.					
	10.					
	11.					
	12.					

Page 1 of 2

13. Employees are required to wear appropriate hearing protection devices for daily operations and noises generated by aircraft. No residential buildings are proposed. No lighting, reflective surfaces, explosives or smoke-producing operations are proposed or would occur as a result of project implementation.

14. No man-made structures or landscaping are proposed.

15. No significant increase in ambient noise levels would occur as a result of project implementation. Existing noise conditions would continue to remain the same. In addition, employees are required to wear appropriate hearing protection devices for daily operations and noises generated by aircraft.

The project would not result in any visual impacts, as it does not propose any structures or buildings and is located within the interior of the Miramar Landfill, which is not readily visible from any public viewing areas or highways.

16. Comment noted. The Negative Declaration has been revised accordingly.

City of San Diego
Development Services Department
ENTITLEMENTS DIVISION
1222 First Avenue, Mail Station 501
San Diego, CA 92101
(619) 446-5460

INITIAL STUDY
Project No. 159323

SUBJECT: Greenery Expansion: MAYORAL APPROVAL for a 45-acre expansion of the existing 29.46-acre Miramar Greenery. The proposed expansion would include additional windrows to accommodate increased feedstocks and associated processing equipment, such as a tub grinder, trommel and colorizer, as well as the addition of manure and grease feedstocks to composting operations. The proposed expansion would continue daily greenery facility operations, which would include the production of mulch, compost and woodchips. The project site is located wholly within the existing footprint of the Miramar Landfill within the City-leased area on the southern portion of Marine Corps Air Station Miramar, north of State Route 52, east of Interstate 805, and west of Interstate 15 at 5180 Convoy Street (APN 349-020-0200 & -0300). Applicant: City of San Diego, Environmental Services Department.

I. HISTORY AND PROJECT DESCRIPTION:

General

The Miramar Landfill began operating in 1959 prior to the adoption of the California Environmental Quality Act (CEQA) in 1970. Since the 1970s numerous environmental documents of varying scope of work have been prepared and certified for the landfill as the landfill has grown and included new operations and facilities. The City of San Diego entered into a lease agreement with the United States Navy in 1959 for the use of Navy-owned land at Naval Air Station (NAS) Miramar for the purpose of operating a solid waste landfill and supporting activities including a public recycling center, household hazardous waste transfer facility, maintenance facility, native plant nursery, the Miramar Greenery Composting Facility (Miramar Greenery), and other related uses. The lease agreement has since been modified over the years with the approval of various permits for new and expanded facilities. The United States Marine Corps has since taken over operations at NAS Miramar, which has been renamed Marine Corps Air Station (MCAS) Miramar. The Miramar Landfill and Miramar Greenery are operated by the City's Environmental Services Department (ESD) although the City's Solid Waste Local Enforcement Agency (LEA), which issues Solid Waste Facility Permits (SWFPs), is considered to be the lead agency for this project.

Miramar General Development Plan

In 1991, environmental analysis began for the currently adopted Miramar Landfill General Development Plan (GDP). The Miramar Landfill GDP is a comprehensive master plan for the future development of the landfill. The purpose of the GDP is to outline those projects which the City might desire to site on Air Station property, in response to the Navy's request at that time. The primary objective of the GDP is to site various projects of ESD and the Metropolitan Wastewater Department (MWWD), which would help the City to meet

would help the City to meet state and federal mandates, maximize the life of the landfill, enhance current landfill operations, and facilitate reclamation of landfill areas.

In 1993, the City completed the Miramar GDP (final printing in September 1994) for the continuance of landfilling operations and the development of new integrated waste management operations at the Miramar Landfill. The GDP was generated in response to changes in local and state laws regarding landfill operating procedures, recycling, and diversion of materials from landfills (i.e. Assembly Bill 939). The GDP includes specific program elements to be implemented in phases in order to achieve the goals for development of Public Facilities, Services, safety, solid waste processing, recycling, resource recovery, and landfill disposal. Thus, the GDP serves as a comprehensive master plan for future development and operation of existing solid waste facilities and siting for new waste and biosolids processing facilities within the Miramar Landfill footprint.

Because the Miramar Landfill is operated by the City of San Diego on federal land though a lease agreement, a state/federal, CEQA/National Environmental Policy Act (NEPA) environmental review for the GDP was required. On August 24, 1994, the City approved the Miramar Landfill General Development Plan/Fiesta Island Replacement Project/Northern Sludge Processing Facility/West Miramar Landfill: Overburden Disposal. Programmatic Environmental Impact Statement (EIS)/Master Environmental Impact Report (EIR) – LDR No. 91-0653. The PEIS/MEIR analyzed the potential overall impacts of the implementation of the GDP and the project-specific impacts of several elements of the plan. The Greenery Facility was discussed in the PEIS/MEIR and related documents as follows:

Greenery Facility – In 1994, the GDP PEIS/MEIR analyzed the expansion of the Greens/Wood Waste Recycling Facility at a programmatic level and envisioned both a mulching and composting operation. In 1999, a Negative Declaration (LDR 99-0431) was issued for project level analysis of the addition of composting operations. The Negative Declaration identified the project area as housing an on-going greenery facility consistent with the objectives and elements of the Miramar GDP.

Miramar Greenery

Since 1986, ESD has operated an organic greens material, mulching program at the City-leased Miramar Landfill. This program involves the diversion of incoming greens material (i.e. grass cutting, tree trimmings) from landfill disposal and processing of the trimmings through a tub grinder into chipped mulch. The City uses the mulched project in City Parks, public right-of-ways, landfill revegetation efforts, and erosion control projects. Mulch is also available to the public for various uses at no cost. Over the years, the mulching facility has experienced increased volume of green materials, particularly with the initiation of the City's curbside greens collection program in 1989 and subsequent incremental expansions, as well as growth and urbanization in the City and has undergone several expansions to its current size of 29.46 acres in order to accommodate the processing of increased volumes of greens materials.

With the expansion of curbside greens collection program Citywide and increased growth patterns in the City of San Diego, the facility was expected to accept an even greater volume of greens materials. In anticipation of this increased volume coupled with the limited demand for a raw, unscreened mulch product, and the need to avoid potential health and safety hazards associated with stockpiled organic materials, ESD began a pilot greenery program with concurrence of the LEA in November 1997. In addition to the previous on-going chipping and grinding operation, the pilot program began the processing of greens

processing of greens materials through a trommel screen and sorting station to remove inorganics to produce a finer product. The pilot program also included windrowing of the processed materials and a stronger marketing effort to the public.

As previously described, in 1999 a Negative Declaration (LDR 99-0431) was issued for the addition of composting operations at the Miramar Greenery mulching and chipping facility. The project received Mayoral approval for the conversion of the on-going organic greens material mulching program into a composting operation.

Project Description

The project proposes a 45-acre expansion of the Miramar Greenery Composting Facility footprint from approximately 29.46 acres to approximately 74.46 acres. The project would also include the addition of manure and grease feedstocks to composting operations at the facility. These feedstocks, because of their physical nature (no grinding required), would be added directly to prepared ground mulch, mixed well, and then capped with clean mulch to serve as a barrier, similar to how food waste is processed.

The Miramar Greenery diverts 100,000 tons (or more) of source-separated green material, wood, drywall, food scraps, animal bedding and paper per year from the Miramar Landfill. The expansion of this facility would allow the City to divert additional amounts of organic waste from disposal to the landfill. The Miramar Greenery primarily serves organic waste generators in the City of San Diego, although loads from other jurisdictions are also accepted.

The existing 29.46-acre facility has a daily peak loading of 460 tons per day with a daily peak of approximately 1,550 cubic yards per day. The proposed expansion would increase the daily peak loading to 690 tons per day and increase the daily peak to approximately 2,325 cubic yards per day. The site capacity of the Miramar Greenery would also increase from approximately 240,000 cubic yards to 301,000 cubic yards. Since the Miramar Greenery accepts primarily source-separated feedstocks, the facility is anticipated to achieve greater than a 95 percent diversion rate.

All facility daily operations would continue as normal. There are 29 windrows existing within the Miramar Greenery, one horizontal grinder and one trommel screen. The facility contains separate areas for the purposes of loading and unloading of greens materials and storage areas for mulch, stockpiled mulch, compost, food waste compost and both regular and colored wood chips. The proposed Miramar Greenery expansion is expected to increase the amount of windrows on-site to between 55-65 windrows. Additional mechanical equipment would include a tub grinder, trommel screen and colorizer for wood chips. The expanded site would provide a loading and unloading area for City greens materials, an equipment yard, and separate storage areas for wood waste stockpiling for cogeneration operations within the landfill, ground woodchips, oversize wood, compost and mulch.

Generally, the intake area is expected to have one to three days worth or more of materials, or about 2,000 to 6,000 cubic yards at maximum design capacity. The post grind area is expected to store materials for 60 to 90 days or more, averaging about 180,000 cubic yards of material. Capacity of the windrows area would provide for more than 60,000 cubic yards. There are expected to be about 20,000 cubic yards of finished compost at any time, and 10,000 cubic yards or more of finished mulch.

II. ENVIRONMENTAL SETTING:

The project site would be located within the footprint of the existing Miramar Landfill (see Figure 1, Location Map) at 5180 Convoy Street. The 1,540-acre Miramar Landfill is located near the geographical center of the City of San Diego within the Southern California coastal plain, and is bounded on the west by Interstate 805; on the south by State Route 52; on the east by the Miramar Mounds Natural Landmark, private property and State Route 163; and to the north by MCAS proper. The landfill is accessible from the south via Convoy Street.

The City's Miramar Landfill leasehold is comprised of four primary areas: North Miramar Landfill, South Miramar Landfill, West Miramar Landfill (Phase I and Phase II), and the entrance road area (see Figure 2, Miramar Landfill General Development Plan). These four areas are collectively known as the Miramar Landfill. The existing Miramar Greenery is located within the active portion of the Miramar Landfill, identified as West Miramar Landfill (Phase I). The proposed project site for the Miramar Greenery expansion would be located immediately east of the existing 29.46-acre greenery mulching and composting facility.

The 45-acre expansion site is irregular in shape. The topography of the site slopes from north to south across a relatively flat pad area. Elevations across the site range from approximately 460 feet above mean sea level (AMSL) to approximately 400 feet AMSL. No structures or buildings are located on the vacant land. Vegetation on-site consists of disturbed native and non-native plant species. The project site is not located within or adjacent to the City of San Diego's Multiple Habitat Planning Area (MHPA).

The Miramar Greenery primarily serves organic waste generators in the City of San Diego, although loads from other jurisdictions are also accepted. Organic waste disposed by generators located within the City represents approximately 20% (approximately 340,000 tons) of the City's annual disposed waste stream. Organic waste includes materials such as yard waste (grass clippings, yard trimmings, tree trimmings, branches, stumps, et cetera), food waste and agricultural crop residues. The Miramar Greenery accepts loads of organic waste and clean wood (dimensional lumber, pallets, cut-offs, et cetera) and limited amounts of food waste and clean gypsum wallboard. The materials are processed on-site to make compost, mulch, and woodchips. Processing typically includes grinding the incoming materials in tub grinders to reduce its size, and then either stockpiling it for distribution, or placing it in long rows called windrows where the materials decompose. Windrows may be open or covered. Processed material may also be placed into aerated static piles and/or ag bags.

There are currently 29 windrows on-site roughly 20 feet wide, eight feet tall and 100-500 feet long. The windrows are placed about 30 feet apart to allow emergency access. The operation includes two 3,800-gallon water trucks with access to a 5,000-gallon water tank and two 10,000-gallon water tanks used to water and aerate the windrows to ensure that proper decomposition occurs. When decomposition is complete, the materials are removed from the windrows and either directly stockpiled for distribution, or further processed to achieve certain product specifications and then stockpiled for distribution as finished compost or mulch.

The processing activities take place in an outdoor setting, and include a combination of manual and mechanical separation. Mechanical separation consists of separating incoming materials using a loader or excavator and specialized equipment, conveyer belts with magnets to separate metals, and screening equipment to separate material according to size.

to size. Separated materials are stored in bunkers, roll-off containers, dumpsters, or other suitable containers until being transported off-site. Materials may also be size reduced using grinding, shredding, or crushing equipment to aid in processing the materials, or ensure that recycled products meet certain specifications.

All of the feedstocks processed at the Miramar Greenery are source separated, thereby eliminating the possibilities of major contamination. On-site staff inspects the feedstock while it is unloaded. Any additional contaminants identified while processing the material through the screening equipment, or in preparation of the material for processing through the grinder, is removed manually and disposed of properly. All contaminants are stored on-site in 40 cubic yard roll-off bins that are emptied as necessary. ESD also has trained staff who visit the site on a routine basis, and are available throughout the day, on an on-call basis, to handle any hazardous wastes. The hours of operation at the facility are as follows: Monday through Friday, 7:00 a.m.- 4:30 p.m. and Saturday and Sunday, 7:30 a.m.- 4:30 p.m.

III. ENVIRONMENTAL ANALYSIS: See attached Initial Study Checklist.

IV. DISCUSSION:

During the environmental review of the project, it was determined that proposed project would not result in significant impacts to the environment in the following area(s): ***Biological Resources, Air Quality (Dust and Odor), and Public Health and Safety.***

Biological Resources

According to the City of San Diego Multiple Species Conservation Program (MSCP) Vegetation Maps, the site area for the proposed 45-acre expansion is categorized as Urban Developed. Lands categorized as Urban Developed generally do not contain sensitive biological resources. The Environmental Analysis Section (EAS) reviewed an aerial photograph of the project site to determine if the site contained any native vegetation. The site appeared to contain primarily disturbed lands. However, some native vegetation (e.g. shrubs) was observed. EAS determined the project site may have the potential to contain sensitive biological resources. Therefore, a biological resources report entitled, *City of San Diego Environmental Services Department Memorandum, Greenery Expansion, Project Number 159323, San Diego, CA* (September 18, 2008) was prepared by Burton Ewert, City Biologist, on behalf of ESD.

According to the biological resources report, the project site has been extremely disturbed as a result of the site currently being used as an active site for refuse disposal. Minimal vegetation was observed during the project biologist's field survey. Vegetation that was observed on-site consisted of native and non-native plant species (i.e. Lemonade berry, California sagebrush, Russian thistle, Prickly sow thistle). No sensitive plant or animal species were identified on-site, and no vernal pools or mima mound complexes were identified within the project area. Due to current landfill operations, it is highly unlikely any sensitive plant or animal species would occur on-site.

A stand of Coastal Sage Scrub is located east of the project site. Several male and female coastal California gnatcatchers are known to occupy this area for foraging. The coastal California gnatcatcher is a covered species under the MSCP and is listed as Federally Threatened and a State Species of Special Concern. MSCP-covered species are those

species included in the Incidental Take Authorization (ITA) issued to the City by the federal or state government as part of the City's MSCP Subarea Plan. Per the City's ITA, coastal California gnatcatchers are considered to be adequately conserved within the City of San Diego Multiple Species Conservation Program's Multi-Habitat Planning Area (MHPA). The project site is not located within or adjacent to the MHPA, and would not impact MHPA lands containing coastal California gnatcatcher. Therefore, the project would not result in a significant impact to any sensitive animal species. No mitigation is required.

Air Quality (Dust and Odor)

A. Dust

Potential dust emissions from the Miramar Greenery facility are a result of handling, grinding, screening and windrow turning of the green materials, and road traffic. The primary means to control dust during these operations are two 3,800-gallon water trucks. The facility access roads are watered daily by the water trucks to minimize dust emissions. The windrows are also watered to maintain moisture at approximately 50%, and the incoming green materials are ground as quickly as possible, usually within 48 hours, to minimize drying. Operation of the facility over the years has shown that processing green materials above 40% moisture would not result in significant dust emissions. In the event that it becomes necessary to screen dry material, the material would be moisture conditioned prior to grinding/screening. The current dust control methods would continue to be used for the existing facility and the proposed expansion of the Miramar Greenery.

B. Odor

The proposed expansion would result in an increased volume of compostable organic materials received and processed at the Miramar Greenery facility, and the possible receipt of feedstocks, such as manure and grease, which may increase odor impacts to the local community should operational and/or design changes at the facility not be implemented. The Miramar Greenery has developed and maintains a site-specific Odor Impact Minimization Plan (OIMP), which is the vehicle the LEA uses to assure the operator minimizes potential odor impacts. Per the California Code of Regulations (CCR), Title 14, Section 17863.4(d), the OIMP is reviewed annually to determine if any revisions to the plan are necessary to address odor at the facility. The OIMP contains site-specific management practices and standard operating procedures for minimizing odors resulting from the Miramar Greenery's standard operations. The existing OIMP would continue to be implemented for both the existing facility and the proposed expansion.

In addition to the OIMP, the LEA conducts site inspections, including odor inspections, and responds to any odor complaints from the public that may occur. The LEA may require changes to operations to reduce odor levels to acceptable levels. If the proposed expansion of the Miramar Greenery facility and receipt of feedstocks results in an increase in complaints, the LEA may require more aggressive odor minimization procedures or technologies to abate odor impacts to the community. Employees at the facility are also trained in odor management procedures.

The proposed 45-acre expansion of the facility may result in an increase in existing odor levels. However, due to the implementation of the Miramar Greenery's OIMP site-specific management practices and standard operating procedures, the LEA's odor

odor inspections and ability to implement more aggressive odor minimization procedures and/or technologies, and the location of the facility one-mile from the nearest surrounding residential development, any increase in odor levels is not anticipated to be significant.

Public Health and Safety

All compost materials on-site are tested regularly in accordance with the requirements of the CCR, Title14, Section 17868. Additional monitoring is provided in compliance with California Integrated Waste Management Board's (CIWMB) requirements, as required by the LEA. Windrow temperatures and moisture content are monitored daily during the pathogen reduction process and weekly after that period. At least one temperature reading is taken per every 150 feet of length of windrow. All active compost is maintained under aerobic conditions for at least 15 consecutive days. A minimum stabilized temperature of not less than 55 degrees Celsius/131 degrees Fahrenheit would be maintained. At least one composite sample for every 5,000 cubic yards of compost produced would be taken and analyzed to ensure it meets the maximum acceptable metal concentration limits specified in CCR Title 14, Section 17868.2, and pathogen reduction requirements specified in CCR Title 14, Section 17868.3.

In accordance with CCR Title 14, Section §17867(a)(4), which requires that product that has undergone pathogen reduction not be contaminated with material that has not, equipment operators have been, and will continue to be, instructed to ensure that equipment used to handle finished product is free of any residue of raw product. In addition, separate areas of the facility are dedicated for the incoming product and the storage of the finished product and the finished product is stored up slope from the raw product.

Vectors, such as birds, rodents and insects, have not posed significant problems at the Miramar Greenery facility because most of the facility's feedstocks are not highly attractive to these types of vectors. Special procedures have been implemented to reduce vector attraction to the windrows containing food scraps, which include a dedicated receiving area, and rapid incorporation of the food scraps with a stockpiled bulking agent. In addition, windrows containing food scraps are blanketed with clean green material. All surrounding areas are kept clean to avoid creating a food source. Manure feedstock would be added directly to prepared ground mulch, mixed well, and then capped with clean mulch to serve as a barrier to outside vectors. In addition to standard operating procedures, bird populations at the Miramar Landfill and Miramar Greenery facility have been minimized due to the related risk to flight operations at MCAS Miramar. If a vector problem develops on-site, additional control measures may include bait traps, biocontrols such as release of fly predators, live traps, adjustments in moisture content and/or turning frequency, or other measures, as approved by the LEA.

Based upon current methods of pathogen and vector reduction, compliance with the applicable CCR, CFR and LEA regulations, and the location of the Miramar Greenery and proposed expansion one-mile from the nearest surrounding residential development, no impacts to public health and safety would occur as a result of the proposed expansion.

V. RECOMMENDATION:

On the basis of this initial evaluation:

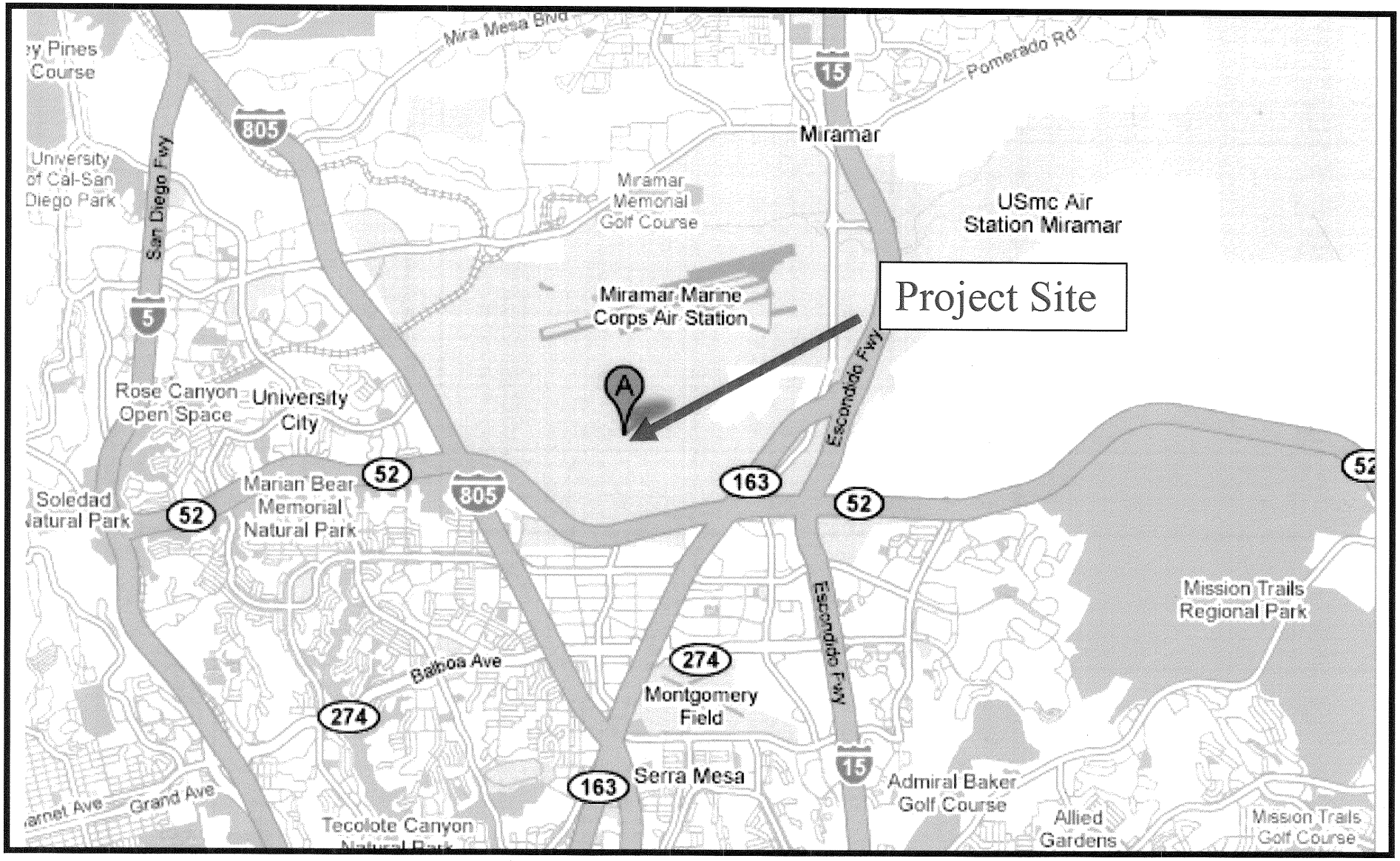
_X_ The proposed project would not have a significant effect on the environment, and a NEGATIVE DECLARATION should be prepared.

___ Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described in Section IV above have been added to the project. A MITIGATED NEGATIVE DECLARATION should be prepared.

___ The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT should be required.

PROJECT ANALYST: Arnhart

Attachments: Location Map
Site Plan
Initial Study Checklist

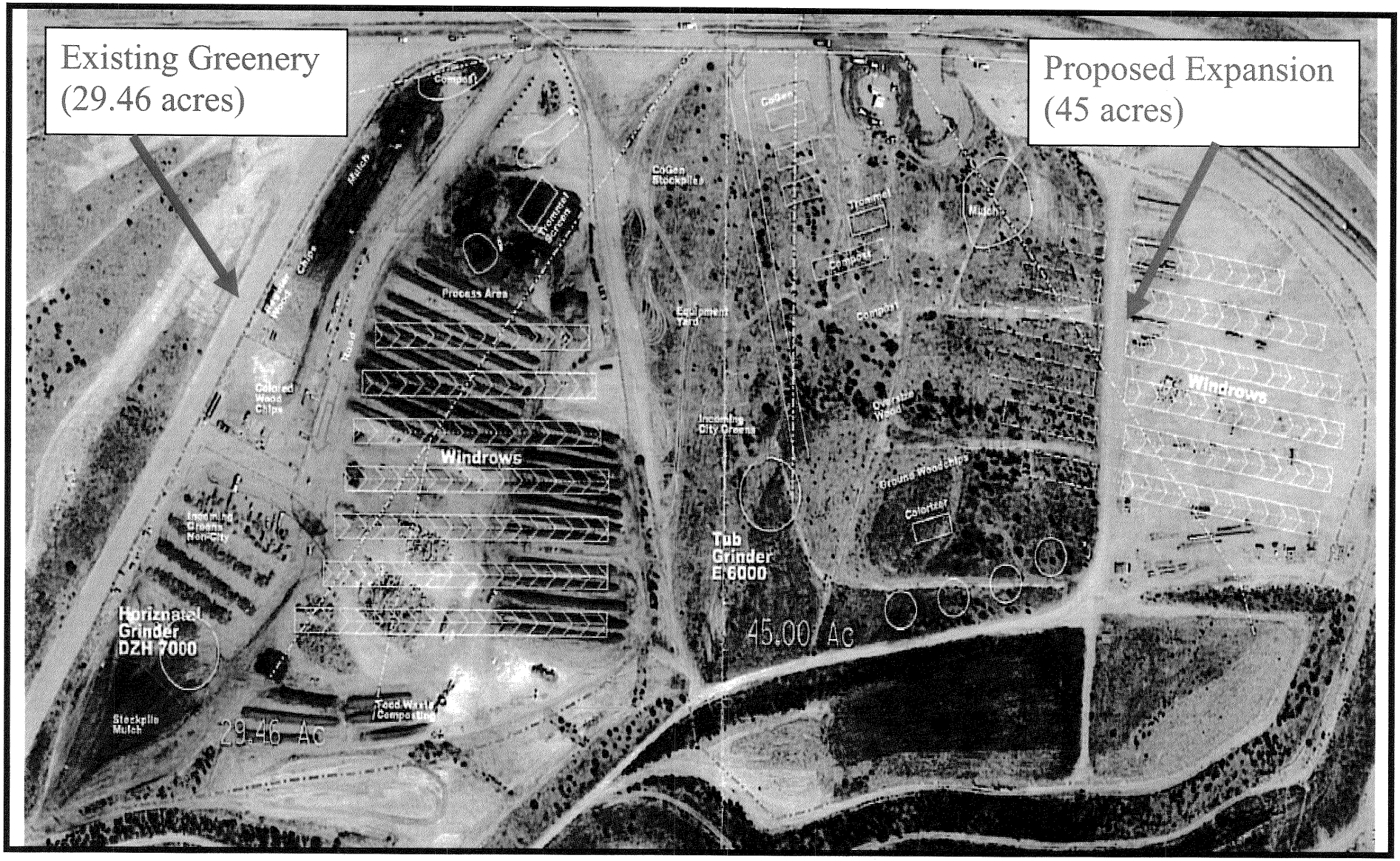


Location Map

Greenery Expansion Project No. 159323

City of San Diego – Development Services Department

FIGURE 1



Site Plan

Greenery Expansion Project No. 159323

City of San Diego – Development Services Department

FIGURE

2

INITIAL STUDY CHECKLIST

Date: 7/28/08

Project No. : 159323

Name of Project: Greenery Expansion

III. ENVIRONMENTAL ANALYSIS:

The purpose of the Initial Study is to identify the potential for significant environmental impacts which could be associated with a project pursuant to Section 15063 of the State CEQA Guidelines. In addition, the Initial Study provides the lead agency with information which forms the basis for deciding whether to prepare an Environmental Impact Report, Negative Declaration or Mitigated Negative Declaration. This Checklist provides a means to facilitate early environmental assessment. However, subsequent to this preliminary review, modifications to the project may mitigate adverse impacts. All answers of "yes" and "maybe" indicate that there is a potential for significant environmental impacts and these determinations are explained in Section IV of the Initial Study.

		YES	MAYBE	NO
I.	AESTHETICS / NEIGHBORHOOD CHARACTER – Will the proposal result in:			
A.	The obstruction of any vista or scenic view from a public viewing area? *The project would not result in an obstruction to a public view corridor, as no designated public corridors have been identified on or adjacent to the site.*	__	__	X
B.	The creation of a negative aesthetic site or project? *The project would be consistent with the existing landfill uses on-site, and would not result in a negative aesthetic site or project.*	__	__	X
C.	Project bulk, scale, materials, or style which would be incompatible with surrounding development? *The proposed project is located within the existing Miramar Landfill, and would be consistent with the existing composting facility in terms of bulk, scale, materials, and style.*	__	__	X
D.	Substantial alteration to the existing character of the area? *The project would be an expansion of an existing use, and would not result in a substantial alteration to the character of the existing*	__	__	X

		YES	MAYBE	NO
	landfill and/or composting facility.			
E.	The loss of any distinctive or landmark tree(s), or a stand of mature trees? *No distinctive or landmark tree(s), or stand of mature trees, exist on-site. Therefore, no such loss would occur as a result of project implementation.*	___	___	X
F.	Substantial change in topography or ground surface relief features? *The project would not require any grading, and would not substantially change the topography and/or ground surface relief features of the proposed site within the Miramar Landfill.*	___	___	X
G.	The loss, covering or modification of any unique geologic or physical features such as a natural canyon, sandstone bluff, rock outcrop, or hillside with a slope in excess of 25 percent? *No unique geologic or physical features are located on-site.*	___	___	X
H.	Substantial light or glare? *The project would not produce any lighting, and would not use any type of reflective surfaces.*	___	___	X
I.	Substantial shading of other properties? *The project would not result in a substantial amount of shading. The project site is located within the existing footprint of the Miramar Landfill. No other properties are located in close proximity to the location of the proposed project site. Therefore, the project would not have the potential to result in substantial shading of other properties.*	___	___	X
II.	AGRICULTURE RESOURCES / NATURAL RESOURCES / MINERAL RESOURCES – Would the proposal result in:			
A.	The loss of availability of a known mineral resource (e.g. sand or gravel) that would be of value to the region and the residents of the state? *The project site is located within the existing footprint of the Miramar Landfill. No known mineral resources are known, or are anticipated, to be present on-site.*	___	___	X
B.	The conversion of agricultural land to nonagricultural use or impairment of the agricultural productivity of agricultural land? *The project site is located within the existing footprint of the*	___	___	X

		YES	MAYBE	NO
	Miramar Landfill. The site contains no agricultural land or agricultural uses.			
III.	AIR QUALITY – Would the proposal?			
A.	Conflict with or obstruct implementation of the applicable air quality plan? *According to the Air Resource Board's February 11, 2008 "Recommendations of the Economic and Technology Advancement Advisory Committee Final Report", composting operations are a mitigation factor reducing emissions compared with those of traditional landfills. Thus, the project would assist with air quality plan attainment.*	___	___	X
B.	Violate any air quality standard or contribute substantially to an existing or projected air quality violation? *Existing dust and odor control methods would continue to be maintained. See III-A.*	___	___	X
C.	Expose sensitive receptors to substantial pollution concentrations? *The project would provide dust suppression through the use of reclaimed water. Dust suppression combined with a one-mile separation of the site from residential development (including an intervening freeway) and the location of the site six miles from the nearest school, would prevent exposure of sensitive receptors to substantial pollution concentrations.*	___	___	X
D.	Create objectionable odors affecting a substantial number of people? *The existing Odor Impact Management Plan (OIMP) for the Miramar Greenery would continue to be implemented. The Local Enforcement Agency (LEA) conducts inspections, including odor inspections, and addresses any odor complaints from the public that may occur. In general, the LEA would be responsible for determining whether or not odors produced at the Miramar Greenery resulting from composting operations are significant. The LEA may require changes to operations to reduce odor levels to acceptable levels. However, no significant change in odor production would occur as a result of the proposed expansion of the greenery compost facility. Please see Initial Study Discussion, Section IV, for additional information.*	___	___	X

		YES	MAYBE	NO
E.	Exceed 100 pounds per day of Particulate Matter 10 (dust)? *The expanded facility would produce an incremental amount of dust compared to the existing daily operations of the Miramar Landfill, but would reduce the trip distance and overall dust production levels by diverting materials from disposal operations to the composting facility. The composting facility would continue to use reclaimed water to reduce dust production on-site. To minimize dust, access roads and windrows are watered daily. Please see Initial Study Discussion, Section IV, for additional information.*	—	—	X
F.	Alter air movement in the area of the project? *No such alteration would occur as a result of project implementation.*	—	—	X
G.	Cause a substantial alteration in moisture, or temperature, or any change in climate, either locally or regionally? *Operation of the composting facility would not cause a substantial alteration in moisture, or temperature, or any change in climate, either locally or regionally. The finished product would consist of a compost material capable of helping soils retain moisture. When compost material displaces chemical fertilizers, it reduces greenhouse gas emission rates. In this regard, the expansion of the composting facility would be considered to be beneficial to the environment.*	—	—	X
IV.	BIOLOGY – Would the proposal result in?			
A.	A reduction in the number of any unique, rare, endangered, sensitive, or fully protected species of plants or animals? *The proposed site for the greenery expansion does not contain any unique, rare, endangered, sensitive, or fully protected species of plants or animals. It is not located within or adjacent to the City of San Diego Multi-Habitat Planning Area. Please see Initial Study Discussion, Section IV for additional information.*	—	—	X
B.	A substantial change in the diversity of any species or animals or plants? *See IV-A.*	—	—	X
C.	Introduction of invasive species of plants into the area? *The proposed project does not include landscaping.*	—	—	X

		YES	MAYBE	NO
D.	Interference with the movement of any resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridor? *The proposed Miramar Greenery expansion would not interfere with the movement of any resident or migratory fish, nor would it impact any wildlife corridors. See IV-A.*	—	—	X
E.	An impact to a sensitive habitat, including but not limited to streamside vegetation, aquatic, riparian, oak woodland, coastal sage scrub or chaparral? *No sensitive habitat exists on-site. See IV-A.*	—	—	X
F.	An impact to wetlands regulated under city, state and/or federal standards (including, but not limited to, coastal salt marsh, vernal pool, lagoon, coastal, etc.) through direct removal, filling, hydrological interruption or other means? *No wetlands are located within the project site where the greenery facility expansion is proposed to be located. See IV-A.*	—	—	X
G.	Conflict with the provisions of the City's Multiple Species Conservation Program (MSCP) Subarea Plan or other approved local, regional or state habitat conservation plan? *The project would not result in a conflict with the provisions of the City's MSCP Subarea Plan or any other approved local, regional or state habitat conservation plan.*	—	—	X
V.	ENERGY – Would the proposal?			
A.	Result in the use of excessive amounts of fuel or energy? *The project would require diesel fuel for the operation of the proposed equipment. However, the amount of fuel required to operate the machinery would not be considered excessive or significant.*	—	—	X
B.	Result in the use of excessive amounts of power? *No electricity would be required to operate the proposed facility. Therefore, the project would not result in the use of excessive amounts of power.*	—	—	X
VI.	GEOLOGY/SOILS – Would the proposal:			
A.	Expose people or property to geologic hazards such as earthquakes, landslides, mudslides, ground failures, or similar hazards?	—	—	X

		YES	MAYBE	NO
	According to the City of San Diego Seismic Safety Study maps, the site has Geologic Hazard Category ratings of 51 (level mesas—underlain by terrace deposits and bedrock, nominal risk) and 53 (level or sloping terrain, unfavorable geologic structure, low to moderate risk). No faults are located on-site, and a geotechnical report was not required.			
B.	Result in a substantial increase in wind or water erosion of soils, either on or off the site? *The project proposal would not result in a substantial increase in wind or water erosion of soils.*	__	__	X
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 landslides, lateral spreading, subsidence, liquefaction or collapse? *See VI-A.*	__	__	X
VII.	HISTORICAL RESOURCES – Would the proposal result in:			
A.	Alteration or destruction of a prehistoric or historic archaeological site? *The project site is located within the footprint of the existing Miramar Landfill, and has been heavily disturbed as a result of landfill operations. Based upon the level of prior site disturbance and no grading occurring as a result of project implementation, there is a low potential to impact cultural resources.*	__	__	X
B.	Adverse physical or aesthetic effects to a prehistoric or historic building, structure, object or site? *No buildings, structures or objects are located on-site. The site would not be considered historic. See VII-A.*	__	__	X
C.	Adverse physical or aesthetic effects to an architecturally significant building, structure or object? *The site for the proposed Miramar Greenery expansion is vacant and disturbed. No architecturally significant buildings, structures or objects are located on-site.*	__	__	X
D.	Any impact to existing and/or sacred uses within the potential impact area? *See VII-A.*	__	__	X

		YES	MAYBE	NO
E.	The disturbance of any human remains, including those interred outside of formal cemeteries? *See VII-A.*	___	___	X
VIII.	HUMAN HEALTH / PUBLIC SAFETY / HAZARDOUS MATERIALS- Would the proposal:			
A.	Create any known health hazard (including mental health)? *The project would not result in any type of health hazard. Pathogens potentially present in the source materials would be eliminated during the composting process. See Initial Study Discussion, Section IV, for additional information.*	___	___	X
B.	Expose people or the environment to a significant hazard through the routine transport, use or disposal of hazardous materials? *The project would not include the routine transport, use or disposal of hazardous materials. No hazardous materials are accepted at the Miramar Greenery. See Initial Study Discussion, Section IV, for additional information.*	___	___	X
C.	Create a future risk of an explosion or the release of hazardous substances (including but not limited to gas, oil, pesticides, chemicals, radiation, or explosives)? *No such impact would occur as a result of project implementation.*	___	___	X
D.	Impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan? *No such impairment/interference would occur as a result of project implementation.*	___	___	X
E.	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, create a significant hazard to the public or environment? *The Department of Toxic Substances Control (DTSC) Envirostor, which provides a current list of hazardous wastes and substances sites, listed Naval Air Station Miramar as a Military Evaluation Site. The Miramar Landfill was not listed on the DTSC Envirostor.* *A search of the County of San Diego Department of Environmental Health's Site Assessment and Mitigation (SAM) case listings (11/5/08) identified three previous case listings for the Miramar Landfill. Two cases were opened in 1989 and the third case in*	___	___	X

		YES	MAYBE	NO
	1991. All three cases have since been closed, the most recent case closure occurring on September 7, 2006. No SAM cases are currently open on the Miramar Landfill.			
F.	Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment? *See VIII-A,B,C,D and E.*	__	__	X
IX.	HYDROLOGY / WATER QUALITY – Would the proposal result in:			
A.	An increase in pollutant discharges, including downstream sedimentation, to receiving waters during or following construction? Consider water quality parameters such as temperature, dissolved oxygen, turbidity and other typical storm water pollutants. *The Miramar Greenery currently operates under the Miramar Landfill's Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit. The existing greenery facility and the proposed expansion are located on an intermediate cover that has been stabilized through the spreading and compaction of fill material to minimize differential settlement, ponding and soil liquefaction. Various Best Management Practices to minimize runoff, erosion, and groundwater have been, and will continue to, be implemented and routinely inspected by the applicable regulatory agencies.*	__	__	X
B.	An increase in impervious surfaces and associated increased runoff? *No impervious surfaces are proposed. Water introduced to the windrows at the Miramar Greenery would not exceed the absorptive capacity of the compost material, preventing any increase to surface runoff on-site. All site runoff is, and would continue to be, directed to existing detention basins south of the Miramar Greenery that are sized to contain the existing and expected runoff flows from the Miramar Greenery expansion. The project would not result in a significant increase in runoff.*	__	__	X
C.	Substantial alteration to on- and off-site drainage patterns due to changes in runoff flow rates or volumes? *The project would not substantially alter on- and/or off-site drainage patterns. Runoff flow rates and volumes would not*	__	__	X

		YES	MAYBE	NO
	significantly increase with the proposed expansion of the Miramar Greenery. See IX-B.			
D.	Discharge of identified pollutants to an already impaired water body [as listed on the Clean Water Act Section 303(d) list]? *No such impact would result from project implementation.*	___	___	X
E.	A potentially significant adverse impact on ground water quality? *Groundwater monitoring currently occurs as part of the Miramar Landfill's operations. No changes to the existing groundwater would occur as a result of project implementation.*	___	___	X
F.	Cause or contribute to an exceedance of applicable surface or groundwater receiving water quality objectives or degradation of beneficial uses? *No such result would occur as a result of project implementation.*	___	___	X
X.	LAND USE – Would the proposal result in:			
A.	A land use which is inconsistent with the adopted community plan land use designation for the site or conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over a project? *The proposed project would result in an expansion of an existing use, and would be consistent with the Marine Corps Air Station (MCAS) Miramar's adopted plans.*	___	___	X
B.	A conflict with the goals, objectives and recommendations of the community plan governing the project site? *The project site is not located within a community plan.*	___	___	X
C.	A conflict with adopted environmental plans, including applicable habitat conservation plans adopted for the purpose of avoiding or mitigating an environmental effect for the area? *The proposed project is consistent with MCAS Miramar's Natural Resources Plan.*	___	___	X
D.	Physically divide an established community? *The project site is located within the Miramar Landfill, and is not located within a community plan area. No such impact would occur as a result of project implementation.*	___	___	X

		YES	MAYBE	NO
E.	Land uses which are not compatible with aircraft accident potential as defined by an adopted Airport Land Use Compatibility Plan? *The proposed project is allowed under MCAS Miramar's adopted Airport Land Use Compatibility Plan.*	—	—	X
XI.	NOISE – Would the proposal result in:			
A.	A significant increase in the existing ambient noise levels? *The proposed project is an expansion of an existing composting facility, and would result in noise levels equivalent to the existing use. The location of the project site is well within the footprint of the Miramar Landfill, and the noise levels would be consistent with existing landfill operations, The project would not result in a significant increase in existing ambient noise levels.*	—	—	X
B.	Exposure of people to noise levels which exceed the City's adopted noise ordinance? *The project would be consistent with the Marine Corps Air Station (MCAS) Miramar's adopted plans, and would be located within the footprint of the Miramar Landfill away from surrounding land uses. No such impact would occur as a result of project implementation.*	—	—	X
C.	Exposure of people to current or future transportation noise levels which exceed standards established in the Transportation Element of the General Plan or an adopted airport Comprehensive Land Use Plan? *No such result would occur from project implementation.*	—	—	X
XII.	PALEONTOLOGICAL RESOURCES: Would the proposal impact a unique fossil resource or site or unique geologic feature? *No grading is proposed. Therefore, there is no potential to impact paleontological resources.*	—	—	X
XIII.	POPULATION AND HOUSING – Would the proposal:			
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)? *The proposed expansion of the existing compost facility would better serve the existing population and future population growth. The expansion, itself, would not result in population growth.*	—	—	X

		YES	MAYBE	NO
B.	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? *The project would not result in the displacement of any housing.*	___	___	X
C.	Alter the planned location, distribution, density or growth rate of the population of an area? *No such impact(s) would occur as a result of project implementation.*	___	___	X
XIV.	PUBLIC SERVICES – Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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:			
A.	Fire protection? *No such impact would result from project implementation.*	___	___	X
B.	Police protection? *No such impact would result from project implementation.*	___	___	X
C.	Parks or other recreational facilities? *No such impact would result from project implementation.*	___	___	X
D.	Maintenance of public facilities, including roads? *No such impact would result from project implementation.*	___	___	X
E.	Other governmental services? *No such impact would result from project implementation.*	___	___	X
XV.	RECREATIONAL RESOURCES – Would the proposal result in			
A.	Would the project 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? *Expansion of an existing composting facility within an existing landfill would not result in an increase in the use of parks and/or recreational facilities.*	___	___	X

		YES	MAYBE	NO
B.	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? *The project would not include recreational facilities, and it would not require the construction or expansion of any recreational facilities.*	___	___	X
XVI.	TRANSPORTATION/CIRCULATION – Would the proposal result in:			
A.	Traffic generation in excess of specific/community plan allocation? *The project site is not located within a specific/community plan, and there would be no increase in Average Daily Trips (ADTs) due to the expansion of the greenery compost facility. Therefore, no such impact would occur as a result of project implementation.*	___	___	X
B.	An increase in projected traffic which is substantial in relation to the existing traffic load and capacity of the street system? *Peak traffic volumes are, and would remain at, 650 trips per day. The proposed project would not result in an increase in ADTs. No such impact would occur as a result of project implementation.*	___	___	X
C.	An increased demand for off-site parking? *Loading and unloading activities would occur at the composting facility. Visitors must enter the landfill through a secured, gated entrance, pass a fee booth, and then travel a road that serves the landfill and greenery composting facility. No off-site parking would occur as a result of the proposed project.*	___	___	X
D.	Effects on existing parking? *The Miramar Landfill is a drop-off/pick-up facility. Visitors of the composting facility would enter the landfill, load and/or unload their vehicle, and then exit the facility. No public parking currently exists, and no public parking is proposed. Only loading and unloading areas would be provided.*	___	___	X
E.	Substantial impact upon existing or planned transportation systems? *No such impact would result from project implementation. See XVI-A and –B.*	___	___	X
F.	Alterations to present circulation movements including effects on existing public access to beaches, parks, or other open space areas? *The project would continue to be accessed from Convoy Street via*	___	___	X

		YES	MAYBE	NO
	California State Route 52, and would not result in a significant alteration(s) to circulation movements.			
G.	Increase in traffic hazards for motor vehicles, bicyclists or pedestrians due to a proposed, non-standard design feature (e.g., poor sight distance or driveway onto an access-restricted roadway)? *The proposed expansion would continue to be accessed via an existing entrance located on Convoy Street. No such traffic hazards would occur as a result of project implementation.*	___	___	X
H.	A conflict with adopted policies, plans or programs supporting alternative transportation models (e.g., bus turnouts, bicycle racks)? *The project proposal would not conflict with adopted policies, plans or programs supporting alternative transportation models.*	___	___	X
XVII.	UTILITIES – Would the proposal result in a need for new systems, or require substantial alterations to existing utilities, including:			
A.	Natural gas? *The existing composting facility does not currently use utilities, and the proposed expansion would not require utilities either.*	___	___	X
B.	Communications systems? *See XVII-A.*	___	___	X
C.	Water? *See XVII-A.*	___	___	X
D.	Sewer? *See XVII-A.*	___	___	X
E.	Storm water drainage? *The proposed expansion would be located within an area covered under the approved Industrial Storm Water Permit issued to the Miramar Landfill. The project would use the existing Miramar Landfill storm water drainage system, and would not result in a need for new systems, or require substantial alterations to existing utilities.*	___	___	X
F.	Solid waste disposal? *The project is an expansion of the existing Miramar Greenery facility that would divert materials from disposal at the landfill, and would process those materials for public/private uses (e.g. mulch,*	___	___	X

		YES	MAYBE	NO
	wood chips).			
XVIII	WATER CONSERVATION – Would the proposal result in:			
A.	Use of excessive amounts of water? *The proposed expansion would continue to use reclaimed water for composting operations.*	___	___	X
B.	Landscaping which is predominantly non-drought resistant vegetation? *The project does not propose landscaping.*	___	___	X
XIX.	MANDATORY FINDINGS OF SIGNIFICANCE:			
A.	Does the project have the potential to 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, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory? *No such results would occur as a result of project implementation.*	___	___	X
B.	Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one which occurs in a relatively brief, definitive period of time while long-term impacts that would endure well into the future). *The primary goal of the project is to divert compostable materials from disposal. No such results are expected to occur as a result of project implementation.*	___	___	X
C.	Does the project have impacts which are individually limited, but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect of the total of those impacts on the environment is significant). *No significant impacts were identified during the Initial Study. No such impacts are expected to occur as a result of project implementation.*	___	___	X

	YES	MAYBE	NO
D. Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly? *The proposed project would contribute to waste reduction, and would help reduce cumulative impacts associated with trash disposal. No such impacts are expected to occur as a result of project implementation.*	___	___	X

INITIAL STUDY CHECKLIST

REFERENCES

I. Aesthetics / Neighborhood Character

X City of San Diego General Plan.

__ Community Plan.

__ Local Coastal Plan.

II. Agricultural Resources / Natural Resources / Mineral Resources

X City of San Diego General Plan.

X U.S. Department of Agriculture, Soil Survey - San Diego Area, California, Part I and II, 1973.

X California Department of Conservation - Division of Mines and Geology, Mineral Land Classification.

_ Division of Mines and Geology, Special Report 153 - Significant Resources Maps.

_ Site Specific Report: _____.

III . Air

X California Clean Air Act Guidelines (Indirect Source Control Programs) 1990.

X Regional Air Quality Strategies (RAQS) - APCD.

_ Site Specific Report: _____.

IV. Biology

X City of San Diego, Multiple Species Conservation Program (MSCP), Subarea Plan, 1997

X City of San Diego, MSCP, "Vegetation Communities with Sensitive Species and Vernal Pools" maps, 1996.

X City of San Diego, MSCP, "Multiple Habitat Planning Area" maps, 1997.

__ Community Plan - Resource Element.

X California Department of Fish and Game, California Natural Diversity Database, "State and Federally-listed Endangered, Threatened, and Rare Plants of California," January 2001.

X California Department of Fish & Game, California Natural Diversity Database, "State and Federally-listed Endangered and Threatened Animals of California," January 2001.

X City of San Diego Land Development Code Biology Guidelines.

X Site Specific Report: *City of San Diego, Environmental Services Department, Memorandum, Greenery Expansion, Project Number 159323, San Diego, CA* (April 26, 2008) prepared by Burton Ewert, Environmental Services Department staff biologist.

X Site Specific Report: *City of San Diego, Environmental Services Department, Memorandum, Greenery Expansion, Project Number 159323, San Diego, CA* (September 18, 2008) prepared by Burton Ewert, Environmental Services Department staff biologist.

V. Energy

_ N/A

VI. Geology/Soils

X City of San Diego Seismic Safety Study.

X U.S. Department of Agriculture Soil Survey - San Diego Area, California, Part I and II, December 1973 and Part III, 1975.

_ Site Specific Report:_____.

VII. Historical Resources

X City of San Diego Historical Resources Guidelines.

X City of San Diego Archaeology Library.

_ Historical Resources Board List.

_ Community Historical Survey: _____.

_ Site Specific Report: _____.

VIII. Human Health / Public Safety / Hazardous Materials

X San Diego County Hazardous Materials Environmental Assessment Listing, 2008

X San Diego County Hazardous Materials Management Division

_ FAA Determination

_ State Assessment and Mitigation, Unauthorized Release Listing, Public Use Authorized 1995.

X Airport Land Use Compatibility Plan

X California Department of Toxic Substances Control Hazardous Waste and Substances Site List, 2008

_ Site Specific Report:_____.

IX. Hydrology/Water Quality

_ Flood Insurance Rate Map (FIRM).

X Federal Emergency Management Agency (FEMA), National Flood Insurance Program - Flood Boundary and Floodway Map.

X Clean Water Act Section 303(d) list, dated May 19, 1999, (http://www.swrcb.ca.gov/tmdl/303d_lists.html).

__ Site Specific Report:_____.

X. Land Use

X City of San Diego General Plan

_ Community Plan

X Miramar Landfill General Development Plan

X Airport Land Use Compatibility Plan

X City of San Diego Zoning Maps

_ FAA Determination

X Site Specific Report: *Report of Composting Site Information, Miramar Greenery Composting Facility (November 2008) prepared by the City of San Diego Environmental Services Department.*

X Site Specific Report: *Odor Impact Minimization Plan, Miramar Greenery (November 2008) prepared by the City of San Diego Environmental Services Department.*

XI. Noise

X Community Plan

_ San Diego International Airport - Lindbergh Field CNEL Maps.

_ Brown Field Airport Master Plan CNEL Maps.

_ Montgomery Field CNEL Maps.

X San Diego Association of Governments - San Diego Regional Average Weekday Traffic Volumes.

X San Diego Metropolitan Area Average Weekday Traffic Volume Maps, SANDAG.

X City of San Diego General Plan

_ Site Specific Report:_____.

XII. Paleontological Resources

X City of San Diego Paleontological Guidelines.

_ Demere, Thomas A., and Stephen L. Walsh, "Paleontological Resources City of San Diego," Department of Paleontology San Diego Natural History Museum, 1996.

X Kennedy, Michael P., and Gary L. Peterson, "Geology of the San Diego Metropolitan Area, California. Del Mar, La Jolla, Point Loma, La Mesa, Poway, and SW 1/4 Escondido 7 1/2 Minute Quadrangles," California Division of Mines and Geology Bulletin 200, Sacramento, 1975.

__ Kennedy, Michael P., and Siang S. Tan, "Geology of National City, Imperial Beach and Otay Mesa Quadrangles, Southern San Diego Metropolitan Area, California," Map Sheet 29, 1977.

__ Site Specific Report:_____.

XIII. Population / Housing

X City of San Diego General Plan.

__ Community Plan.

__ Series 8 Population Forecasts, SANDAG.

__ Other:_____.

XIV. Public Services

X City of San Diego General Plan.

__ Community Plan.

XV. Recreational Resources

X City of San Diego General Plan.

__ Community Plan.

__ Department of Park and Recreation

__ City of San Diego - San Diego Regional Bicycling Map

__ Additional Resources:_____.

XVI. Transportation / Circulation

X City of San Diego General Plan.

__ Community Plan.

X San Diego Metropolitan Area Average Weekday Traffic Volume Maps, SANDAG.

X San Diego Region Weekday Traffic Volumes, SANDAG.

_ Site Specific Report:_____.

XVII. Utilities

_ _____.

XVIII. Water Conservation

_ Sunset Magazine, New Western Garden Book. Rev. ed. Menlo Park, CA: Sunset Magazine.

APPENDIX B

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APPENDIX C

MATERIALS TYPICALLY ACCEPTED BY CERTIFICATE OF COMPLIANCE

Materials Typically Accepted by Certificate of Compliance

1. Soil amendment
2. Fiber mulch
3. PVC or PE pipe up to 16 inch diameter
4. Stabilizing emulsion
5. Lime
6. Preformed elastomeric joint seal
7. Plain and fabric reinforced elastomeric bearing pads
8. Steel reinforced elastomeric bearing pads
9. Waterstops (Special Condition)
10. Epoxy coated bar reinforcement
11. Plain and reinforcing steel
12. Structural steel
13. Structural timber and lumber
14. Treated timber and lumber
15. Lumber and timber
16. Aluminum pipe and aluminum pipe arch
17. Corrugated steel pipe and corrugated steel pipe arch
18. Structural metal plate pipe arches and pipe arches
19. Perforated steel pipe
20. Aluminum underdrain pipe
21. Aluminum or steel entrance tapers, pipe downdrains, reducers, coupling bands and slip joints
22. Metal target plates
23. Paint (traffic striping)
24. Conductors
25. Painting of electrical equipment
26. Electrical components
27. Engineering fabric
28. Portland Cement
29. PCC admixtures
30. Minor concrete, asphalt
31. Asphalt (oil)
32. Liquid asphalt emulsion
33. Epoxy

APPENDIX D

SAMPLE CITY INVOICE WITH SPEND CURVE

City of San Diego, CM&FS Div., 9753 Chesapeake Drive, SD CA 92123

Project Name:

Work Order No or Job Order No.

City Purchase Order No.

Resident Engineer (RE):

RE Phone#: Fax#:

Contractor's Name:

Contractor's Address:

Contractor's Phone #:

Contractor's fax #:

Contact Name:

Invoice No.

Invoice Date:

Billing Period: (To)

Item #	Item Description	Contract Authorization				Previous Totals To Date		This Estimate		Totals to Date	
		Unit	Price	Qty	Extension	%/QTY	Amount	% / QTY	Amount	% / QTY	Amount
1					$ -		$ -		$ -	0.00	$ -
2					$ -		$ -		$ -	0.00%	$ -
3					$ -		$ -		$ -	0.00%	$ -
4					$ -		$ -		$ -	0.00%	$ -
5					$ -		$ -		$ -	0.00%	$ -
6					$ -		$ -		$ -	0.00%	$ -
7					$ -		$ -		$ -	0.00%	$ -
8					$ -		$ -		$ -	0.00%	$ -
5					$ -		$ -		$ -	0.00%	$ -
6					$ -		$ -		$ -	0.00%	$ -
7					$ -		$ -		$ -	0.00%	$ -
8					$ -		$ -		$ -	0.00%	$ -
9					$ -		$ -		$ -	0.00%	$ -
10					$ -		$ -		$ -	0.00%	$ -
11					$ -		$ -		$ -	0.00%	$ -
12					$ -		$ -		$ -	0.00%	$ -
13					$ -		$ -		$ -	0.00%	$ -
14					$ -		$ -		$ -	0.00%	$ -
15					$ -		$ -		$ -	0.00%	$ -
16					$ -		$ -		$ -	0.00%	$ -
17	**Field Orders**				$ -		$ -		$ -	0.00%	$ -
					$ -		$ -		$ -	0.00%	$ -
	CHANGE ORDER No.				$ -		$ -		$ -	0.00%	$ -
					$ -		$ -		$ -	0.00%	$ -
	Total Authorized Amount (including approved Change Order)				**$ -**		**$ -**		$ -	**Total Billed**	$ -

SUMMARY

A. Original Contract Amount	$ -
B. Approved Change Order #00 Thru #00	$ -
C. Total Authorized Amount (A+B)	$ -
D. Total Billed to Date	$ -
E. Less Total Retention (5% of D)	$ -
F. Less Total Previous Payments	$ -
G. Payment Due Less Retention	**$0.00**
H. Remaining Authorized Amount	$0.00

I certify that the materials have been received by me in the quality and quantity specified

_____

Resident Engineer

_____

Construction Engineer

Retention and/or Escrow Payment Schedule

Total Retention Required as of this billing (Item E)	$0.00
Previous Retention Withheld in PO or in Escrow	$0.00
Add'l Amt to Withhold in PO/Transfer in Escrow:	***$0.00***
Amt to Release to Contractor from PO/Escrow:	

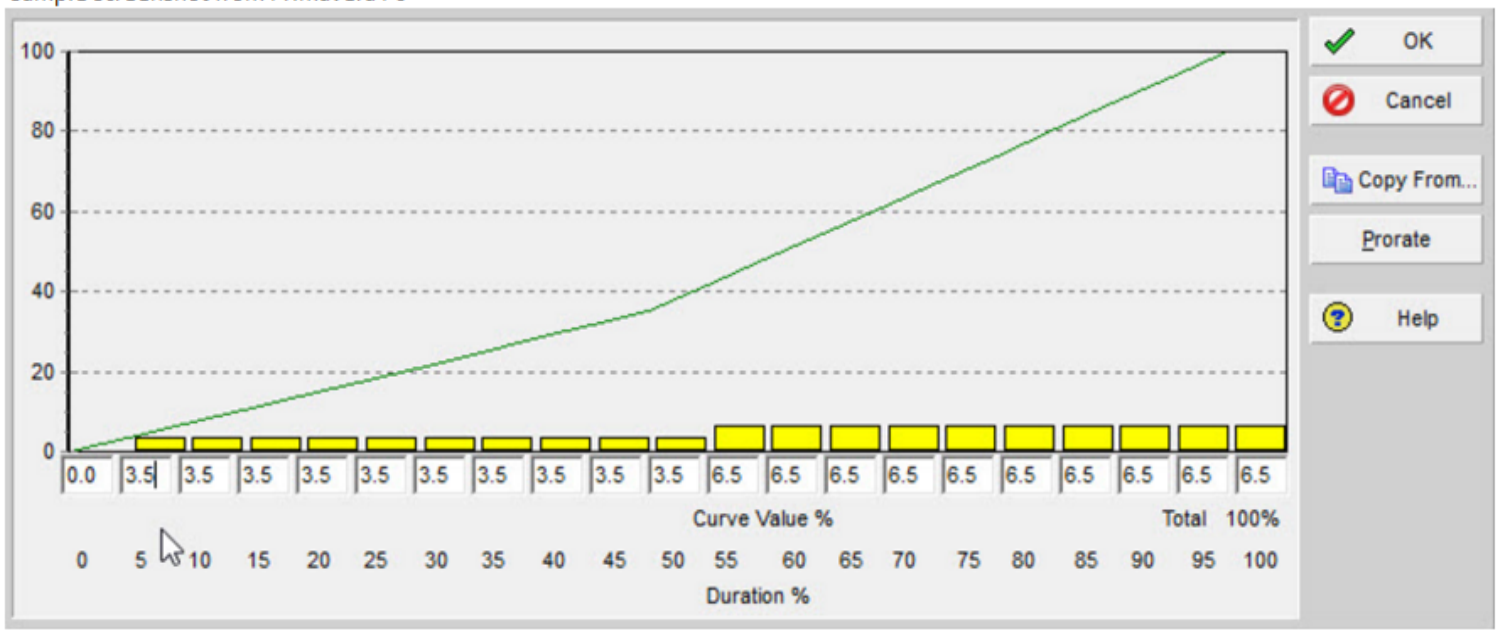
Contractor Signature and Date: _____

Sample Project Spend Curve

Sample Date Entries Required

Incremental Curve Value	0.0%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%
Duration % Increment	0%	5%	10%	15%	20%	25%	30%	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%	90%	95%	100%

Sample Screenshot from Primavera P6



APPENDIX E

LOCATION MAP

Location Map

Aerated Static Pile System (S-16053) at the Environmental Services Miramar Greenery (Design-Build Contract)

APPENDIX F

HAZARDOUS FORMS/LABEL

INCIDENT/RELEASE ASSESSMENT FORM [1]

If you have an emergency, Call 911

Handlers of hazardous materials are required to report releases. The following is a tool to be used for assessing if a release is reportable. Additionally, a non-reportable release incident form is provided to document why a release is not reported (see back).

Questions for Incident Assessment:	YES	NO
1. Was anyone killed or injured, or did they require medical care or admitted to a hospital for observation?	❒	❒
2. Did anyone, other than employees in the immediate area of the release, evacuate?	❒	❒
3. Did the release cause off-site damage to public or private property?	❒	❒
4. Is the release greater than or equal to a reportable quantity (RQ)?	❒	❒
5. Was there an uncontrolled or unpermitted release to the air?	❒	❒
6. Did an uncontrolled or unpermitted release escape secondary containment, or extend into any sewers, storm water conveyance systems, utility vaults and conduits, wetlands, waterways, public roads, or off site?	❒	❒
7. Will control, containment, decontamination, and/or clean up require the assistance of federal, state, county, or municipal response elements?	❒	❒
8. Was the release or threatened release involving an unknown material or contains an unknown hazardous constituent?	❒	❒
9. Is the incident a threatened release (a condition creating a substantial probability of harm that requires immediate action to prevent, reduce, or mitigate damages to persons, property, or the environment)?	❒	❒
10. Is there an increased potential for secondary effects including fire, explosion, line rupture, equipment failure, or other outcomes that may endanger or cause exposure to employees, the general public, or the environment?	❒	❒

If the answer is YES to any of the above questions – report the release to the California Office of Emergency Services at 800-852-7550 and the local CUPA daytime: (619) 338-2284, after hours: (858) 565-5255. Note: other state and federal agencies may require notification depending on the circumstances.

Call 911 in an emergency

If all answers are NO, complete a Non Reportable Release Incident Form (page 2 of 2) and keep readily available. Documenting why a "no" response was made to each question will serve useful in the event questions are asked in the future, and to justify not reporting to an outside regulatory agency.

If in doubt, report the release.

[1] This document is a guide for accessing when hazardous materials release reporting is required by Chapter 6.95 of the California Health and Safety Code. It does not replace good judgment, Chapter 6.95, or other state or federal release reporting requirements.

NON REPORTABLE RELEASE INCIDENT FORM

1. RELEASE AND RESPONSE DESCRIPTION Incident #_____

Date/Time Discovered	Date/Time Discharge	Discharge Stopped ☐ Yes ☐ No
Incident Date / Time:		
Incident Business / Site Name:		
Incident Address:		
Other Locators (Bldg, Room, Oil Field, Lease, Well #, GIS)		
Please describe the incident and indicate specific causes and area affected. Photos Attached?: ☐Yes ☐No		
Indicate actions to be taken to prevent similar releases from occurring in the future.		

2. ADMINISTRATIVE INFORMATION

Supervisor in charge at time of incident:	Phone:
Contact Person:	Phone:

3. CHEMICAL INFORMATION

Chemical	Quantity ☐ GAL ☐ LBS ☐ FT^3
Chemical	Quantity ☐ GAL ☐ LBS ☐ FT^3
Chemical	Quantity ☐ GAL ☐ LBS ☐ FT^3
Clean-Up Procedures & Timeline:	
Completed By:	Phone:
Print Name:	Title:

EMERGENCY RELEASE FOLLOW - UP NOTICE REPORTING FORM

A

BUSINESS NAME	FACILITY EMERGENCY CONTACT & PHONE NUMBER ( ) -

B

INCIDENT DATE MO DAY YR	TIME OES NOTIFIED (use 24 hr time)	OES CONTROL NO.

C

INCIDENT ADDRESS LOCATION	CITY / COMMUNITY	COUNTY ZIP

D

CHEMICAL OR TRADE NAME (print or type)	CAS Number

CHECK IF CHEMICAL IS LISTED IN 40 CFR 355, APPENDIX A ☐	CHECK IF RELEASE REQUIRES NOTIFI - CATION UNDER 42 U.S.C. Section 9603 (a) ☐

PHYSICAL STATE CONTAINED ☐ SOLID ☐ LIQUID ☐ GAS	PHYSICAL STATE RELEASED ☐ SOLID ☐ LIQUID ☐ GAS	QUANTITY RELEASED

ENVIRONMENTAL CONTAMINATION ☐ AIR ☐ WATER ☐ GROUND ☐ OTHER	TIME OF RELEASE	DURATION OF RELEASE ___DAYS ___HOURS ___MINUTES

E

ACTIONS TAKEN

F

KNOWN OR ANTICIPATED HEALTH EFFECTS (Use the comments section for addition information)

☐ ACUTE OR IMMEDIATE (explain) _____

☐ CHRONIC OR DELAYED (explain) _____

☐ NOTKNOWN (explain)

G

ADVICE REGARDING MEDICAL ATTENTION NECESSARY FOR EXPOSED INDIVIDUALS

H

COMMENTS (INDICATE SECTION (A - G) AND ITEM WITH COMMENTS OR ADDITIONAL INFORMATION)

I

CERTIFICATION: I certify under penalty of law that I have personally examined and I am familiar with the information submitted and believe the submitted information is true, accurate, and complete.

REPORTING FACILITY REPRESENTATIVE (print or type) _____

SIGNATURE OF REPORTING FACILITY REPRESENTATIVE _____ DATE: _____

EMERGENCY RELEASE FOLLOW-UP NOTICE
REPORTING FORM INSTRUCTIONS

GENERAL INFORMATION:

Chapter 6.95 of Division 20 of the California Health and Safety Code requires that written emergency release follow-up notices prepared pursuant to 42 U.S.C. § 11004, be submitted using this reporting form. Non-permitted releases of reportable quantities of Extremely Hazardous Substances (listed in 40 CFR 355, appendix A) or of chemicals that require release reporting under section 103(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 [42 U.S.C. § 9603(a)] must be reported on the form, as soon as practicable, but no later than 30 days, following a release. The written follow-up report is required in addition to the verbal notification.

BASIC INSTRUCTIONS:

- The form, when filled out, reports follow-up information required by 42 U.S.C § 11004. Ensure that all information requested by the form is provided as completely as possible.
- If the incident involves reportable releases of more than one chemical, prepare one report form for each chemical released.
- If the incident involves a series of separate releases of chemical(s) at different times, the releases should be reported on separate reporting forms.

SPECIFIC INSTRUCTIONS:

Block A: Enter the name of the business and the name and phone number of a contact person who can provide detailed facility information concerning the release.

Block B: Enter the date of the incident and the time that verbal notification was made to OES. The OES control number is provided to the caller by OES at the time verbal notification is made. Enter this control number in the space provided.

Block C: Provide information pertaining to the location where the release occurred. Include the street address, the city or community, the county and the zip code.

Block D: Provide information concerning the specific chemical that was released. Include the chemical or trade name and the Chemical Abstract Service (CAS) number. Check all categories that apply. Provide best available information on quantity, time and duration of the release.

Block E: Indicate all actions taken to respond to and contain the release as specified in 42 U.S.C. § 11004(c).

Block F: Check the categories that apply to the health effects that occurred or could result from the release. Provide an explanation or description of the effects in the space provided. Use Block H for additional comments/information if necessary to meet requirements specified in 42 U.S.C. § 11004(c).

Block G: Include information on the type of medical attention required for exposure to the chemical released. Indicate when and how this information was made available to individuals exposed and to medical personnel, if appropriate for the incident, as specified in 42 U.S.C. § 11004(c).

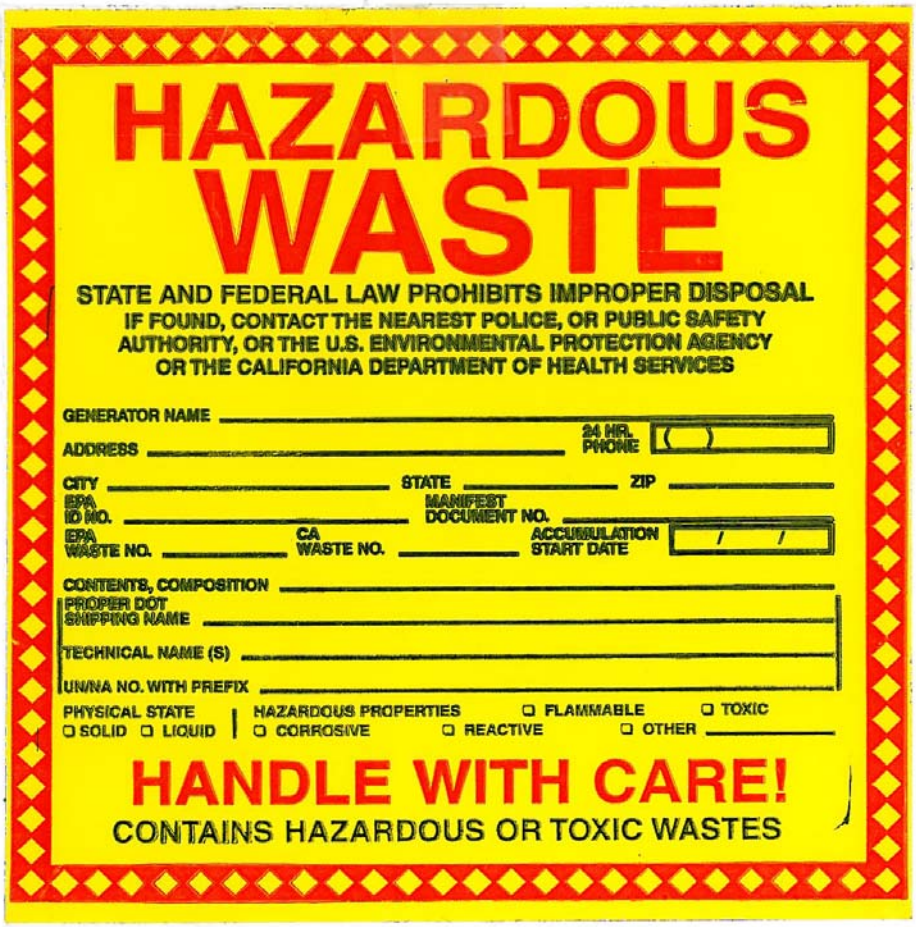
Block H: List any additional pertinent information.

Block I: Print or type the name of the facility representative submitting the report. Include the official signature and the date that the form was prepared.

MAIL THE COMPLETED REPORT TO:

State Emergency Response Commission (SERC)
Attn: Section 304 Reports
Hazardous Materials Unit
3650 Schriever Avenue
Mather, CA 95655

NOTE: Authority cited: Sections 25503, 25503.1 and 25507.1, Health and Safety Code. Reference: Sections 25503(b)(4), 25503.1, 25507.1, 25518 and 25520, Health and Safety Code.


HAZARDOUS
WASTE
STATE AND FEDERAL LAW PROHIBITS IMPROPER DISPOSAL
IF FOUND, CONTACT THE NEAREST POLICE, OR PUBLIC SAFETY
AUTHORITY, OR THE U.S. ENVIRONMENTAL PROTECTION AGENCY
OR THE CALIFORNIA DEPARTMENT OF HEALTH SERVICES
GENERATOR NAME
ADDRESS
24 HR. PHONE
CITY
STATE
ZIP
EPA ID NO.
MANIFEST DOCUMENT NO.
EPA WASTE NO.
CA WASTE NO.
ACCUMULATION START DATE
CONTENTS, COMPOSITION
PROPER DOT SHIPPING NAME
TECHNICAL NAME (S)
UN/NA NO. WITH PREFIX
PHYSICAL STATE
SOLID LIQUID
HAZARDOUS PROPERTIES
CORROSIVE
REACTIVE
FLAMMABLE
TOXIC
OTHER
HANDLE WITH CARE!
CONTAINS HAZARDOUS OR TOXIC WASTES

APPENDIX G

PROJECT AREA

Project Area

Miramar Greenery - ASP System

City of San Diego - Environmental Services Department

FIGURE No. 1

APPENDIX H

WEST MIRAMAR PHASE 1 TOPOGRAPHY

West Miramar Phase 1 Topography

Miramar Greenery - ASP System

City of San Diego - Environmental Services Department

FIGURE No. 2

APPENDIX I

TRANSACTION COUNTS AND TONS FOR GREENERY BY DAY AND MATERIAL TYPE

Transaction Counts and Tons for Greenery
By Day and Material Type
Jul-16

DATE	GREENERY		GREENS WASTE MULTIPLE		FOOD WASTE		FOOD WASTE MULTIPLE		WOOD WASTE		TOTALS	
	LOADS	TONS	LOADS	TONS	LOADS	TONS	LOADS	TONS	LOADS	TONS	LOADS	TONS
07/01/2016	182	260.93			5	20.24	2	10.11	11	16.55	200	307.83
07/02/2016	278	225.4			2	9.14	1	3.61	11	7.52	292	245.67
07/03/2016	188	135.04			1	0.69			12	13.81	201	149.54
07/04/2016	61	49.12			5	19.24	3	21.01	5	3.35	74	92.72
07/05/2016	159	348.97			5	14.88	1	4.07	8	7.8	173	375.72
07/06/2016	182	276.45	1	2.49			3	13.66	11	14.47	197	307.07
07/07/2016	198	279.82			7	17.6	2	3.58	10	10.59	217	311.59
07/08/2016	179	226.06			4	12.23	2	9.65	10	9.99	195	257.93
07/09/2016	257	305.635	1	1.24	2	5.8	1	3.88	7	7.52	268	324.075
07/10/2016	185	139.35			1	0.69			7	7	193	147.04
07/11/2016	208	345.12			8	25.79	2	13.05	9	8.25	227	392.21
07/12/2016	206	324.57			2	13.09	1	4.17	14	9.68	223	351.51
07/13/2016	178	266.69			2	11.33	2	9.46	11	11.36	193	298.84
07/14/2016	177	223.21			6	10.62	2	4.06	8	8.64	193	246.53
07/15/2016	176	266.64	1	0.66	3	14.26	2	10.65	9	9.66	191	301.87
07/16/2016	240	189.2			3	10	1	3.31	18	19.63	262	222.14
07/17/2016	152	115.56							3	3.74	155	119.3
07/18/2016	180	362.59			10	36.82	3	16.47	12	14.4	205	430.28
07/19/2016	197	287.93			2	6.5	1	3.31	14	13.04	214	310.78
07/20/2016	167	220.06	1	8.16	3	6.23	3	13.82	10	13.72	184	261.99
07/21/2016	172	217.08	1	4.34	7	22.22	2	3.88	17	26.01	199	273.53
07/22/2016	153	211.53	1	0.91	5	20.05	3	16.42	11	18.21	173	267.12
07/23/2016	203	154.77			1	1.48	1	3.13	11	10.97	216	170.35
07/24/2016	148	114.06			1	9.93			6	4.14	155	128.13
07/25/2016	175	317.65			8	22.12	3	19.05	11	17.39	197	376.21
07/26/2016	176	303.3			1	1.61	1	3.96	12	19.8	190	328.67
07/27/2016	176	239.21			3	20.27	3	15	15	19.46	197	293.94
07/28/2016	155	181.81	2	7.38	6	11.58	2	3.36	20	29.88	185	234.01
07/29/2016	163	252.71	1	1.09	2	11.42	2	11.6	10	12.5	178	289.32
07/30/2016	235	205.41			2	8.35	1	3.24	5	4.58	243	221.58
07/31/2016	171	125.19			1	5.1			6	3.91	178	134.2
TOTALS	5677	7171.07	9	26.27	108	369.28	50	227.51	324	377.57	6168	8171.7

Transaction Counts and Tons for Greenery

By Day and Material Type

Aug-16

DATE	GREENERY		GREENS WASTE MULTIPLE		FOOD WASTE		FOOD WASTE MULTIPLE		WOOD WASTE		TOTALS	
	LOADS	TONS	LOADS	TONS	LOADS	TONS	LOADS	TONS	LOADS	TONS	LOADS	TONS
08/01/2016	175	358.21			8	20.62	3	17.75	22	15.12	208	411.7
08/02/2016	157	259.16			1	4.68	1	4.65	9	7.74	168	276.23
08/03/2016	190	272.9			5	34.31	3	15.48	19	16.76	217	339.45
08/04/2016	154	210.15	1	3.71	7	21.56	2	3.72	10	11.84	174	250.98
08/05/2016	170	242.07	1	1.38	3	13.5	1	6.12	9	8.9	184	271.97
08/06/2016	244	188.46	1	4.38	2	3.21	2	9.39	18	16.54	267	221.98
08/07/2016	168	121.53							5	4.91	173	126.44
08/08/2016	172	336.86			7	22.24	3	21.07	9	13.17	191	393.34
08/09/2016	193	346.37			4	24.88	1	4.68	8	6.98	206	382.91
08/10/2016	169	269.18			2	9.71	2	10.7	18	20.46	191	310.05
08/11/2016	190	185.52	1	6.55	7	14.65	1	2.59	14	18.97	213	228.28
08/12/2016	193	262.64	1	1.28	3	18.58	3	14.35	8	5.66	208	302.51
08/13/2016	240	185.71	1	3.6	3	7.83	1	4.46	19	20.11	264	221.71
08/14/2016	133	97.08							10	8.34	143	105.42
08/15/2016	194	381.29			9	30.9	3	20.02	7	4.98	213	437.19
08/16/2016	185	287.8			5	19.42	1	4.46	11	7.99	202	319.67
08/17/2016	156	258.15	1	4.31	1	6.25	2	9.98	7	13.78	167	292.47
08/18/2016	180	234.64			8	17.59	2	4.28	11	17.08	201	273.59
08/19/2016	184	254.08			5	20.7	3	17.61	18	14.03	210	306.42
08/20/2016	238	184.39			2	7.52			11	18.17	251	210.08
08/21/2016	195	154.83			1	6.24			13	10.85	209	171.92
08/22/2016	158	305.06			7	26.09	2	13.25	13	9.94	180	354.34
08/23/2016	171	298.34			2	10.27	1	4.37	18	19.78	192	332.76
08/24/2016	181	263.66	1	4.85	4	12.9	3	14.8	25	26.47	214	322.68
08/25/2016	182	225.24	1	4.39	8	26.13	2	3.45	15	17.16	208	276.37
08/26/2016	170	235.64			2	8.9	2	11.31	20	30.4	194	286.25
08/27/2016	284	231.09			3	9.99	1	3.32	7	5.19	295	249.59
08/28/2016	182	140.13							3	2.07	185	142.2
08/29/2016	185	370.87			6	23.75	3	21.29	11	12.66	205	428.57
08/30/2016	208	331.51	1	4.02	1	5.71	1	3.74	10	11.3	221	356.28
08/31/2016	193	270.56			3	16.93	3	16.4	14	17.59	213	321.48
TOTAL	5794	7763.12	10	38.47	119	445.06	52	263.24	392	414.94	6367	8924.83

Transaction Counts and Tons for Greenery

By Day and Material Type

Sep-16

DATE	GREENERY		GREENS WASTE MULTIPLE		FOOD WASTE		FOOD WASTE MULTIPLE		WOOD WASTE		TOTALS	
	LOADS	TONS	LOADS	TONS	LOADS	TONS	LOADS	TONS	LOADS	TONS	LOADS	TONS
09/01/2016	174	227.68	1	3.77	4	14.33	2	3.75	15	16.34	196	265.87
09/02/2016	180	280.79	1	1.16	3	14.51	2	10.97	14	18.71	200	326.14
09/03/2016	244	194.668			1	2.66	1	3.25	12	17.94	258	218.518
09/04/2016	189	143.32	1	8.26					5	3.45	195	155.03
09/05/2016	100	74.97			5	24.15	2	12.28	5	2.78	112	114.18
09/06/2016	188	336.97	1	5.42	3	13.53	2	14.92	5	8.01	199	378.85
09/07/2016	182	327.17			1	4.04	3	14.02	11	20.15	197	365.38
09/08/2016	207	290.6	1	3.02	6	20.59	1	2.42	7	6.93	222	323.56
09/09/2016	179	215.19			4	10.75	2	11.47	9	12.08	194	249.49
09/10/2016	276	322.65	1	2.03	4	15.97			9	10.08	290	350.73
09/11/2016	167	122.57							7	7.44	174	130.01
09/12/2016	175	369.59			6	27.17	3	20.09	10	14.97	194	431.82
09/13/2016	172	284.14			4	20.81	1	4.28	10	12.03	187	321.26
09/14/2016	161	221.22	1	5.62	2	6.43	4	14.85	8	9.15	176	257.27
09/15/2016	172	220.9			9	22.14	2	3.87	10	11.35	193	258.26
09/16/2016	175	262.1	1	1.6	3	17.37	2	10.92	10	13.27	191	305.26
09/17/2016	232	186.83			2	3.9	1	2.32	6	12.54	241	205.59
09/18/2016	188	146.7							6	5.42	194	152.12
09/19/2016	166	306.31			8	31	3	22.35	14	17.78	191	377.44
09/20/2016	142	277.125			1	4.26	1	5.06	14	21.68	158	308.125
09/21/2016	117	179.86	1	3.5	3	21.94	3	16.78	2	2.55	126	224.63
09/22/2016	162	209.81	1	4	7	18.92	2	4.31	11	15.47	183	252.51
09/23/2016	180	241.41	2	3.4	4	17.53	2	11.06	9	13.57	197	286.97
09/24/2016	232	184.57			3	5.06	1	2.88	9	8.29	245	200.8
09/25/2016	172	130.93			1	0.69			3	1.79	176	133.41
09/26/2016	192	384.39			8	31.71	3	18.62	3	3.2	206	437.92
09/27/2016	165	260.16			4	24.78	1	4.46	11	14.11	181	303.51
09/28/2016	180	228.24			1	3.09	3	15.05	11	10.81	195	257.19
09/29/2016	170	216.13	1	3.24	9	27.55	2	3.54	8	6.67	190	257.13
09/30/2016	198	245.62	1	1.38	4	19.39	3	15.97	6	15.48	212	297.84
TOTALS	5437	7092.61	14	46.4	110	424.27	52	249.49	260	334.04	5873	8146.81
Q1 TOTALS	16908	22026.8	33	111.14	337	1238.61	154	740.24	976	1126.55	18408	25243.3

Appendix I

City of San Diego, Environmental Services - Transactions Counts and Tons, By Day and Material Type

Report ID : T1DMND0013756

	CHRISTMAS TREES		FOOD WASTE		FOOD WASTE MULTIPLE		GREENERY		WOOD WASTE		TOTALS	
	LOADS	TONS	LOADS	TONS	LOADS	TONS	LOADS	TONS	LOADS	TONS	TOTAL # OF LOADS	TOTAL TONS
10/01/2016			4	18.19	1	3.84	284	226.16	16	13.77	305	261.96
10/02/2016							179	135.75	4	2.48	183	138.23
10/03/2016			5	15.41	3	21.11	208	377.94	11	8.9	227	423.36
10/04/2016			3	10.6	1	5.33	209	366.83	8	13.83	221	396.59
10/05/2016			2	8.19	3	14.5	176	271.55	19	32.2	200	326.44
10/06/2016			8	26.55	2	3.2	188	247.04	16	20.33	214	297.12
10/07/2016			2	8.3	2	12.7	195	279.28	13	13.83	212	314.11
10/08/2016			3	7.97	1	4.23	256	208.22	13	13.24	273	233.66
10/09/2016							153	109.85	7	7.51	160	117.36
10/10/2016			5	21.41	2	13.25	209	390.65	11	23.45	227	448.76
10/11/2016			2	9.89			201	330.5	6	6.41	209	346.8
10/12/2016			2	12.42	3	16.62	204	337.32	6	4.75	215	371.11
10/13/2016			9	36.16	2	4.3	161	221.55	19	29.12	191	291.13
10/14/2016			2	7.77	2	10.16	187	304.14	13	14.76	204	336.83
10/15/2016			4	10.34	1	4.74	273	213.18	9	18.68	287	246.94
10/16/2016							206	165.14	5	4.88	211	170.02
10/17/2016			6	17.16	3	20.6	208	392.51	11	15.14	228	445.41
10/18/2016			3	13.67	1	4.55	218	364.79	15	17.55	237	400.56
10/19/2016			4	19.42	3	14.91	201	272.71	15	20.94	223	327.98
10/20/2016			9	28.29	2	4.1	167	238.73	14	22.78	192	293.9
10/21/2016			1	4.06	3	13.73	205	278.28	12	17.23	221	313.3
10/22/2016					1	2.81	224	183.63	9	13.14	234	199.58
10/23/2016							169	130.69	6	3.35	175	134.04
10/24/2016			11	50.05	1	8.33	207	389.61	11	8.56	230	456.55
10/25/2016			5	17.2	1	5.34	193	328.59	9	14.24	208	365.37
10/26/2016			2	9.87	2	10.56	166	278.62	6	4.15	176	303.2
10/27/2016			6	19.05	2	4.01	200	293.26	11	16.1	219	332.42
10/28/2016			3	11.27	3	14.97	192	286.11	15	13.23	213	325.58
10/29/2016			6	26.13			233	181.69	18	23.94	257	231.76
10/30/2016							153	120.44	8	7.89	161	128.33
10/31/2016			5	17.82	3	19.54	183	363	17	13.76	208	414.12
Total			112	427.19	48	237.43	6208	8287.76	353	440.14	6721	9392.52

City of San Diego, Environmental Services - Transactions Counts and Tons, By Day and Material Type

Report ID : T1DMND0013756

	CHRISTMAS TREES		FOOD WASTE		FOOD WASTE MULTIPLE		GREENERY		WOOD WASTE		TOTALS	
	LOADS	TONS	LOADS	TONS	LOADS	TONS	LOADS	TONS	LOADS	TONS	TOTAL # OF LOADS	TOTAL TONS
11/01/2016			2	4.43	1	4.05	168	309.38	8	5.26	179	323.12
11/02/2016			1	1.83	3	14.37	182	251.21	15	15.52	201	282.93
11/03/2016			10	30.77	3	7.14	148	172.23	16	20.44	177	230.58
11/04/2016			6	28.24	2	10.58	175	245.92	8	11.02	191	295.76
11/05/2016			2	5.28	1	8.07	226	181.46	8	11.2	237	206.01
11/06/2016							172	125.89	4	5.22	176	131.11
11/07/2016			5	12.17	4	20.73	174	380.48	10	14.6	193	427.98
11/08/2016			3	8.53	1	5.09	167	322.3	7	9.38	178	345.3
11/09/2016			2	9.72	2	12.2	162	268.75	9	11.28	175	301.95
11/10/2016			9	46.78	3	7.97	161	230.9	9	9.76	182	295.41
11/11/2016			2	10.62	3	29.56	195	272.85	13	18.67	213	331.7
11/12/2016			2	3.4	1	2.84	211	176.47	10	11.32	224	194.03
11/13/2016							153	118.02	3	2.07	156	120.09
11/14/2016			6	15.91	2	14.26	188	329.93	13	17.28	209	377.38
11/15/2016			3	8.41	2	5.76	198	338.55	11	16.1	214	368.82
11/16/2016			4	18.89	3	18.1	168	246.8	9	21.77	184	305.56
11/17/2016			8	19.19	2	3.57	168	228.54	7	8.35	185	259.65
11/18/2016			4	15.87	3	14.84	179	241.78	24	24.35	210	296.84
11/19/2016			2	3.97	1	3.42	209	178.24	17	17.17	229	202.8
11/20/2016			1	0.41			189	151.28	7	4.63	197	156.32
11/21/2016			5	18.28	3	18.99	105	305.84	9	7.66	122	350.77
11/22/2016			4	10.53	1	4.27	159	283.06	11	16.05	175	313.91
11/23/2016			3	11.7	3	16.44	191	253.09	8	9.31	205	290.54
11/25/2016			8	20.28	4	17.27	143	167.9	10	9.35	165	214.8
11/26/2016			2	5.9	1	1.9	206	238.66	6	4.08	215	250.54
11/27/2016							37	28			37	28
11/28/2016			6	27.57	3	20.05	114	298.41	6	5.84	129	351.87
11/29/2016			2	3.68	1	3.88	125	266.1	6	9.45	134	283.11
11/30/2016			1	3.98	3	14.09	142	217.68	8	8.77	154	244.52
Total			103	346.34	56	279.44	4815	6829.72	272	325.9	5246	7781.4

City of San Diego, Environmental Services - Transactions Counts and Tons, By Day and Material Type

Report ID : T1DMND0013756

	CHRISTMAS TREES		FOOD WASTE		FOOD WASTE MULTIPLE		GREENERY		WOOD WASTE		TOTALS	
	LOADS	TONS	LOADS	TONS	LOADS	TONS	LOADS	TONS	LOADS	TONS	TOTAL # OF LOADS	TOTAL TONS
12/01/2016			8	21.82	2	3.58	155	202.8	8	10.38	173	238.58
12/02/2016			5	18.7	3	14.4	174	269.54	7	6.54	189	309.18
12/03/2016			3	6.62	1	2.7	206	183.02	10	15.54	220	207.88
12/04/2016							171	134.58	5	4.64	176	139.22
12/05/2016			4	7.18	3	18.88	177	360.31	7	6.4	191	392.77
12/06/2016	1	2.44	5	17.61	1	5.15	166	261.88	10	8.1	183	295.18
12/07/2016	2	1.65	3	11.71	3	14.61	168	238.35	14	27.4	190	293.72
12/08/2016	1	2.06	6	26.52	2	3.72	160	204.23	8	15.12	177	251.65
12/09/2016			3	11.67	3	15.19	183	252.06	15	18.96	204	297.88
12/10/2016			4	11.15			196	177.29	5	3.75	205	192.19
12/11/2016							157	120.93	2	1.38	159	122.31
12/12/2016	1	1.75	6	13.34	2	13.63	178	337.89	9	8.61	196	375.22
12/13/2016			3	10.95	1	4.97	173	299.37	6	9.9	183	325.19
12/14/2016	3	16.06	4	15.65	2	9.79	168	249.16	16	20.41	193	311.07
12/15/2016	2	2.73	5	9.86	2	4.98	169	229.49	6	6.56	184	253.62
12/16/2016	2	3.98	2	11.17	3	14.82	41	114.35	4	9.28	52	153.6
12/17/2016			1	1.91	1	3.05	103	101.55	2	1.52	107	108.03
12/18/2016	1	1.42					89	68.42	4	2.76	94	72.6
12/19/2016	2	3.3	8	36.21			160	307.59	6	6.85	176	353.95
12/20/2016	4	10.62	4	23.53	1	4.04	153	224.71	10	10.8	172	273.7
12/21/2016	3	4.3	1	3.36	3	13.98	166	236.91	10	9.17	183	267.72
12/22/2016	1	0.12	6	7.8	1	1.58	46	98.91	7	8.24	61	116.65
12/23/2016			3	16.91	3	15.79	74	135.41	7	7.91	87	176.02
12/24/2016			1	2.5	2	8.47	32	22.47	2	1.38	37	34.82
12/26/2016	23	36	5	17.36	1	4.82	86	78.17	7	5.28	122	141.63
12/27/2016	33	73.71	1	6.3	1	3.68	164	297.46	5	3.94	204	385.09
12/28/2016	40	64.96	2	10.66	3	16.32	171	277.65	11	10.53	227	380.12
12/29/2016	28	57.88	3	4.03	2	2.19	203	281.6	12	14.1	248	359.8
12/30/2016	24	15.99	5	23.04	3	17.13	84	124.58	7	9.42	123	190.16
12/31/2016	28	40.04			1	3.49	53	123.73	4	2.48	86	169.74
Quarterly Sum:	199	339.01	316	1121.09	154	737.83	15249	21131.89	851	1033.39	16769	24363.21

APPENDIX J

CALRECYCLE ORGANICS GRANT PROGRAM EXHIBITS

EXHIBIT A
TERMS AND CONDITIONS

Organics Grant Program
Fiscal Year 2016–17

The following terms used in this Grant Agreement (Agreement) have the meanings given to them below, unless the context clearly indicates otherwise:

- "CalRecycle" means the Department of Resources Recycling and Recovery.
- "Director" means the Director of CalRecycle or his or her designee.
- "Grant Agreement" and "Agreement" means all documents comprising the agreement between CalRecycle and the Grantee for this Grant.
- "Grant Manager" means CalRecycle staff person responsible for monitoring the grant.
- "Grantee" means the recipient of funds pursuant to this Agreement.
- "Program" means the Organics Grant Program.
- "State" means the State of California, including, but not limited to, CalRecycle and/or its designated officer.

AIR OR WATER POLLUTION VIOLATION

The grantee shall not be:

(a) In violation of any order or resolution not subject to review promulgated by the State Air Resources Board or an air pollution control district.

(b) Out of compliance with any final cease and desist order issued pursuant to Water Code Section 13301 for violation of waste discharge requirements or discharge prohibitions.

(c) Finally determined to be in violation of provisions of federal law relating to air or water pollution.

AMENDMENT

No amendment or variation of the terms of this Agreement shall be valid unless made in writing, signed by the parties, and approved as required. No oral understanding or agreement not incorporated into this Agreement is binding on any of the parties. This Agreement may be amended, modified or augmented by mutual consent of the parties, subject to the requirements and restrictions of this paragraph.

AMERICANS WITH DISABILITIES ACT

The grantee assures the state that it complies with the Americans with Disabilities Act of 1990 (ADA)(42 U.S.C.§ 12101 et seq.), which prohibits discrimination on the basis of disability, as well as all applicable regulations and guidelines issued pursuant to the ADA.

ASSIGNMENT, SUCCESSORS, AND ASSIGNS

(a) This Agreement may not be assigned by the grantee, either in whole or in part, without CalRecycle's prior written consent.

(b) The provisions of this Agreement shall be binding upon and inure to the benefit of CalRecycle, the grantee, and their respective successors and assigns.

AUDIT/RECORDS ACCESS

The grantee agrees that CalRecycle, the Department of Finance, the Bureau of State Audits, or their designated representative(s) shall have the right to review and to copy any records

and supporting documentation pertaining to the performance of this Agreement. The grantee agrees to maintain such records for possible audit for a minimum of three (3) years after final payment date or grant term end date, whichever is later, unless a longer period of records retention is stipulated, or until completion of any action and resolution of all issues which may arise as a result of any litigation, dispute, or audit, whichever is later. The grantee agrees to allow the designated representative(s) access to such records during normal business hours and to allow interviews of any employees who might reasonably have information related to such records. Further, the grantee agrees to include a similar right of the State to audit records and interview staff in any contract or subcontract related to performance of this Agreement.

[It may be helpful to share the Terms and Conditions and Procedures and Requirements with your finance department, contractors and subcontractors. Examples of audit documentation include, but are not limited to: expenditure ledger, payroll register entries and time sheets, personnel expenditure summary form, travel expense log, paid warrants, contracts, change orders, invoices, and/or cancelled checks.]

AUTHORIZED REPRESENTATIVE
The grantee shall continuously maintain a representative vested with signature authority authorized to work with CalRecycle on all grant-related issues. The grantee shall, at all times, keep the Grant Manager informed as to the identity and contact information of the authorized representative.

AVAILABILITY OF FUNDS
CalRecycle's obligations under this Agreement are contingent upon and subject to the availability of funds appropriated for this grant.

BANKRUPTCY/DECLARATION OF FISCAL EMERGENCY NOTIFICATION
If the grantee files for protection under Chapter 9 of the U.S. Bankruptcy Code (11 U.S.C. §901 et seq.) or declares a fiscal emergency at any time during the Grant Term, the grantee shall notify CalRecycle within 15 days of such filing or declaration, pursuant to the procedures set forth in the section entitled “Communications” herein.

CHARTER CITIES
If the grantee is a charter city, a joint powers authority that includes one or more charter cities, or the regional lead for a regional program containing one or more charter cities, the grantee shall not receive any grant funding if such funding is prohibited by Labor Code section 1782. If it is determined that Labor Code section 1782 prohibits funding for the grant project, this Agreement will be terminated and any disbursed grant funds shall be returned to CalRecycle.

CHILD SUPPORT COMPLIANCE ACT
For any agreement in excess of $100,000, the grantee acknowledges that:
(a) The grantee recognizes the importance of child and family support obligations and shall fully comply with all applicable state and federal laws relating to child and family support enforcement, including, but not limited to, disclosure of information and compliance with earnings assignment orders, as provided in Family Code Section 5200 et seq.; and

(b) The grantee, to the best of its knowledge, is fully complying with the earnings assignment orders of all employees, and is providing the names of all new employees to the New Hire Registry maintained by the California Employment Development Department.

COMMUNICATIONS

All communications from the grantee to CalRecycle shall be directed to the Grant Manager. All notices, including reports and payment requests, required by this Agreement shall be given in writing by email, letter, or fax to the Grant Manager as identified in the Procedures and Requirements (Exhibit B). If an original document is required, prepaid mail or personal delivery to the Grant Manager is required following the email or fax.

COMPLIANCE

The grantee shall comply fully with all applicable federal, state, and local laws, ordinances, regulations, and permits. The grantee shall provide evidence, upon request, that all local, state, and/or federal permits, licenses, registrations, and approvals have been secured for the purposes for which grant funds are to be expended. The grantee shall maintain compliance with such requirements throughout the Grant Term. The grantee shall ensure that the requirements of the California Environmental Quality Act are met for any approvals or other requirements necessary to carry out the terms of this Agreement. The grantee shall ensure that all of grantee's contractors and subcontractors have all local, state, and/or federal permits, licenses, registrations, certifications, and approvals required to perform the work for which they are hired. Any deviation from the requirements of this section shall result in non-payment of grant funds.

CONFLICT OF INTEREST

The grantee needs to be aware of the following provisions regarding current or former state employees. If the grantee has any questions on the status of any person rendering services or involved with this Agreement, CalRecycle must be contacted immediately for clarification.

Current State Employees (Pub. Contract Code, § 10410):

(a) No officer or employee shall engage in any employment, activity, or enterprise from which the officer or employee receives compensation or has a financial interest and which is sponsored or funded by any state agency, unless the employment, activity, or enterprise is required as a condition of regular state employment.
(b) No officer or employee shall contract on his or her own behalf as an independent contractor with any state agency to provide goods or services.

Former State Employees (Pub. Contract Code, § 10411):

(a) For the two-year period from the date he or she left state employment, no former state officer or employee may enter into a contract in which he or she engaged in any of the negotiations, transactions, planning, arrangements or any part of the decision-making process relevant to the contract while employed in any capacity by any state agency.
(b) For the twelve-month period from the date he or she left state employment, no former state officer or employee may enter into a contract with any state agency if he or she was employed by that state agency in a policy-making position in the same general subject area as the proposed contract within the twelve month period prior to his or her leaving state service.

If the grantee violates any provisions of above paragraphs, such action by the grantee shall render this Agreement void. (Pub. Contract Code, § 10420).

CONTRACTORS/SUBCONTRACTORS

The grantee will be entitled to make use of its own staff and such contractors and subcontractors as are mutually acceptable to the grantee and CalRecycle. Any change in contractors or subcontractors must be mutually acceptable to the parties. Immediately upon termination of any such contract or subcontract, the grantee shall notify the Grant Manager. Nothing contained in this Agreement or otherwise, shall create any contractual relation between CalRecycle and any contractors or subcontractors of grantee, and no agreement with contractors or subcontractors shall relieve the grantee of its responsibilities and obligations hereunder. The grantee agrees to be as fully responsible to CalRecycle for the acts and omissions of its contractors and subcontractors and of persons either directly or indirectly employed by any of them as it is for the acts and omissions of persons directly employed by the grantee. The grantee's obligation to pay its contractors and subcontractors is an independent obligation from CalRecycle's obligation to make payments to the grantee. As a result, CalRecycle shall have no obligation to pay or to enforce the payment of any moneys to any contractor or subcontractor.

COPYRIGHTS

Grantee retains title to any copyrights or copyrightable material produced pursuant to this Agreement. Grantee hereby grants to CalRecycle a royalty-free, nonexclusive, transferable, world-wide license to reproduce, translate, and distribute copies of any and all copyrightable materials produced pursuant this Agreement, for nonprofit, non-commercial purposes, and to have or permit others to do so on CalRecycle's behalf. Grantee is responsible for obtaining any necessary licenses, permissions, releases or authorizations to use text, images, or other materials owned, copyrighted, or trademarked by third parties and for extending such licenses, permissions, releases, or authorizations to CalRecycle pursuant to this section.

CORPORATION QUALIFIED TO DO BUSINESS IN CALIFORNIA

When work under this Agreement is to be performed in California by a corporation, the corporation shall be in good standing and currently qualified to do business in the State. "Doing business" is defined in Revenue and Taxation Code Section 23101 as actively engaging in any transaction for the purpose of financial or pecuniary gain or profit.

DISCHARGE OF GRANT OBLIGATIONS

The grantee's obligations under this Agreement shall be deemed discharged only upon acceptance of the final report by CalRecycle. If the grantee is a non-profit entity, the grantee's Board of Directors shall accept and certify as accurate the final report prior to its submission to CalRecycle.

DISCLAIMER OF WARRANTY

CalRecycle makes no warranties, express or implied, including without limitation, the implied warranties of merchantability and fitness for a particular purpose, regarding the materials, equipment, services or products purchased, used, obtained and/or produced with funds awarded under this Agreement, whether such materials, equipment, services or products are purchased, used, obtained and/or produced alone or in combination with other materials, equipment, services or products. No CalRecycle employees or agents have any right or authority to make any other representation, warranty or promise with respect to any

materials, equipment, services or products, purchased, used, obtained, or produced with grant funds. In no event shall CalRecycle be liable for special, incidental or consequential damages arising from the use, sale or distribution of any materials, equipment, services or products purchased or produced with grant funds awarded under this Agreement.

DISCRETIONARY TERMINATION

The Director shall have the right to terminate this Agreement at his or her sole discretion at any time upon 30 days written notice to the grantee. Within 45 days of receipt of written notice, grantee is required to:

(a) Submit a final written report describing all work performed by the grantee.
(b) Submit an accounting of all grant funds expended up to and including the date of termination.
(c) Reimburse CalRecycle for any unspent funds.

DISPUTES

In the event of a dispute regarding performance under this Agreement or interpretation of requirements contained therein, the grantee may, in addition to any other remedies that may be available, provide written notice of the particulars of such dispute to the Branch Chief of Financial Resources Management Branch, Department of Resources Recycling and Recovery, PO Box 4025, Sacramento, CA 95812-4025. Such written notice must contain the grant number.

Unless otherwise instructed by the Grant Manager, the grantee shall continue with its responsibilities under this Agreement during any dispute.

DRUG-FREE WORKPLACE CERTIFICATION

The person signing this Agreement on behalf of the grantee certifies under penalty of perjury under the laws of California, that the grantee will comply with the requirements of the Drug-Free Workplace Act of 1990 (Gov. Code, § 8350 et seq.) and will provide a drug-free workplace by taking the following actions:

(a) Publish a statement notifying employees that unlawful manufacture, distribution, dispensation, possession or use of a controlled substance is prohibited and specifying actions that will be taken against employees for violations.
(b) Establish a drug-free awareness program to inform employees about all of the following:
    (1) The dangers of drug abuse in the workplace.
    (2) The grantee's policy of maintaining a drug-free workplace.
    (3) Any available counseling, rehabilitation, and employee assistance programs.
    (4) Penalties that may be imposed upon employees for drug abuse violations.
(c) Require that each employee who works on the grant:
    (1) Receive a copy of the drug-free policy statement of the grantee.
    (2) Agrees to abide by the terms of such statement as a condition of employment on the grant.

Failure to comply with these requirements may result in suspension of payments under the Agreement or termination of the Agreement or both and grantee may be ineligible for award of any future state agreements if CalRecycle determines that the grantee has made a false certification, or violated the certification by failing to carry out the requirements as noted above.

EFFECTIVENESS OF AGREEMENT
This Agreement is of no force or effect until signed by both parties.

ENTIRE AGREEMENT
This Agreement supersedes all prior agreements, oral or written, made with respect to the subject hereof and, together with all attachments hereto, contains the entire agreement of the parties.

ENVIRONMENTAL JUSTICE
In the performance of this Agreement, the grantee shall conduct its programs, policies, and activities that substantially affect human health or the environment in a manner that ensures the fair treatment of people of all races, cultures, and income levels, including minority populations and low-income populations of the state.

EXPATRIATE CORPORATIONS
The person signing this Agreement on behalf of the grantee certifies under penalty of perjury under the laws of California, that the grantee is not an expatriate corporation or subsidiary of an expatriate corporation within the meaning of Public Contract Code Sections 10286 and 10286.1, and is eligible to contract with the State of California.

FAILURE TO PERFORM AS REQUIRED BY THIS AGREEMENT
CalRecycle will benefit from the grantee's full compliance with the terms of this Agreement only by the grantee's:
(a) Investigation and/or application of technologies, processes, and devices which support reduction, reuse, and/or recycling of wastes.
(b) Cleanup of the environment.
(c) Enforcement of solid waste statutes and regulations, as applicable.
Therefore, the grantee shall be in compliance with this Agreement only if the work it performs results in:
(a) Application of information, a process, usable data or a product which can be used to aid in reduction, reuse, and/or recycling of waste.
(b) The cleanup of the environment.
(c) The enforcement of solid waste statutes and regulations, as applicable.
If the Grant Manager determines that the grantee has not complied with the Grant Agreement, the grantee may forfeit the right to reimbursement of any grant funds not already paid by CalRecycle, including, but not limited to, the 10 percent withhold.

FORCE MAJEURE
Neither CalRecycle nor the grantee, its contractors, vendors, or subcontractors, if any, shall be responsible hereunder for any delay, default, or nonperformance of this Agreement, to the extent that such delay, default, or nonperformance is caused by an act of God, weather, accident, labor strike, fire, explosion, riot, war, rebellion, sabotage, flood, or other contingencies unforeseen by CalRecycle or the grantee, its contractors, vendors, or subcontractors, and beyond the reasonable control of such party.

FORFEIT OF GRANT FUNDS/REPAYMENT OF FUNDS IMPROPERLY EXPENDED
If grant funds are not expended, or have not been expended, in accordance with this Agreement, or if real or personal property acquired with grant funds is not being used, or has not been used, for grant purposes in accordance with this Agreement, the Director, at his or

her sole discretion, may take appropriate action under this Agreement, at law or in equity, including requiring the grantee to forfeit the unexpended portion of the grant funds, including, but not limited to, the 10 percent withhold, and/or to repay to CalRecycle any funds improperly expended.

GENERALLY ACCEPTED ACCOUNTING PRINCIPLES
The grantee is required to use Generally Accepted Accounting Principles in documenting all grant expenditures.

GRANT MANAGER
The Grant Manager's responsibilities include monitoring grant progress, and reviewing and approving Grant Payment Requests and other documents delivered to CalRecycle pursuant to this Agreement. The Grant Manager may monitor grantee performance to ensure that the grantee expends grant funds appropriately and in a manner consistent with the terms and conditions contained herein. The Grant Manager does not have the authority to approve any deviation from or revision to the Terms and Conditions (Exhibit A) or the Procedures and Requirements (Exhibit B), unless such authority is expressly stated in the Procedures and Requirements (Exhibit B).

GRANTEE ACCOUNTABILITY
The grantee is ultimately responsible and accountable for the manner in which the grant funds are utilized and accounted for and the way the grant is administered, even if the grantee has contracted with another organization, public or private, to administer or operate its grant program. In the event an audit should determine that grant funds are owed to CalRecycle, the grantee is responsible for repayment of the funds to CalRecycle.

GRANTEE'S INDEMNIFICATION AND DEFENSE OF THE STATE
The grantee agrees to indemnify, defend and save harmless the state and CalRecycle, and their officers, agents and employees from any and all claims and losses accruing or resulting to any and all contractors, subcontractors, suppliers, laborers, and any other person, firm or corporation furnishing or supplying work services, materials, or supplies in connection with the performance of this Agreement, and from any and all claims and losses accruing or resulting to any person, firm or corporation who may be injured or damaged by the grantee as a result of the performance of this Agreement.

GRANTEE'S NAME CHANGE
A written amendment is required to change the grantee's name as listed on this Agreement. Upon receipt of legal documentation of the name change, CalRecycle will process the amendment. Payment of Payment Requests presented with a new name cannot be paid prior to approval of the amendment.

IN CASE OF EMERGENCY
In the event of an emergency, or where there is an imminent threat to public health and safety or the environment, the grantee may choose, at its own risk, to incur grant-eligible expenses not previously included in the approved Budget, subject to subsequent approval by the Grant Manager of both the Budget change and the need to implement the Budget change on an emergency basis. The grantee shall notify the Grant Manager of the emergency and the Budget change at the earliest possible opportunity. CalRecycle reserves the right to accept or reject the grantee's determination that the circumstances constituted an emergency

or a threat to public health and safety or the environment. If the Grant Manager determines that the circumstances did not constitute an emergency or a threat to public health or safety, the Budget change will be disallowed.

NATIONAL LABOR RELATIONS BOARD CERTIFICATION

The person signing this Agreement on behalf of the grantee certifies under penalty of perjury that no more than one final unappealable finding of contempt of court by a federal court has been issued against the grantee within the immediately preceding two-year period because of the grantee's failure to comply with an order of a federal court which orders the grantee to comply with an order of the National Labor Relations Board. This section is not applicable if the grantee is a public entity.

NO AGENCY RELATIONSHIP CREATED/INDEPENDENT CAPACITY

The grantee and the agents and employees of grantee, in the performance of this Agreement, shall act in an independent capacity and not as officers or employees or agents of CalRecycle.

NO WAIVER OF RIGHTS

CalRecycle shall not be deemed to have waived any rights under this Agreement unless such waiver is given in writing and signed by CalRecycle. No delay or omission on the part of CalRecycle in exercising any rights shall operate as a waiver of such right or any other right. A waiver by CalRecycle of a provision of this Agreement shall not prejudice or constitute a waiver of CalRecycle's right otherwise to demand strict compliance with that provision or any other provision of this Agreement. No prior waiver by CalRecycle, nor any course of dealing between CalRecycle and grantee, shall constitute a waiver of any of CalRecycle's rights or of any of grantee's obligations as to any future transactions. Whenever the consent of CalRecycle is required under this Agreement, the granting of such consent by CalRecycle in any instance shall not constitute continuing consent to subsequent instances where such consent is required and in all cases such consent may be granted or withheld in the sole discretion of CalRecycle.

NON-DISCRIMINATION CLAUSE

(a) During the performance of this Agreement, grantee and its contractors shall not unlawfully discriminate, harass, or allow harassment against any employee or applicant for employment on the bases enumerated in Government Code Section 12900 et seq.
(b) The person signing this Agreement on behalf of the grantee certifies under penalty of perjury under the laws of California that the grantee has, unless exempted, complied with the nondiscrimination program requirements (Gov. Code, § 12990, subd. (a-f) and California Code of Regulations, Title 2, Section 8103). (Not applicable to public entities.)

ORDER OF PRECEDENCE

The performance of this grant shall be conducted in accordance with the Terms and Conditions, Procedures and Requirements, Project Summary/Statement of Use, Work Plan, and Budget of this Agreement, or other combination of exhibits specified on the Grant Agreement Coversheet attached hereto (collectively referred to as "Terms"). Grantee's CalRecycle-approved Application (Grantee's Application) is hereby incorporated herein by this reference. In the event of conflict or inconsistency between the articles, exhibits, attachments, specifications or provisions that constitute this Agreement, the following order of precedence shall apply:

(a) Grant Agreement Coversheet and any Amendments thereto
(b) Terms and Conditions
(c) Procedures and Requirements
(d) Project Summary/Statement of Use
(e) Budget
(f) Work Plan
(g) Grantee's Application
(h) All other attachments hereto, including any that are incorporated by reference.

OWNERSHIP OF DRAWINGS, PLANS, AND SPECIFICATIONS

The grantee shall, at the request of CalRecycle or as specifically directed in the Procedures and Requirements (Exhibit B), provide CalRecycle with copies of any data, drawings, design plans, specifications, photographs, negatives, audio and video productions, films, recordings, reports, findings, recommendations, and memoranda of every description or any part thereof, prepared under this Agreement. Grantee hereby grants to CalRecycle a royalty-free, nonexclusive, transferable, world-wide license to reproduce, translate, and distribute copies of any and all such materials produced pursuant this Agreement, for nonprofit, non-commercial purposes, and to have or permit others to do so on CalRecycle's behalf.

PAYMENT

(a) The approved Budget, if applicable, is attached hereto and incorporated herein by this reference and states the maximum amount of allowable costs for each of the tasks identified in the Work Plan, if applicable, which is attached hereto and incorporated herein by this reference. CalRecycle shall reimburse the grantee for only the work and tasks specified in the Work Plan or the Grantee's Application at only those costs specified in the Budget and incurred in the term of the Agreement.
(b) The grantee shall carry out the work described in the Work Plan or in the Grantee's Application in accordance with the approved Budget, and shall obtain the Grant Manager's written approval of any changes or modifications to the Work Plan, approved project as described in the Grantee's Application or the approved Budget prior to performing the changed work or incurring the changed cost. If the grantee fails to obtain such prior written approval, the Director, at his or her sole discretion, may refuse to provide funds to pay for such work or costs.
(c) The grantee shall request reimbursement in accordance with the procedures described in the Procedures and Requirements.
(d) Ten percent will be withheld from each Payment Request and paid at the end of the grant term, when all reports and conditions stipulated in this Agreement have been satisfactorily completed. Failure by the grantee to satisfactorily complete all reports and conditions stipulated in this Agreement may result in forfeiture of any such funds withheld pursuant to CalRecycle's 10 percent retention policy.
(e) Lodgings, Meals and Incidentals: Grantee's Per Diem eligible costs are limited to the amounts authorized in the California State Administrative Manual (contact the Grant Manager for more information).
(f) Payment will be made only to the grantee.
(g) Reimbursable expenses shall not be incurred unless and until the grantee receives a Notice to Proceed as described in the Procedures and Requirements (Exhibit B).

PERSONAL JURISDICTION
The grantee consents to personal jurisdiction in the State of California for all proceedings concerning the validity and operation of this Agreement and the performance of the obligations imposed upon the parties. Native American Tribal grantees expressly waive tribal sovereign immunity as a defense to any and all proceedings concerning the validity and operation of this Agreement and the performance of the obligations imposed upon the parties.

PERSONNEL COSTS
If there are eligible costs pursuant to Exhibit B, Procedures and Requirements, any personnel expenditures to be reimbursed with grant funds must be computed based on actual time spent on grant-related activities and on the actual salary or equivalent hourly wage the employee is paid for his or her regular job duties, including a proportionate share of any benefits to which the employee is entitled, unless otherwise specified in the Procedures and Requirements (Exhibit B).

REAL AND PERSONAL PROPERTY ACQUIRED WITH GRANT FUNDS
(a) All real and personal property, including equipment and supplies, acquired with grant funds shall be used by the grantee only for the purposes for which CalRecycle approved their acquisition for so long as such property is needed for such purposes, regardless of whether the grantee continues to receive grant funds from CalRecycle for such purposes. In no event shall the length of time during which such property, including equipment and supplies, acquired with grant funds, is used for the purpose for which CalRecycle approved its acquisition be less than five (5) years after the end of the grant term, during which time the property, including equipment and supplies, must remain in the State of California.
(b) Subject to the obligations and conditions set forth in this section, title to all real and personal property acquired with grant funds, including all equipment and supplies, shall vest upon acquisition in the grantee. The grantee may be required to execute all documents required to provide CalRecycle with a security interest in any real or personal property, including equipment and supplies, and it shall be a condition of receiving this grant that CalRecycle shall be in first priority position with respect to the security interest on any such property acquired with the grant funds, unless pre-approved in writing by the Grant Manager that CalRecycle will accept a lower priority position with respect to the security interest on the property. Grantee shall inform any lender(s) from whom it is acquiring additional funding to complete the property purchase of this grant condition.
(c) The grantee may not transfer Title to any real or personal property, including equipment and supplies, acquired with grant funds to any other entity without the express authorization of CalRecycle.
(d) CalRecycle will not reimburse the grantee for the acquisition of equipment that was previously purchased with CalRecycle grant funds, unless the acquisition of such equipment with grant funds is pre-approved in writing by the Grant Manager. In the event of a question concerning the eligibility of equipment for grant funding, the burden will be on the grantee to establish the pedigree of the equipment.

REASONABLE COSTS
A cost is reasonable if, in its nature or amount, it does not exceed that which would be incurred by a prudent person under the circumstances prevailing at the time the decision was made to incur the cost. Consideration will be given to:

(a) Whether the cost is of a type generally recognized as ordinary and necessary for the performance of the grant.
(b) The restraints or requirements imposed by such factors as generally accepted sound business practices, arms-length bargaining, federal and state laws and regulations, and the terms and conditions of this Agreement.
(c) Whether the individuals concerned acted with prudence in the circumstances, considering their responsibilities to the organization, its members, employees, clients, and the public at large.
(d) Significant deviations from the established practices of the organization which may unjustifiably increase the grant costs.

RECYCLED-CONTENT PAPER
All documents submitted by the grantee must be printed double-sided on recycled-content paper containing 100 percent post-consumer fiber. Specific pages containing full color photographs or other ink-intensive graphics may be printed on photographic paper.

REDUCTION OF WASTE
In the performance of this Agreement, grantee shall take all reasonable steps to ensure that materials purchased or utilized in the course of the project are not wasted. Steps should include, but not be limited to: the use of used, reusable, or recyclable products; discretion in the amount of materials used; alternatives to disposal of materials consumed; and the practice of other waste reduction measures where feasible and appropriate.

REDUCTION OF WASTE TIRES
Unless otherwise provided for in this Agreement, in the performance of this Agreement, for all purchases made with grant funds, including, but not limited to equipment and tire-derived feedstock, the grantee shall purchase and/or process only California waste tires and California waste tire-derived products. As a condition of final payment under this Agreement, the grantee must provide documentation substantiating the source of the tire materials used during the performance of this Agreement to the Grant Manager.

REIMBURSEMENT LIMITATIONS
Under no circumstances shall the grantee seek reimbursement pursuant to this Agreement for a cost or activity that has been or will be paid for through another funding source. The grantee shall not seek reimbursement for any costs used to meet cost sharing or matching requirements of any other CalRecycle funded program.

All costs charged against the Agreement shall be net of all applicable credits. The term “applicable credits” refers to those receipts or reductions of expenditures that operate to offset or reduce expense items that are reimbursable under this Agreement. Applicable credits may include, but are not necessarily limited to, rebates or allowances, discounts, credits toward subsequent purchases, and refunds. Grantee shall, where possible, deduct the amount of the credit from the amount billed as reimbursement for the cost, or shall deduct the amount of the credit from the total billed under a future invoice.

RELIABLE CONTRACTOR DECLARATION
Prior to authorizing any contractor or subcontractor to commence work under this Grant, the grantee shall submit to CalRecycle a Reliable Contractor Declaration (CalRecycle 168) from the contractor or subcontractor, signed under penalty of perjury, disclosing whether of any of

the events listed in Section 17050 of Title 14, California Code of Regulations, Natural Resources, Division 7, has occurred with respect to the contractor or subcontractor within the preceding three (3) years. If a contractor is placed on CalRecycle's Unreliable List after award of this Grant, the grantee may be required to terminate that contract.

REMEDIES
Unless otherwise expressly provided herein, the rights and remedies hereunder are in addition to, and not in limitation of, other rights and remedies under this Agreement, at law or in equity, and exercise of one right or remedy shall not be deemed a waiver of any other right or remedy.

SELF-DEALING AND ARM'S LENGTH TRANSACTIONS
All expenditures for which reimbursement pursuant to this Agreement is sought shall be the result of arm's-length transactions and not the result of, or motivated by, self-dealing on the part of the grantee or any employee or agent of the grantee. For purposes of this provision, "arm's-length transactions" are those in which both parties are on equal footing and fair market forces are at play, such as when multiple vendors are invited to compete for an entity's business and the entity chooses the lowest of the resulting bids. "Self-dealing" is involved where an individual or entity is obligated to act as a trustee or fiduciary, as when handling public funds, and chooses to act in a manner that will benefit the individual or entity, directly or indirectly, to the detriment of, and in conflict with, the public purpose for which all grant monies are to be expended.

SEVERABILITY
If any provisions of this Agreement are found to be unlawful or unenforceable, such provisions will be voided and severed from this Agreement without affecting any other provision of this Agreement. To the full extent, however, that the provisions of such applicable law may be waived, they are hereby waived to the end that this Agreement be deemed to be a valid and binding agreement enforceable in accordance with its terms.

SITE ACCESS
The grantee shall allow the state to access sites at which grant funds are expended and related work being performed at any time during the performance of the work and for ninety (90) days after completion of the work, or until all issues related to the grant project have been resolved.

STOP WORK NOTICE
Immediately upon receipt of a written notice from the Grant Manager to stop work, the grantee shall cease all work under this Agreement.

TERMINATION FOR CAUSE
CalRecycle may terminate this Agreement and be relieved of any payments should the grantee fail to perform the requirements of this Agreement at the time and in the manner herein provided. In the event of such termination, CalRecycle may proceed with the work in any manner deemed proper by CalRecycle. All costs to CalRecycle shall be deducted from any sum due the grantee under this Agreement. Termination pursuant to this section may result in forfeiture by the grantee of any funds retained pursuant to CalRecycle's 10 percent retention policy.

TIME IS OF THE ESSENCE
Time is of the essence to this Agreement.

TOLLING OF STATUTE OF LIMITATIONS
The statute of limitations for bringing any action, administrative or civil, to enforce the terms of this Agreement or to recover any amounts determined to be owing to CalRecycle as the result of any audit of the grant covered by this Agreement shall be tolled during the period of any audit resolution, including any appeals by the grantee to the Director.

UNION ORGANIZING
By signing this Agreement, the grantee hereby acknowledges the applicability of Government Code Sections 16645, 16645.2, 16645.8, 16646, 16647, and 16648 to this Agreement and hereby certifies that:
(a) No grant funds disbursed by this grant will be used to assist, promote, or deter union organizing by employees performing work under this Agreement.
(b) If the grantee makes expenditures to assist, promote, or deter union organizing, the grantee will maintain records sufficient to show that no state funds were used for those expenditures, and that grantee shall provide those records to the Attorney General upon request.

VENUE/CHOICE OF LAW
(a) All proceedings concerning the validity and operation of this Agreement and the performance of the obligations imposed upon the parties hereunder shall be held in Sacramento County, California. The parties hereby waive any right to any other venue. The place where the Agreement is entered into and place where the obligation is incurred is Sacramento County, California.
(b) The laws of the State of California shall govern all proceedings concerning the validity and operation of this Agreement and the performance of the obligations imposed upon the parties hereunder.

WAIVER OF CLAIMS AND RECOURSE AGAINST THE STATE
The grantee agrees to waive all claims and recourse against the state, its officials, officers, agents, employees, and servants, including, but not limited to, the right to contribution for loss or damage to persons or property arising out of, resulting from, or in any way connected with or incident to this Agreement. This waiver extends to any loss incurred attributable to any activity undertaken or omitted pursuant to this Agreement or any product, structure, or condition created pursuant to, or as a result of, this Agreement.

WORK PRODUCTS
Grantee shall provide CalRecycle with copies of all final products identified in the Work Plan. Grantee shall also provide CalRecycle with copies of all public education and advertising material produced pursuant to this Agreement.

WORKERS' COMPENSATION/LABOR CODE
The grantee is aware of Labor Code Section 3700, which requires every employer to be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the Labor Code, and the grantee agrees to comply with such provisions before commencing the performance of the work of this Agreement.

EXHIBIT B
PROCEDURES AND REQUIREMENTS

ORGANICS GRANT PROGRAM
2nd Cycle – Fiscal Year 2016–17

Copies of these Procedures and Requirements should be shared with BOTH the Finance Department AND the staff responsible for implementing the grant activities.

INTRODUCTION

The Organics Grant Program is administered through the Department of Resources Recycling and Recovery (CalRecycle). These Procedures and Requirements describe project and reporting requirements, report due dates, report contents, grant payment conditions, eligible and ineligible project costs, project completion and closeout procedures, and records and audit requirements.

This document is attached to, and incorporated by reference, into the Grant Agreement.

MILESTONES

Date	Milestones
Notice to Proceed date	Grant Term begins on the date indicated on the Notice to Proceed (NTP)
Sept. 15, 2017	Progress Report Due Covering activities from NTP to Sept. 1, 2017
Dec. 15, 2017	Progress Report Due Covering activities from Sept. 2, 2017 to Dec. 11, 2017
March 15, 2018	Progress Report Due Covering activities from Dec. 12, 2017 to March 1, 2018
To be scheduled March - June 2018	Critical Project Review Covering activities from NTP to March 1, 2018
June 15, 2018	Progress Report Due Covering activities from March 2, 2018 to June 1, 2018
Sept. 17, 2018	Progress Report Due Covering activities from June 2, 2018 to Sept. 1, 2018
Dec. 17, 2018	Progress Report Due Covering activities from Sept. 2, 2018 to Dec. 1, 2018
March 15, 2019	Progress Report Due Covering activities from Dec. 2, 2018 to March 1, 2019
June 17, 2019	Progress Report Due Covering activities from March 2, 2019 to June 1, 2019
Sept. 16, 2019	Progress Report Due Covering activities from June 2, 2019 to Sept. 1, 2019
Dec. 16, 2019	Progress Report Due Covering activities from Sept. 2, 2019 to Dec. 1, 2019
April 1, 2020	Grant Term Ends. Final Report and final Payment Request Due. All costs must be incurred by this date.

QUESTIONS

All communication regarding this grant should be directed to the assigned Grant Manager. To find the email address and telephone number of your Grant Manager, follow the instructions below to "access the grant." The assigned Grant Manager is listed at the top of the screen. The grantee may also contact the Financial Resources Management (FiRM) Branch at (916) 341-5062 or Grants@CalRecycle.ca.gov.

GRANT MANAGEMENT SYSTEM (GMS)

GMS is CalRecycle's web-based grant application and grant management system. Access to GMS is secure; grantees must log in using a WebPass. WebPass accounts are tied to a specific email address. If an email address changes or becomes inactive, the grantee must create a new WebPass account to continue accessing GMS. Establish or manage a WebPass at CalRecycle's WebPass page (https://secure.calrecycle.ca.gov/WebPass/).

Accessing the grant

Grantees must log into GMS (https://secure.calrecycle.ca.gov/Grants) using their web pass. After login, locate the grant in the **My Awarded/Open Grants** table and select the **Grant Management** button. The **Grant Management Module** includes the following sections:

- **Summary tab** – shows approved budget, paid and remaining amounts. (This section is available to the grantee in read-only mode.)
- **Payment Request tab** - requests reimbursement.
- **Reports tab-** uploads required reports.
- **Documents tab**– uploads other grant documents that are not considered supporting documents to a payment request or a report. This section also provides access to documents that were uploaded within other sections of GMS.
- **Sites tab** – lists approved project sites.

Follow the instructions in GMS to work in the system. Use the information in the following sections to determine what reports, transactions, and supporting documents are required.

Contact Updates

Access to the grant is limited to those listed in the **Contacts** tab of the **Application Module** with the access check box marked. A contact may be listed but not granted access by not checking the box. Please note, if a contact is granted access to a grant, they will be able to edit contacts, submit payment requests, upload reports, and view all documents. Those with access may update contact information for all contact types except Signature Authority. Email the assigned Grant Manager regarding any changes to Signature Authority information.

PRIOR TO COMMENCING WORK

Prior to commencing work under this grant, the grantee's Grant Manager or primary contact and authorized grant Signature Authority should review the Terms and Conditions (Exhibit A) and the Procedures and Requirements (Exhibit B) to identify key grant administrative requirements. Evaluation of the grantee's compliance with these requirements is a major focus of grant audits.

Reliable Contractor Declaration
Prior to authorizing a contractor(s) to commence work under this grant, the grantee shall submit to the Grant Manager a declaration from the contractor(s), signed under penalty of perjury, stating that within the preceding three (3) years, none of the events listed in Section 17050 of Title 14 (www.calrecycle.ca.gov/Laws/Regulations/Title14/ch1.htm#ch1a5), California Code of Regulations, Natural Resources, Division 7, has occurred with respect to the contractor(s) and the subcontractor(s), respectively.

If a (sub) contractor is placed on the CalRecycle Unreliable List after award of this grant, the grantee may be required to terminate that contract. Obtain the Reliable Contractor Declaration form (CalRecycle 168) from CalRecycle's Grant Forms webpage (www.calrecycle.ca.gov/Funding/Forms).

A scanned copy of the signed Reliable Contractor Declaration form must be uploaded in GMS. To upload the form:

1. Go to the **Reports** tab.
2. Click on **Reliable Contractor Declaration** under **Report Type**.
3. Click the **Add Document** button.
4. Select Reliable Contractor Declaration in the **Document Type** drop down box, enter a document title, click the **Browse** button to search and upload the document, and then **Save**.
5. Click on the **Submit Report** button.

For further instructions regarding GMS, including login directions, see the section above titled Grant Management System.

Facilities on Non-Owned Property
A grantee that wants to establish facilities or expand existing facilities on property not owned by the grantee must prove a legally binding long term commitment. The application must clearly state the ownership or leasehold interests of the parties. A copy of any agreement between the grantee and private owner must have been uploaded in the application.

If a grantee is planning to lease buildings for any part of their submitted project, the lease must meet the requirements for developing a permanent facility on privately owned property (e.g., long-term lease evidencing commitment to utilize facility for purpose set forth in the grant; commitment to utilize facility as described in the application for life of facility)

GRANT TERM
The Grant Term begins on the date indicated in the NTP. The Grant Term ends on April 1, 2020. This is also the date the Final Report and final Payment Request are due to CalRecycle.

Grant-eligible program expenditures may start no earlier than the date indicated in the NTP. Eligible program costs must be incurred no later than April 1, 2020.

CalRecycle recommends reserving the period from March 1, 2020 to March 31, 2020 exclusively for the preparation of the Final Report and final Payment Request, though they may be completed earlier. **Costs incurred to prepare the Final Report and final Payment Request are only eligible for reimbursement during the Grant Term.**

ELIGIBLE COSTS

All grant expenditures must be for activities, products, and costs specifically included in the approved Work Plan and approved Budget. To be eligible for reimbursement, costs must be incurred after receiving a NTP and before the end of the Grant Term on April 1, 2020. All services must be provided and goods received during this period in order to be eligible costs. Invoices for goods and services must be paid by the grantee prior to the inclusion of those goods and services on a payment request.

Food waste prevention and food rescue salaries (i.e., driver and nonprofit labor wages) can account for up to 50 percent of the food waste prevention and rescue budget. The purchase of food waste prevention and rescue software that can be shared with food waste generators is eligible.

Any proposed revision(s) to the Work Plan and/or Budget must be submitted in writing and pre-approved in writing by the Grant Manager prior to grantee incurring the proposed expenditure. The approval document should be retained by the grantee for audit purposes. See Audit Record/Access section of the Terms and Conditions (Exhibit A).

INELIGIBLE COSTS

Any costs not specifically included in the approved Budget and not directly related to the Work Plan and the approved grant project are ineligible for reimbursement. Contact the Grant Manager if clarification is needed. Ineligible costs include, but are not limited to:

- Costs incurred prior to the date of the NTP letter or after April 1, 2020.
- The purchase or retrofitting of vehicles or containers for collection of feedstock when not associated with a food waste prevention and rescue component.
- Collection/delivery/purchase of organics (i.e., green waste, food materials or alternative daily cover (ADC)) feedstock.
- Food dehydrators and liquefiers unless the dehydrated or liquefied material is subsequently digested or composted. These projects must result in increased tons of California-generated food materials diverted from landfills.
- Combined costs for permitting, public education/outreach, indirect costs, and salaries not related to construction or installation exceeding five percent of the total amount requested.
- Design and engineering costs exceeding five percent of total amount requested.
- The same activities or purposes already being funded through other agencies using California Climate Investments funds.
- Costs currently covered by another CalRecycle loan, grant, or contract, or covered by a grant or contract offered by another state agency.
- Environmental review for project permitting, including the preparation of Environmental Impact Reports or related documents.
- Lease of land or buildings.
- Purchase of buildings that are not associated with the processing of materials.

- Travel costs exceeding the state-approved rates for mileage, per diem, lodging, etc.
- Purchases of offsets or allowances.
- Costs deemed unreasonable or not related to the grant project by the Grant Manager.
- Costs associated with the purchase of equipment and supplies that will not be under the direct control of a grantee.
- Labor costs shall not exceed 50 percent of the food waste prevention and rescue budget

INDIRECT COST

Indirect costs can be claimed by the grantee. The following guidelines must be used when claiming these costs.

- Total indirect costs shall not exceed five percent of the total grant award. These costs are expenditures not capable of being assigned or not readily itemized to a particular project or activity, but considered necessary for the operation of the organization and the performance of the program. The costs of operating and maintaining facilities, accounting services, and administrative salaries are examples of indirect costs. All indirect costs charged to the grant must be associated with grant activities as shown in the approved Budget.
- Direct costs charged directly to the grant shall not be included in the indirect cost formula. Supervision performed by managers and supervisors can be included in the indirect cost formula, and therefore, will not be a direct charge to the grant. On the other hand, if a manager or supervisor performs an activity that is directly related to the execution of the grant (not supervising staff working on the project), costs associated with this activity may be included as a direct charge. Such activity must be clearly supported by appropriate documentation and shall not be charged to the grant as an indirect cost.
- The grantee must maintain organized and accurate records that follow generally accepted accounting principles and leave an audit trail. The Grantee must provide access to all documents related to the grant program and fiscal operation of the grant program as deemed necessary by CalRecycle.

ACKNOWLEDGEMENTS

The grantee shall acknowledge both California Climate Investments as a funding source and CalRecycle's administration of funds each time projects funded, in whole or in part, by this Agreement are publicized in any medium, including news media, brochures, or other types of promotional materials. The acknowledgement of California Climate Investments and CalRecycle's support must incorporate the appropriate logo. Initials or abbreviations for CalRecycle shall not be used. The Grant Manager may approve deviation from this requirement on a case-by-case basis where such deviation is consistent with CalRecycle's Communication Strategy and Outreach Plan.

RETENTION OF PUBLIC EDUCATION

For audit purposes, grantees are required to retain samples of all publicity and education materials for three years AFTER the close of the Grant Term, or a longer period if warranted to resolve any issues with this grant. (See Audit/Records Access Section in Terms and Conditions (Exhibit A).

REPORTING REQUIREMENTS AND INFORMATION

The grantee must submit Progress Reports and a Final Report as required by this Agreement; however, the Grant Manager may request a Progress Report at any time during the Grant Term. Failure to submit the Final Report with appropriate documentation by the due date may result in rejection of the Payment Request and/or forfeiture by the Grantee of claims for costs incurred that might otherwise have been eligible for grant funding.

All reports must be uploaded in GMS. For further instructions regarding GMS, including login directions, see the section above entitled, Grant Management System.
To upload a report:

1. Go to the **Reports** tab.
2. Click on the appropriate Report Type.
3. Click on the **Add Document** button.
4. Choose the Document Type, enter a document title, click the **Browse** button to search and upload the document, and then **Save**.
   - You may upload multiple documents to complete reporting requirements.
   - The maximum allowable file size is 35MB.
5. Click the **Submit** button when the report is complete.

The reports must be current, include all required sections and documents, and must be approved by the Grant Manager before any Payment Request can be processed. Failure to comply with the specified reporting requirements may be considered a breach of this Agreement and may result in the termination of this Agreement or rejection of the Payment Request and/or forfeiture by the grantee of claims for costs incurred that might otherwise have been eligible for grant funding. Any problems or delays must be reported immediately to the Grant Manager.

Some reported project information will be publicly available on the Air Resources Board (ARB) website, including the amount of funding that is being spent on projects that benefit disadvantaged communities and maps that show the locations of these communities.

PROGRESS REPORT

The grantee must submit a **Progress Report** each quarter by the due date assigned in the Milestones. Each Progress Report should cover grant activities that occurred within that reporting quarter. The report should include the following:

1. **General Information**
   The Grant Number, Grantee's name, and reporting period. The following disclaimer must appear on the cover page of the report:
   "The statements and conclusions of this report are those of the grantee and not necessarily those of the Department of Resources Recycling and Recovery (CalRecycle), its employees, or the State of California. The state makes no warranty, express or implied, and assumes no liability for the information contained in the succeeding text."
2. **Description**
   A description of work completed, arranged according to tasks and expenditure categories as shown in the Work Plan. Responses to the following questions should be included:

- Did you accomplish all of the tasks and activities which were scheduled to be completed in this quarterly reporting period according to the Work Plan? If not, what was not accomplished, why and how will you complete the delayed tasks and activities to make up the lost time? Include any permitting issues and local opposition.
- A brief description of work that will be conducted during the subsequent quarterly reporting period. If necessary, discuss any adjustments to the Work Plan that you may be requesting as a result of the evaluation process.
- Document any issues or challenges that will prevent the project from meeting the goals in the Work Plan.

3. Performance Data

Provide both qualitative and quantitative data from the previous quarterly reporting period in a format approved by your CalRecycle grant manager. The report must include how your project contributed to increased greenhouse gas (GHG) reductions, tons diverted from landfills, and all benefits to Disadvantaged Communities. This will include a performance table which CalRecycle will provide to enter quantitative data. Reported outcomes must include all of the following:

a) California tons of newly diverted material from landfills

Grantees must report the tons diverted that occurred in the previous quarter as a result of the project.

- Provide documentation that the project is utilizing feedstock generated in California which was previously disposed in landfills. This includes contracts, franchise agreements, or other verifiable documentation.
  - This documentation must demonstrate reduced tonnages of disposal that are a direct result of increased feedstocks for the project. Documentation may include weight receipts from certified scales, reports from haulers indicating feedstock tonnage and sources, pictures of incoming feedstock, and/or landfill receipts.
  - Discuss whether the current annualized throughput is sufficient to achieve the tons per year goals cited in the grant application. If not, discuss the specific steps which the grantee will take to increase throughput to those levels and the dates by which these steps will occur.
- The gross tons of organic materials processed for the quarter, using feedstock described above.
- The total tons of residual material (contaminants separated from the delivered feedstock) sent to the landfill or not used in the manufacturing of the finished product.
- The quantity of products produced, (e.g., tons of compost, standard cubic foot of biogas, gallons of biodiesel).
- The total tons of food waste prevented and/or food rescued as a result of the food waste prevention component of the project.
- The quantity of ancillary products produced and their fate.
  - If the project is anaerobic digestion, report on the tons and/or gallons of solid and/or liquid digestate produced, and its use. If digestate is sent to composting, provide weight receipts indicating where and how much digestate was composted.

- If the project is composting, and mulch, biomass fuel, or ADC is also being produced, provide weight tickets or other proof indicating where and how many tons of these products were sold.

b) GHG Emission Reductions

Grantees must report the GHG emission reductions that occurred in the previous quarter as a result of the project. The approved ARB quantification methodology referenced in the Grant Agreement must be used to calculate GHG emissions. Note: The qualification methodology and estimated GHG emission reductions may have been modified by ARB and CalRecycle during the application review.

c) Disadvantaged Communities

Grantees must report benefits to disadvantaged communities that occurred in the previous quarter as a result of the project. Identify any progress on new jobs created.

- Jobs and Job Training
  - Number of project work hours for jobs provided to disadvantaged community residents and the associated census tract numbers, if applicable.
  - Total number of jobs and the associated jobs classification/trade.
  - Number of jobs that were provided to disadvantaged community residents and the associated jobs classification/trade, if applicable.
  - Entry-level and median hourly wage or entry-level and median total compensation (hourly wage plus benefits) for each job classification/trade.
  - For all job training
    - Total number of people that completed job training and the associated job training classification/trade; and
    - The type of credentials earned (e.g., certifications, licenses, degrees)
  - For job training provided to disadvantaged community residents, if applicable.
    - Number of disadvantaged community residents that completed job training and the associated job training classification/trade; and
    - The type of credentials earned (e.g., certifications, licenses, degrees)
- If your project included a food waste prevention and rescue component, indicate how many pounds of food were rescued and distributed (e.g., at a food bank), as well as specific locations. If rescued food was served as meals, indicate approximately how many meals were served and the average weight per meal. Estimate how many meals were served inside and outside of disadvantaged communities, the specific disadvantaged communities served, and your method for that estimation. Quantify the food residuals that will be captured from the Food Waste Prevention and Rescue Component.
- If this project provides other benefits to a disadvantaged community, please discuss the types of benefits provided, the specific disadvantaged communities served, and your method for quantifying these benefits. Describe how the project benefits have addressed the community's need.

- Describe how you have engaged the community within a ½ mile radius of the facility project and along project truck routes, if applicable. Summarize the results of your outreach.

4. **Performance Table**
   CalRecycle will provide a table within which to enter quantitative data related to Diverted Tons, GHG Emissions Reductions, disadvantaged communities, and other grant performance data within the prior quarter. (Required documents and reports are subject to change due to ARB Funding Guidelines or legislative requirements.)
5. **Air and Water Quality**
   Quantify and document any improvements in air and water quality (other than GHG emission reductions) resulting from the project during the previous quarter.
6. **Pictures**
   Provide photographs showing the progress of the grant project during the previous quarter.
7. **Payment Request and Expenditure/Performance Itemization Summary**
   A Payment Request form (CalRecycle 87), supporting documentation and Expenditure/Performance Itemization Summary (EPIS) form (CalRecycle 777) may be submitted if reimbursement is desired. Refer to the section labeled "Grant Payment Request and Documentation" for additional details.

CRITICAL PROJECT REVIEW

A **Critical Project Review** will be scheduled by the Grant Manager in the second quarter of 2018. The review may be conducted via phone call or meeting. This review will cover activities **from the NTP** to **the date of the review**. During this review, the grantee will discuss the progress on tasks included in the work plan and budget. If the project hasn't started construction one year after award, CalRecycle may terminate the agreement.

The Grant Manager may schedule subsequent Critical Project Reviews at any time during the Grant Term. If it is determined by CalRecycle from the Critical Project Review that, at that time, the grant project is not meeting, and is unlikely to meet, certain milestones, CalRecycle shall have the right to terminate the Grant Agreement pursuant to the Terms and Conditions (Exhibit A) of the Grant Agreement. If the grant is terminated and has incurred any costs during the term, the grantee may be required by CalRecycle to return any previously reimbursed funds. Termination may result in forfeiture by the grantee of any funds retained pursuant to CalRecycle's 10 percent retention policy.

FINAL REPORT

The Final Report is due **April 1, 2020.** This report should cover grant activities **from the NTP** through **April 1, 2020.** The following items must be included:

1. **General Information**
   The Grant Number, Grantee's name and Grant Term. The following disclaimer statement on the cover page:

   > "The statements and conclusions of this report are those of the grantee and not necessarily those of the Department of Resources Recycling and Recovery (CalRecycle), its employees, or the State of California. The state makes no warranty, express or implied, and assumes no liability for the information contained in the succeeding text."

2. **Description**
   Description of activities that were started, continued, and completed during the entire grant term. Activities must be arranged by the categories shown in your approved Work Plan.
   - What aspects of the project worked well and why?
   - What aspects of the project did not work well and why?
   - What aspects of the project will be continued beyond the grant term?
   - Describe how other funding sources have leveraged the project.
3. **Performance Data**
   Provide a cumulative total of all quarterly reports in a format approved by your CalRecycle grant manager. The report must include how your project contributed to GHG emission reductions, tons diverted from landfills, and all benefits to disadvantaged communities. This will include a performance table which CalRecycle will provide to enter quantitative data. Reported outcomes must include all of the following:
   a) **GHG reductions, in MTCO2e**, achieved during the grant term, along with all supporting calculations. Report the annual GHG reductions in MTCO2e that occurred during the grant term. In addition, project what will occur each subsequent year through the project life until December 31, 2026, based on the actual projected tons of diverted material for that period in paragraph (b).
   b) **Total tons of organic waste material generated in California and newly diverted from landfills** during the grant term, along with all supporting documentation. Report the net annual tons of material that was diverted from a landfill each year during the grant term. Net annual tons are newly diverted organic material minus the weight of any residual materials that will be landfilled or used for ADC. In addition, project the annual tons that will be diverted from a landfill each subsequent year through the project life until December 31, 2026.
   c) **Benefits to Disadvantaged Communities** - Describe and quantify benefits to disadvantaged communities including improvements in air and water quality, as well as economic and social indicators identified in the application. Disadvantaged communities can be determined by using CalEnviroScreen 2.0, under CalEnviroScreen 2.0 Mapping Applications and Data Section. How do you plan to continue engaging the community within a half-mile mile radius of the facility project and along project truck routes?
4. **Performance Table**
   CalRecycle will provide a table within which to enter quantitative data related to Diverted Tons, GHG Emissions Reductions, disadvantaged communities, and other grant performance data for the full grant term. (Required documents and reports are subject to change due to ARB Funding Guidelines or legislative requirements.)
5. **Air and Water Quality**
   Quantify and document any current and/or projected improvements in air and water quality resulting from the project.
6. **Pictures of Project Implementation or Improvement**
   Provide digital images of each stage of your project when submitting the Final Progress Report. The photographs should be in PDF, JPG, or PNG format.

7. **Final Payment Request (CalRecycle 87), if needed**
   An EPIS form and required documentation can be submitted if reimbursement is desired. Refer to the "Grant Payment Request and Documentation" section below for more details.

GRANT PAYMENT INFORMATION

1. Payment to the grantee for eligible infrastructure expenses is made on a reimbursement basis only and only for those materials and services specified in the approved grant application.
2. Reimbursement and a performance payment may be requested quarterly during the grant term in conjunction with submission of the Progress Report and the Final Report.
3. Performance payments are issued for each ton of California-generated greenwaste, food materials, or ADC diverted from landfills and composted or digested. The payments will be issued quarterly on a per ton basis with the dollar amount previously determined by dividing the amount requested and approved for performance payments by the total number of tons diverted under the project during the grant term, as stated in the application.
4. The grantee must submit the required Progress Report/Final Report, and the Grant Manager must approve the report prior to, or concurrent with, submission of the Grant Payment Request.
5. The grantee must submit a completed Grant Payment Request and provide supporting documentation as described in the "Payment Request and Documentation" section for completed project(s) only. Reimbursements and performance payments must be made on separate Grant Payment Request forms.
6. Grant payments will only be made to the grantee. It is the grantee's responsibility to pay all contractors and subcontractors for purchased goods and services.
7. Ten percent of each approved reimbursement Grant Payment Request will be withheld and retained until all conditions stipulated in the Agreement, including submission and Grant Manager approval of the Progress and/or Final Report, have been satisfied.
8. CalRecycle will make payments to the grantee as promptly as fiscal procedures permit. The grantee can typically expect payment approximately 45 days from the date a Grant Payment Request is approved by the Grant Manager.
9. The grantee must provide a Reliable Contractor Declaration (CalRecycle 168) (http://www.calrecycle.ca.gov/Funding/forms/) signed under penalty of perjury by the grantee's contractor(s) and subcontractor(s) in accordance with the "Reliable Contractor Declaration" provision of the Terms and Conditions (Exhibit A). The declaration must be received and approved by the Grant Manager prior to commencement of work. See "Reliable Contractor Declaration" provision in Terms and Conditions (Exhibit A) for more information.
10. The grantee must provide the Feedstock Certification Form (CalRecycle 778-GHG) (http://www.calrecycle.ca.gov/Funding/forms/) signed under penalty of perjury and completed by each processor, contractor or hauler who provides or will provide feedstock for the grantee's project. The form must be signed by both the processor, contractor or hauler and the grantee's Signature Authority, and received and approved by the Grant Manager prior to commencement of work.

PAYMENT REQUEST AND DOCUMENTATION

Failure to submit the final Payment Request with appropriate documentation by the due date may result in rejection of the Payment Request and/or forfeiture by the grantee of claims for costs incurred that might otherwise have been eligible for grant funding.

Payment requests must be submitted in GMS. For further instructions regarding GMS, including login directions, see the section above entitled, Grant Management System. To submit a Grant Payment Request:

1. Go to the **Payment Request** tab.
2. Click on the **Create a Payment Request** button.
   - For either reimbursement of infrastructure costs or performance payments, choose **Reimburse** for the Transaction Type and enter the amount spent in each budget sub category.
     Note: you must complete a separate request for infrastructure and performance payment even if they are submitted at the same time.
   - When the transaction is complete, click the **Save** button.
   - After the transaction is saved, the **Upload Supporting Documentation** button will appear in the lower right corner.
3. Click the **Upload Supporting Documentation** button.
   - Choose the Document Type, enter a document title, click the **Browse** button to search and upload the document, and then **Save**.
   - Select the **Back** button to upload another document and continue this process until all required supporting documents as listed below are uploaded.
   - The maximum allowable file size for each document is 35MB.
4. Click the **Submit Transaction** button, located on the transaction page, to complete your payment request (including uploading all the documents listed below).

Supporting Documentation for Reimbursement Payments

A. A scanned copy of the **Grant Payment Request form** (ensure you select the appropriate payment type). Mail only the **original** Grant Payment Request form (CalRecycle 87), with the original signature of the signatory or his/her designee*, as authorized by grantee's Resolution or Letter of Commitment to:

Via standard mail	Via courier/personal delivery
Department of Resources Recycling and Recovery ORG Grant Program FiRM Branch, 13th Floor P.O. Box 4025 Sacramento, CA 95812-4025	Department of Resources Recycling and Recovery ORG Grant Program FiRM Branch, 13th Floor 1001 I Street Sacramento, CA 95814

*A designee may sign on behalf of the grantee if a) authorized by the Resolution or Letter of Commitment, and b) a Letter of Designation has been provided to the Grant Manager.

B. **Expenditure/Performance Itemization Summary (EPIS)** (CalRecycle 777). All expenditures must be itemized and arranged by the reporting and expenditure categories as contained in the grantee's approved Budget and Work Plan.
    - Each EPIS must be accompanied by supporting documentation for each line item expense (see below). The grantee should retain the original documents.
    - The EPIS must include the following certification.
      "I certify under penalty of perjury, under the laws of the State of California, that the above information is correct and that all funds received have been expended in accordance with the Grant Agreement."
    - The certification must be dated and signed by the person authorized in the grantee's Resolution or Letter of Commitment. An EPIS received without the signed certification will not be approved.

C. **Cost and Payment Documentation.** Pertinent documentation must be submitted with the EPIS to substantiate all expenses claimed on the EPIS. For audit purposes, the grantee should retain this documentation for a minimum of three years after the end of the grant term (see Audit/Records Access in the Terms and Conditions (Exhibit A). Types of acceptable documentation include, but are not limited to:
    a) **Invoices, Receipts, or Purchase orders.** Invoices, receipts or purchase orders containing the product manufacturer, supplier/vendor, and/or contractor name, phone number, address, purchase amount, date and description of goods/services.
    b) **Proof of Payment** that clearly identify the date and payee (e.g., copies of cancelled checks, EFT confirmations, bank statements, and invoices or credit card statements that show a zero balance).
    c) **Personnel Expenditure Summary** (CalRecycle 165 or grantee's version). Document personnel expenditures based on actual time spent on grant activities and actual amounts paid to personnel (these forms are not required if you have an alternate time reporting method pre-approved by your Grant Manager).
    d) **Travel Expense Log Form** (CalRecycle 246 or grantee's version). Document costs related to travel and include supporting documentation.

Supporting Documentation for Performance Payments

A. A scanned copy of the **Grant Payment Request form** (ensure you select the appropriate payment type). Mail only the **original** Grant Payment Request form (CalRecycle 87), with the original signature of the signatory or his/her designee*, as authorized by grantee's Resolution or Letter of Commitment to:

Via standard mail	Via courier/personal delivery
Department of Resources Recycling and Recovery Organics Grant Program FiRM Branch, 13th Floor P.O. Box 4025 Sacramento, CA 95812-4025	Department of Resources Recycling and Recovery Organics Grant Program FiRM Branch, 13th Floor 1001 I Street Sacramento, CA 95814

*A designee may sign on behalf of the grantee if a) authorized by the Resolution or Letter of Commitment, and b) a Letter of Designation has been provided to the Grant Manager.

B. Feedstock Certification Form (CalRecycle 778-GHG). Check the Payment Request box and include your processor, contractor or hauler's signature and obtain signature from Signature Authority for verification of tonnage diverted from landfills. You must include supporting documentation (e.g., Certificate of Origin, a Bill of Lading and Manifest documentation.

Note: Progress Report/Final Report must be approved the report prior to, or concurrent with, submission of the Grant Payment Request. Seeing Reporting Requirements and Grant Payment Information sections above.

All forms listed above can be downloaded from the CalRecycle Grant Forms website (http://www.calrecycle.ca.gov/Funding/Forms).

ANNUAL SURVEY

Post-grant term Annual Surveys may be requested by CalRecycle or ARB to verify continuous progress of projects funded by the Organics Grant Program. The grantee may be asked to complete and submit an Annual Survey for the Organics Grant Program every year for three years after the end of grant term, based on the schedule below. You will be notified via email once the annual online survey is available.

Survey Due	Survey Period
June 30, 2021	End of Grant Term – June 30, 2021
June 30, 2022	July 1, 2022 – June 30, 2022
June 30, 2023	July 1, 2023 – June 30, 2023

AUDIT CONSIDERATIONS

The grantee agrees to maintain records and supporting documentation pertaining to the performance of this grant subject to possible audit. The State of California has the right to review project documents and conduct audits during project implementation and over the project life (2017–2026). A longer period of records retention may be stipulated in order to complete any action and/or resolution of all issues which may arise as a result of any litigation, dispute, or audit, whichever is later.

Examples of audit documentation include, but are not limited to, expenditure ledger, payroll register entries, time sheets, personnel expenditure summary form, travel expense log, paid warrants, contracts and change orders, samples of items and materials developed with grant funds, invoices and/or cancelled checks. Please refer to the Terms and Conditions (Exhibit A) for more information.

ATTACHMENT F

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ATTACHMENT G

EVALUATION AND SELECTION

ATTACHMENT G

EVALUATION AND SELECTION

Proposals will be ranked according to the criteria described below:

1. Addenda to this RFP – Pass / Fail

1.1. The Proposer shall acknowledge each addendum issued in connection with this RFP, by listing all issued addenda on an Addenda Acknowledgement sheet to be submitted with the Proposal. Failure to acknowledge all issued addenda may result in the Proposal being considered **non-responsive** and ineligible for further consideration.

1.2. Including copies of addenda with the Proposal shall not constitute acknowledgement of issued addenda.

2. Proposer Exceptions to this RFP – Pass / Fail

2.1. If the Proposer takes exception to any portion of the contract terms, the Proposer must identify and explain to the City in writing the basis for the exception. The Proposer must submit any claimed exception a minimum of 10 calendar days prior to the due date for submission of Proposals. Exceptions taken after the submission period for this RFP may be cause for rejection of the Proposal as being **non-responsive**.

3. Summary of Proposal (5 Points Max)

3.1. Each Proposer must submit a one to two page summary of its Proposal.

4. Project Team (5 Points Max)

4.1. Describe the proposed management plan for this Project. Describe the qualifications of key proposed construction and technical personnel, and subcontractors, from applicable fields including the following:

5.1.1 Civil

5.1.2 Mechanical

5.1.3 Electrical

5.1.4 Instrumentation and Controls

5.1.5 Environmental

5. Technical Approach and Design Concept (40 Points Max)

5.1. Describe in detail the proposed design concept for this Project. Include detailed descriptions, conceptual design drawings, schematics, a list of major equipment, and any other information deemed necessary to allow the City to make an informed evaluation of the Proposer's technical approach. The completeness and technical merit of the design concept will be evaluated.

The following elements shall be included in this Technical Proposal:

5.1.1. The City will select a Proposer that will offer the best value for the design and construction of an ASP system per the Scope of Work and the requirements of this contract. The Work and Services required of the Proposer include those during design, construction, startup, and demonstration of the Project. The Proposer shall provide all management, supervision, labor, services, temporary services, equipment, tools, supplies, and any other item of every kind and description required for the complete design and construction, of the Project, as described in Attachment A.

5.1.2. The Project Manager will assemble a team which will evaluate the proposals and utilize the point system described below to rank the Proposer. The Proposers will be notified in writing of the City's final decision. Selection of the Proposer will be based on the following criteria:

5.1.3. **Efficiency (10 points):** Provide a system layout/design and sequencing plan that will allow for the most efficient implementation of the entire project. The proposed ASP system must process the minimum annual throughput, but should also provide for the most efficient possible execution of a future expansion of the system.

5.1.4. **Enhanced Composting Process (10 points):** Provide a system meeting site constraints that effectively processes throughput as well as provides enhanced storm water quality and odor control throughout composting.

5.1.5. **Functionality (10 points):** Provide a system that is suitable for site conditions and meets all applicable local, state, and federal regulations related to the ASP system, composting, and the project's site. Proposer should demonstrate how their proposed system will fulfill these objectives.

5.1.6. **Serviceability and Quality/Durability (10 points)**: Ease of maintenance and quality/durability of equipment and materials is important to ensure the ASP system will provide the maximum possible service life with minimal operation disruption.

6. Construction Plan (20 Points Max)

6.1. Describe the proposed construction plan for this Project, including the following, at a minimum:

6.1.1. Construction approach and methods

6.1.2. Plan for operation of facility during construction

6.1.3. Plan for phasing of construction activities

6.1.4. General plan for functional testing and start-up.

6.1.5. Proposed construction schedule

7. Equal Employment and Contracting Opportunity (25 Points Max)

7.1. Failure to submit the required EOCP information will result in Proposal being determined as **non-responsive**.

7.2. Subcontractor Documentation

7.2.1. The points will be awarded according to the chart below, based upon actual subcontract award amounts, as set forth in the price proposals.

OUTCOME		MAXIMUM POSSIBLE POINTS
1	5% - 9% participation SLBE, ELBE or DVBE	5
2	10%-14%participation SLBE, ELBE or DVBE	10
3	15%-19% participation SLBE, ELBE or DVBE	15
4	20%-24% participation SLBE, ELBE or DVBE	20
5	25% participation SLBE, ELBE or DVBE	25
In no case the points shall exceed 25.		

8. Reference Checks (5 Points Max)

A minimum of three (3) references are required. The City will utilize the list of references provided by the Proposer during the RFP solicitation when rating/scoring performance under this section.

TOTAL POINTS: 100

9. Review of Technical Proposal

9.1. Following the receipt of the Technical Proposal, the City anticipates allotting 2 weeks for review of the Technical Proposals.

10. Final Selection Based on Weighted Criteria

10.1. Based on the Design-Builders' Proposals and any follow-up presentations, and using the Project's Evaluation Criteria, the Panel will continue to rank the Design-Builder's Proposals by determining an overall score which shall be calculated as follows:

10.2. A maximum of 70 points will be assigned for the Contract Price as proposed. The lowest total Contract Price of all the Proposals that meet the requirements of this RFP will receive the maximum assigned points to this category. The other Price Proposals will be scored based on how much higher their total Contract Prices compare to the lowest:

$$\left(1- \frac{\text{(Contract Price-Lowest Contract Price)}}{\text{(Lowest Contract Price)}}\right) \times \text{Max Pts} = \text{Pts Rcvd}$$

10.3. A maximum of 30 points will be assigned for the qualitative criteria described in the RFP. All Proposals shall receive scores based on 0.3 times the average of the composite ratings provided by the Panel.

10.4. The Selected Design-Builder will be the team with the highest total score earned. Design-Builders will be notified in writing of the City's final decision.

10.5. For example, if the lowest total Contract Price of all proposals is $100, that Proposal would receive the maximum allowable points for the price category. If the total Contract Price of another proposal is $105 and the maximum allowable points is 80 points, then that Proposal would receive (1– ((105–100)/100)) x 80 = 76 points, or 95% of the maximum points. The lowest score a Proposal can receive for this category is zero points - the score cannot be a negative number. The below example using the same 80/20 split illustrates the calculation outcomes with Firm A winning the competition even though Firm A did not have the highest rated proposal or the lowest price:

Firm	Avg. Composite Rating	Qualitative Score (20Max)	Price Proposal	Price Score (80 Max)	Total Score (100 Max)
A	85.00	17.00	$105	76.00	93.00
B	**88.00**	**17.60**	**$130**	**56.00**	**73.60**
C	50.00	10.00	$100	80.00	90.00
Note: All figures will be rounded off to two decimal places.					

ATTACHMENT H

PRICE FORMS

PRICE PROPOSAL FORMS

The Design-Builder agrees to the design and construction of **AERATED STATIC PILE SYSTEM**, for the City of San Diego, in accordance with these contract documents for the lump sum price listed below. The Design-Builder guarantees the proposed prices for a period of 120 Days from the date Proposals are due. The duration of the price guarantee may be extended as required by mutual consent.

ITEM	NAICS CODE	DESCRIPTION	D*	UNIT	QUANTITY	UNIT PRICE	EXTENSION
1	524126	Bonds (Payment and Performance)		LS	1		$
2	541330	WPCP Development		LS	1		$
3	237990	WPCP Implementation		LS	1		$
4	541330	Engineering and Design Services (Entire Project)	D	LS	1		$
5		Field Orders (EOCP Type II)		AL	1		$150,000.00
6	541690	Field Construction, Materials, and Project Management (ASP System)		LS	1		$
7	562212	Specialty Fabric Covers for Aerated Static Piles		LS	1		

ITEM	NAICS CODE	DESCRIPTION	D*	UNIT	QUANTITY	UNIT PRICE	EXTENSION
8	541690	Monthly Generator Rental		EA	12	$	$
9	541690	Mobile Winding Machine		EA	1	$	$
10	541690	Startup, Demonstration, and Training		LS	1		$
TOTAL FOR PROPOSAL (ITEMS NO 1 THROUGH 10 INCLUSIVE)							**$**
ADDITIVE ALTERNATE 1							
1	541330	Dedicated Electrical Service for ASP System		LS	1		$
TOTAL ADDITIVE ALTERNATE 1:							**$**
ADDITIVE ALTERNATE 2							
2	541330	Connection of ASP System and Equipment to Existing Electrical Feed		LS	1		$
TOTAL ADDITIVE ALTERNATE 2:							**$**

ITEM	NAICS CODE	DESCRIPTION	D*	UNIT	QUANTITY	UNIT PRICE	EXTENSION
ADDITIVE ALTERNATE 3							
3	541690	As-Needed Repair Services		HR	80	$	$
						TOTAL ADDITIVE ALTERNATE 3:	**$**
ADDITIVE ALTERNATE 4							
4	562219	ASP System Expansion		LS	1		$
						TOTAL ALTERNATE 4:	**$**
						TOTAL PROPOSAL + ADDITIVE ALTERNATE 1 + ADDITIVE ALTERNATE 2 + ADDITIVE ALTERNATE 3 + ADDITIVE ALTERNATE 4:	$

Total Price For Design-Build Proposal, (items 1 through 10, Plus Additive Alternate 1, Item 1, Plus Additive Alternate 2, Item 1, Plus Additive Alternate 3, Item1, and Additive Alternate 4, Item 1 inclusive) amount written in words:

_____

Design-Builder:_____

Title:_____

Signature:_____

The names of all persons interested in the foregoing proposal as principals are as follows:

_____

_____

_____

IMPORTANT NOTICE: If Design-Builder or other interested person is a corporation, state secretary, treasurer, and manager thereof; if a co-partnership, state true name of firm, also names of all individual co-partners composing firm; if Design-Builder or other interested person is an individual, state first and last names in full.

NOTES:

A. The Contract Price to be used in the selection process as described in Attachment G of the RFP will be determined by the Base Proposal.

B. After the selected Design-Builder has been determined, the City may, at its sole discretion, award the contract for the Base Proposal alone or for the Base Proposal plus one or more alternates.

C. Proposals shall not contain any recapitulation of the Work. Conditional Proposals may be rejected as being **non-responsive**. Alternative proposals will not be considered unless called for.

D. Subcontractors' License Numbers must be filled in. Failure to provide the information specified may deem the bidder **non-responsive**.

E. Blank spaces must be filled in. The Design-Builder's failure to submit a price may render the Proposal non-responsive and ineligible for award.

F. Unit prices shall be entered for all unit price items. Unit prices shall not exceed two (2) decimal places. If the Unit prices entered exceed two (2) decimal places, the City will only use the first two digits after the decimal points without rounding up or down.

G. All extensions of the unit prices bid will be subject to verification by the City. In the case of conflict between the Product of the Quantity x Unit Price and the written Extension, the Product shall govern.

H. In the case of conflict, between the sum of the Extensions and the Bid Total, the sum of the Extensions shall govern.

DESIGN-BUILD LIST OF SUBCONTRACTORS TO BE INCLUDED IN THE PRICE PROPOSAL ONLY

In accordance with the requirements of the “Subletting and Subcontracting Fair Practices Act”, Section 4100, of the Public Contract Code (PCC), The Design-Builder is to list below the name and address of each Subcontractor who will perform work, labor, render services or specially fabricates and installs a portion [type] of the work or improvement, in an amount in excess of0.5% of the Design-Builder’s total Bid. The Design-Builder is to list below the portion of the work which will be done by each Subcontractor. The Design-Builder is to list only one Subcontractor for each portion of the Work. The DOLLAR **VALUE** of the total Bid to be performed by the Subcontractor is to be stated for all Subcontractors listed. Failure to comply with the listing of the Subcontractors as specified may result in the Bid being rejected as non-responsive and ineligible for award. The Design-Builder is to list all SLBE, ELBE, DBE, DVBE, MBE, WBE, OBE, WoSB, SDB, HUBZone, and SDVOSB Subcontractors that Design-Builder are seeking recognition towards achieving any subcontracting participation percentages.

NAME, ADDRESS AND TELEPHONE NUMBER OF SUBCONTRACTOR	DIR Registration Number	CONSTRUCTOR OR DESIGNER	SUBCONTRACTOR LICENSE NUMBER	TYPE OF WORK	DOLLAR VALUE OF SUBCONTRACT	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB☐	WHERE CERTIFIED ☐	CHECK IF JOINT VENTURE PARTNERSHIP
Name: IO Environmental & Infrastructure Inc Address: 2840 Adams Avenue, Ste. 301 City: San Diego, State: CA Zip: 92116 Phone: 619.280.3278 Email: kathym@iosdv.com	1000001765	CONSTRUCTOR	957419	CONSTRUCTION	$390,785.64	SLBE	CITY OF SAN DIEGO	
Name: Frank's Industrial Serivces, Inc. Address: 1426 259th St City: Harbor City State: CA Zip: 90710 Phone: 310.539.7827 Email: sgsedillo@yahoo.com	1000005601	DESIGNER AND CONSTRUCTOR	700250	ELECTRICAL	$149,040.00	N/A	N/A	

① As appropriate, Design-Builder shall identify Subcontractor as one of the following and shall include a valid proof of certification (except for OBE, SLBE and ELBE):

Certified Minority Business Enterprise	MBE	Certified Woman Business Enterprise	WBE
Certified Disadvantaged Business Enterprise	DBE	Certified Disabled Veteran Business Enterprise	DVBE
Other Business Enterprise	OBE	Certified Emerging Local Business Enterprise	ELBE
Certified Small Local Business Enterprise	SLBE	Small Disadvantaged Business	SDB
Woman-Owned Small Business	WoSB	HUBZone Business	HUBZone
Service-Disabled Veteran Owned Small Business	SDVOSB		

② As appropriate, Design-Builder shall indicate if Subcontractor is certified by:

City of San Diego	CITY	State of California Department of Transportation	CALTRANS
California Public Utilities Commission	CPUC	San Diego Regional Minority Supplier Diversity Council	SRMSDC
State of California’s Department of General Services	CADoGS	City of Los Angeles	LA
State of California	CA	U.S. Small Business Administration	SBA

The Design-Builder will not receive any subcontracting participation percentages if the Design-Builder fails to submit the required proof of certification.

DESIGN-BUILD NAMED EQUIPMENT/MATERIAL SUPPLIER LIST TO BE INCLUDED IN THE PRICE PROPOSAL ONLY

For credit calculations for City-funded contracts, see Chapter 11 in The WHITEBOOK. For non-City funded contracts, refer to the Funding Agency Provisions. If no indication of the supplier, manufacturer, or non-supplier is provided, listed firm will receive no credit for purpose of calculating the Subcontractor Participation Percentages.

NAME, ADDRESS AND TELEPHONE NUMBER OF VENDOR/SUPPLIER	DIR Registration Number	MATERIALS OR SUPPLIES	DOLLAR VALUE OF MATERIAL OR SUPPLIES	SUPPLIER (Yes/No)	MANUFACTURER (Yes/No)	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB☐	WHERE CERTIFIED☐
Name: Sustainable Generation, LLC Address: 110 South Poplar Street, Suite 400 City: Wilmington, State: DE Zip: 19801 Phone: 303.601.3404 Email: brett.hoyt@sustainable-generation.com	1000052239	SG Mobile™ System with GORE® Covers	$1,318,379.00	Yes	Yes	NA	NA
Name: Yodda Software, LLC Address: 11320 9th St. E City: Treasure Island State: FL Zip: 33706 Phone: 917.678.6947 Email: brett.hoyt@sustainable-generation.com	1000054272	Oxygen Control System	$477,528.00	Yes	Yes	NA	NA

① As appropriate, Design-Builder shall identify Vendor/Supplier as one of the following and shall include a valid proof of certification (except for OBE, SLBE and ELBE):

Certified Minority Business Enterprise	MBE	Certified Woman Business Enterprise	WBE
Certified Disadvantaged Business Enterprise	DBE	Certified Disabled Veteran Business Enterprise	DVBE
Other Business Enterprise	OBE	Certified Emerging Local Business Enterprise	ELBE
Certified Small Local Business Enterprise	SLBE	Small Disadvantaged Business	SDB
Woman-Owned Small Business	WoSB	HUBZone Business	HUBZone
Service-Disabled Veteran Owned Small Business	SDVOSB		

② As appropriate, Design-Builder shall indicate if Vendor/Supplier is certified by:

City of San Diego	CITY	State of California Department of Transportation	CALTRANS
California Public Utilities Commission	CPUC	San Diego Regional Minority Supplier Diversity Council	SRMSDC
State of California's Department of General Services	CADoGS	City of Los Angeles	LA
State of California	CA	U.S. Small Business Administration	SBA

The Design-Builder will not receive any subcontracting participation percentages if the Design-Builder fails to submit the required proof of certification.

DESIGN-BUILD NAMED EQUIPMENT/MATERIAL SUPPLIER LIST TO BE INCLUDED IN THE PRICE PROPOSAL ONLY

For credit calculations for City-funded contracts, see Chapter 11 in The WHITEBOOK. For non-City funded contracts, refer to the Funding Agency Provisions. If no indication of the supplier, manufacturer, or non-supplier is provided, listed firm will receive no credit for purpose of calculating the Subcontractor Participation Percentages.

NAME, ADDRESS AND TELEPHONE NUMBER OF VENDOR/SUPPLIER	DIR Registration Number	MATERIALS OR SUPPLIES	DOLLAR VALUE OF MATERIAL OR SUPPLIES	SUPPLIER (Yes/No)	MANUFACTURER (Yes/No)	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB☐	WHERE CERTIFIED☐
Name: UTV AG Address: Am Alten Raomerpfad 2 City: Baden-Baden State: Germany Zip: 76534 Phone: 49 (0)7223/8001505 Email: thomas@utvag.de	1000054273	Cover Winder Machine	$300,000.00	Yes	No	NA	NA
Name: United Rentals Address: 1960 West Mission Road City: Escondido State: CA Zip: 92029 Phone: 760.890.3080 Email: wjensen@ur.com	1000012175	Generator Rentals	$71,000.00	Yes	No	N/A	N/A

① As appropriate, Design-Builder shall identify Vendor/Supplier as one of the following and shall include a valid proof of certification (except for OBE, SLBE and ELBE):

Certified Minority Business Enterprise	MBE	Certified Woman Business Enterprise	WBE
Certified Disadvantaged Business Enterprise	DBE	Certified Disabled Veteran Business Enterprise	DVBE
Other Business Enterprise	OBE	Certified Emerging Local Business Enterprise	ELBE
Certified Small Local Business Enterprise	SLBE	Small Disadvantaged Business	SDB
Woman-Owned Small Business	WoSB	HUBZone Business	HUBZone
Service-Disabled Veteran Owned Small Business	SDVOSB		

② As appropriate, Design-Builder shall indicate if Vendor/Supplier is certified by:

City of San Diego	CITY	State of California Department of Transportation	CALTRANS
California Public Utilities Commission	CPUC	San Diego Regional Minority Supplier Diversity Council	SRMSDC
State of California's Department of General Services	CADoGS	City of Los Angeles	LA
State of California	CA	U.S. Small Business Administration	SBA

The Design-Builder will not receive any subcontracting participation percentages if the Design-Builder fails to submit the required proof of certification.

DESIGN-BUILD NAMED EQUIPMENT/MATERIAL SUPPLIER LIST TO BE INCLUDED IN THE PRICE PROPOSAL ONLY

For credit calculations for City-funded contracts, see Chapter 11 in The WHITEBOOK. For non-City funded contracts, refer to the Funding Agency Provisions. If no indication of the supplier, manufacturer, or non-supplier is provided, listed firm will receive no credit for purpose of calculating the Subcontractor Participation Percentages.

NAME, ADDRESS AND TELEPHONE NUMBER OF VENDOR/SUPPLIER	DIR Registration Number	MATERIALS OR SUPPLIES	DOLLAR VALUE OF MATERIAL OR SUPPLIES	SUPPLIER (Yes/No)	MANUFACTURER (Yes/No)	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB☐	WHERE CERTIFIED☐
Name: ISCO Industries Address: 1375 City: E Baseline St. State: San Bernardino Zip: 92410 Phone: 502.614.3604 Email:	1000043397	Stormwater Pollution Prevention Materials - Silt fences, straw wattles	$12,000.00	Yes	No	NA	NA

① As appropriate, Design-Builder shall identify Vendor/Supplier as one of the following and shall include a valid proof of certification (except for OBE, SLBE and ELBE):

Certified Minority Business Enterprise	MBE	Certified Woman Business Enterprise	WBE
Certified Disadvantaged Business Enterprise	DBE	Certified Disabled Veteran Business Enterprise	DVBE
Other Business Enterprise	OBE	Certified Emerging Local Business Enterprise	ELBE
Certified Small Local Business Enterprise	SLBE	Small Disadvantaged Business	SDB
Woman-Owned Small Business	WoSB	HUBZone Business	HUBZone
Service-Disabled Veteran Owned Small Business	SDVOSB		

② As appropriate, Design-Builder shall indicate if Vendor/Supplier is certified by:

City of San Diego	CITY	State of California Department of Transportation	CALTRANS
California Public Utilities Commission	CPUC	San Diego Regional Minority Supplier Diversity Council	SRMSDC
State of California's Department of General Services	CADoGS	City of Los Angeles	LA
State of California	CA	U.S. Small Business Administration	SBA

The Design-Builder will not receive any subcontracting participation percentages if the Design-Builder fails to submit the required proof of certification.

DESIGN-BUILD NAMED EQUIPMENT/MATERIAL SUPPLIER LIST TO BE INCLUDED IN THE PRICE PROPOSAL ONLY

For credit calculations for City-funded contracts, see Chapter 11 in The WHITEBOOK. For non-City funded contracts, refer to the Funding Agency Provisions. If no indication of the supplier, manufacturer, or non-supplier is provided, listed firm will receive no credit for purpose of calculating the Subcontractor Participation Percentages.

NAME, ADDRESS AND TELEPHONE NUMBER OF VENDOR/SUPPLIER	DIR Registration Number	MATERIALS OR SUPPLIES	DOLLAR VALUE OF MATERIAL OR SUPPLIES	SUPPLIER (Yes/No)	MANUFACTURER (Yes/No)	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB☐	WHERE CERTIFIED☐
Name: Walter's Wholesale Address:10031 Old Grove Road City: San Diego State: CA Zip: 92131 Phone: (858) 437-5700 Email:		Electrical supplies - Switchboard, Conduit, Wires	$80,000.00	Yes	No	NA	NA

① As appropriate, Design-Builder shall identify Vendor/Supplier as one of the following and shall include a valid proof of certification (except for OBE, SLBE and ELBE):

Certified Minority Business Enterprise	MBE	Certified Woman Business Enterprise	WBE
Certified Disadvantaged Business Enterprise	DBE	Certified Disabled Veteran Business Enterprise	DVBE
Other Business Enterprise	OBE	Certified Emerging Local Business Enterprise	ELBE
Certified Small Local Business Enterprise	SLBE	Small Disadvantaged Business	SDB
Woman-Owned Small Business	WoSB	HUBZone Business	HUBZone
Service-Disabled Veteran Owned Small Business	SDVOSB		

② As appropriate, Design-Builder shall indicate if Vendor/Supplier is certified by:

City of San Diego	CITY	State of California Department of Transportation	CALTRANS
California Public Utilities Commission	CPUC	San Diego Regional Minority Supplier Diversity Council	SRMSDC
State of California's Department of General Services	CADoGS	City of Los Angeles	LA
State of California	CA	U.S. Small Business Administration	SBA

The Design-Builder will not receive any subcontracting participation percentages if the Design-Builder fails to submit the required proof of certification.

DESIGN-BUILD NAMED EQUIPMENT/MATERIAL SUPPLIER LIST TO BE INCLUDED IN THE PRICE PROPOSAL ONLY

For credit calculations for City-funded contracts, see Chapter 11 in The WHITEBOOK. For non-City funded contracts, refer to the Funding Agency Provisions. If no indication of the supplier, manufacturer, or non-supplier is provided, listed firm will receive no credit for purpose of calculating the Subcontractor Participation Percentages.

NAME, ADDRESS AND TELEPHONE NUMBER OF VENDOR/SUPPLIER	DIR Registration Number	MATERIALS OR SUPPLIES	DOLLAR VALUE OF MATERIAL OR SUPPLIES	SUPPLIER (Yes/No)	MANUFACTURER (Yes/No)	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB☐	WHERE CERTIFIED☐
Name: Art's Trench Plate Address: 7292 Mission Gorge Road City: San Diego State: CA Zip: 92120 Phone: 619.229.9780 Email: artstrenchplate@att.net	-	Furnish K-rails	$17,760.00	Yes	No	N/A	N/A
Name: P&F Distributors Address: 1304 E. San Bernardino Ave. City: San Bernardino State: CA Zip: 92048 Phone: 909.799.7800 Email: leevan@pedistributors.com	1000003425	Furnish HDPE Pipe	$69,298.00	Yes	No	N/A	N/A

① As appropriate, Design-Builder shall identify Vendor/Supplier as one of the following and shall include a valid proof of certification (except for OBE, SLBE and ELBE):

Certified Minority Business Enterprise	MBE	Certified Woman Business Enterprise	WBE
Certified Disadvantaged Business Enterprise	DBE	Certified Disabled Veteran Business Enterprise	DVBE
Other Business Enterprise	OBE	Certified Emerging Local Business Enterprise	ELBE
Certified Small Local Business Enterprise	SLBE	Small Disadvantaged Business	SDB
Woman-Owned Small Business	WoSB	HUBZone Business	HUBZone
Service-Disabled Veteran Owned Small Business	SDVOSB		

② As appropriate, Design-Builder shall indicate if Vendor/Supplier is certified by:

City of San Diego	CITY	State of California Department of Transportation	CALTRANS
California Public Utilities Commission	CPUC	San Diego Regional Minority Supplier Diversity Council	SRMSDC
State of California's Department of General Services	CADoGS	City of Los Angeles	LA
State of California	CA	U.S. Small Business Administration	SBA

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DESIGN-BUILD NAMED EQUIPMENT/MATERIAL SUPPLIER LIST TO BE INCLUDED IN THE PRICE PROPOSAL ONLY

For credit calculations for City-funded contracts, see Chapter 11 in The WHITEBOOK. For non-City funded contracts, refer to the Funding Agency Provisions. If no indication of the supplier, manufacturer, or non-supplier is provided, listed firm will receive no credit for purpose of calculating the Subcontractor Participation Percentages.

NAME, ADDRESS AND TELEPHONE NUMBER OF VENDOR/SUPPLIER	DIR Registration Number	MATERIALS OR SUPPLIES	DOLLAR VALUE OF MATERIAL OR SUPPLIES	SUPPLIER (Yes/No)	MANUFACTURER (Yes/No)	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB☐	WHERE CERTIFIED☐
Name: United Rentals Address: 1960 West Mission Road City: Escondido State: CA Zip: 92029 Phone: 760.890.3080 Email: wjensen@ur.com	1000012175	Generator Rentals	$92,660.00	Yes	No	N/A	N/A

① As appropriate, Design-Builder shall identify Vendor/Supplier as one of the following and shall include a valid proof of certification (except for OBE, SLBE and ELBE):

Certified Minority Business Enterprise	MBE	Certified Woman Business Enterprise	WBE
Certified Disadvantaged Business Enterprise	DBE	Certified Disabled Veteran Business Enterprise	DVBE
Other Business Enterprise	OBE	Certified Emerging Local Business Enterprise	ELBE
Certified Small Local Business Enterprise	SLBE	Small Disadvantaged Business	SDB
Woman-Owned Small Business	WoSB	HUBZone Business	HUBZone
Service-Disabled Veteran Owned Small Business	SDVOSB		

② As appropriate, Design-Builder shall indicate if Vendor/Supplier is certified by:

City of San Diego	CITY	State of California Department of Transportation	CALTRANS
California Public Utilities Commission	CPUC	San Diego Regional Minority Supplier Diversity Council	SRMSDC
State of California's Department of General Services	CADoGS	City of Los Angeles	LA
State of California	CA	U.S. Small Business Administration	SBA

The Design-Builder will not receive any subcontracting participation percentages if the Design-Builder fails to submit the required proof of certification.

DESIGN-BUILD LIST OF SUBCONTRACTORS TO BE INCLUDED IN THE PRICE PROPOSAL ONLY

ADDITIVE/DEDUCTIVE ALTERNATE

The Design-Builder is to list all Subcontractors described in the Design-Builder's Base Bid whose percentage of work will increase or decrease if alternates are selected for award. The Design-

Builder is to also list additional Subcontractors not described in the Design-Builder's Base Bid who, as a result of the alternates, will perform work or labor, or render services, or specially fabricate and install a portion [type] of work or improvements in an amount in excess of 0.5%. Failure to comply with this requirement may result in the Bid being rejected as non-responsive and ineligible for award. The Design-Builder is to list all SLBE, ELBE, DBE, DVBE, MBE, WBE, OBE, SDB, WoSB, HUBZone, and SDVOSB Subcontractors that Design-Builder are seeking recognition towards achieving any mandatory, voluntary, or both subcontracting participation percentages.

Subcontractors' License Number must be filled in. Failure to provide the information specified may deem the bidder non-responsive.

ADDITIVE / DEDUCTIVE ALTERNATE	NAME, ADDRESS AND TELEPHONE NUMBER OF SUBCONTRACTOR	DIR Registration Number	CONSTRUCTOR OR DESIGNER	SUBCONTRACTOR LICENSE NUMBER	TYPE OF WORK	DOLLAR VALUE OF SUBCONTRACT	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB☐	WHERE CERTIFIED☐	CHECK IF JOINT VENTURE PARTNERSHIP
1	Name: Frank's Industrial Serivces, Inc. Address: 1426 259th St City: Harbor City State: CA Zip: 90710 Phone: 310.539.7827 Email: sqsedillo@yahoo.com	1000005601	DESIGNER AND CONSTRUCTOR	700250	ELECTRICAL	$740,000	NA	NA	NA
2	Name: Frank's Industrial Serivces, Inc. Address: 1426 259th St City: Harbor City State: CA Zip: 90710 Phone: 310.539.7827 Email: sqsedillo@yahoo.com	1000005601	DESIGNER AND CONSTRUCTOR	700250	ELECTRICAL	$300,000	NA	NA	NA

① As appropriate, Design-Builder shall identify Subcontractor as one of the following and shall include a valid proof of certification (except for OBE, SLBE and ELBE):

Certified Minority Business Enterprise	MBE	Certified Woman Business Enterprise	WBE
Certified Disadvantaged Business Enterprise	DBE	Certified Disabled Veteran Business Enterprise	DVBE
Other Business Enterprise	OBE	Certified Emerging Local Business Enterprise	ELBE
Certified Small Local Business Enterprise	SLBE	Small Disadvantaged Business	SDB
Woman-Owned Small Business	WoSB	HUBZone Business	HUBZone
Service-Disabled Veteran Owned Small Business	SDVOSB		

② As appropriate, Design-Builder shall indicate if Subcontractor is certified by:

City of San Diego	CITY	State of California Department of Transportation	CALTRANS
California Public Utilities Commission	CPUC	San Diego Regional Minority Supplier Diversity Council	SRMSDC
State of California's Department of General Services	CADoGS	City of Los Angeles	LA
State of California	CA	U.S. Small Business Administration	SBA

The Design-Builder will not receive any subcontracting participation percentages if the Design-Builder fails to submit the required proof of certification.

DESIGN-BUILD LIST OF SUBCONTRACTORS TO BE INCLUDED IN THE PRICE PROPOSAL ONLY

ADDITIVE/DEDUCTIVE ALTERNATE

The Design-Builder is to list all Subcontractors described in the Design-Builder's Base Bid whose percentage of work will increase or decrease if alternates are selected for award. The Design-

Builder is to also list additional Subcontractors not described in the Design-Builder's Base Bid who, as a result of the alternates, will perform work or labor, or render services, or specially fabricate and install a portion [type] of work or improvements in an amount in excess of 0.5%. Failure to comply with this requirement may result in the Bid being rejected as non-responsive and ineligible for award. The Design-Builder is to list all SLBE, ELBE, DBE, DVBE, MBE, WBE, OBE, SDB, WoSB, HUBZone, and SDVOSB Subcontractors that Design-Builder are seeking recognition towards achieving any mandatory, voluntary, or both subcontracting participation percentages.

Subcontractors' License Number must be filled in. Failure to provide the information specified may deem the bidder non-responsive.

ADDITIVE / DEDUCTIVE ALTERNATE	NAME, ADDRESS AND TELEPHONE NUMBER OF SUBCONTRACTOR	DIR Registration Number	CONSTRUCTOR OR DESIGNER	SUBCONTRACTOR LICENSE NUMBER	TYPE OF WORK	DOLLAR VALUE OF SUBCONTRACT	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB☐	WHERE CERTIFIED☐	CHECK IF JOINT VENTURE PARTNERSHIP
4	Name: IO Environmental & Infrastructure Inc Address: 2840 Adams Avenue, Ste. 301 City: San Diego, State: CA Zip: 92116 Phone: 619.280.3278 Email: kathyn@iosdv.com.	1000001765	CONSTRUCTOR	957419	CONSTRUCTION	$192,272	SLBE	CITY OF SAN DIEGO	NA
4	Name: Frank's Industrial Services, Inc. Address: 1426 256th St City: Harbor City State: CA Zip: 90710 Phone: 310.539.7827 Email: sqsedillo@yahoo.com	1000005601	DESIGNER AND CONSTRUCTOR	700250	ELECTRICAL	$50,000	NA	NA	NA

① As appropriate, Design-Builder shall identify Subcontractor as one of the following and shall include a valid proof of certification (except for OBE, SLBE and ELBE):

Certified Minority Business Enterprise	MBE	Certified Woman Business Enterprise	WBE
Certified Disadvantaged Business Enterprise	DBE	Certified Disabled Veteran Business Enterprise	DVBE
Other Business Enterprise	OBE	Certified Emerging Local Business Enterprise	ELBE
Certified Small Local Business Enterprise	SLBE	Small Disadvantaged Business	SDB
Woman-Owned Small Business	WoSB	HUBZone Business	HUBZone
Service-Disabled Veteran Owned Small Business	SDVOSB		

② As appropriate, Design-Builder shall indicate if Subcontractor is certified by:

City of San Diego	CITY	State of California Department of Transportation	CALTRANS
California Public Utilities Commission	CPUC	San Diego Regional Minority Supplier Diversity Council	SRMSDC
State of California's Department of General Services	CADoGS	City of Los Angeles	LA
State of California	CA	U.S. Small Business Administration	SBA

The Design-Builder will not receive any subcontracting participation percentages if the Design-Builder fails to submit the required proof of certification.

CERTIFICATIONS AND FORMS

The Proposer, by submitting its electronic bid or proposal, agrees to and certifies under penalty of perjury under the laws of the State of California, that the certifications, forms and affidavits submitted as part of this submission are true and correct.

DESIGN-BUILD PROPOSAL

The undersigned The Design-Builder proposes and agrees, if this Proposal is accepted, to enter into an agreement with the City in the form included in the Contract Documents to perform the Work as specified or indicated in said Contract Documents entitled **Aerated Static Pile System** Design-Build Contract.

1. The Design-Builder accepts all of the terms and conditions of the Contract Documents, including without limitation those in the RFP.

2. This Proposal will remain open for the period stated in the RFP unless otherwise required by law. The Design-Builder will enter into an agreement within the time and in the manner required in the RFP and will furnish the insurance certificates, Payment Bond, and Performance Bond required by the Contract Documents.

3. The Design-Builder has familiarized itself with the nature and extent of the Contract Documents, Work, site, locality where the Work is to be performed, the legal requirements (federal, state and local laws, ordinances, rules, and regulations), and the conditions affecting cost, progress or performance of the Work and has made such independent investigations as The Design-Builder deems necessary.

To all the foregoing, and including all Proposal schedule(s) and information required of the Design-Builder contained in this Proposal Form, said The Design-Builder further agrees to complete the Work and Services required under the Contract Documents within the Contract Time stipulated in said Contract Documents, and to accept in full payment therefore the Contract Price based on the Total Proposal Price(s) named in the aforementioned Proposal schedule(s).

Dated: November 15, 2017

The Design-Builder: Stearns, Conrad and Schmidt, Consulting Engineers, Inc. dba SCS Engineers/SCS Field Services

By: _____
(Signature)

Title: Galen Petoyan, Senior Vice President

PROPOSAL

Design-Builder's General Information

To the City of San Diego:

Pursuant to the "Proposal Documents", specifications, and requirements on file with the City Clerk, and subject to all provisions of the Charter and Ordinances of the City of San Diego and applicable laws and regulations of the United States and the State of California, the undersigned hereby proposes to furnish to the City of San Diego, complete at the prices stated herein, the items or services hereinafter mentioned. The undersigned further warrants that this proposal is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the proposal is genuine and not collusive or sham; that the proposer has not directly or indirectly induced or solicited any other proposer to put in a false or sham proposal, and has not directly or indirectly colluded, conspired, connived, or agreed with any proposer or anyone else to put in a sham proposal, or that anyone shall refrain from proposing; that the proposer has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the proposal price of the proposer or any other proposer, or to fix any overhead, profit, or cost element of the proposal price, or of that of any other proposer, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the proposal are true; and, further, that the proposer has not, directly or indirectly, submitted his or her proposal price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company, association, organization, proposal depository, or to any member or agent thereof to effectuate a collusive or sham proposal. The undersigned proposer(s) further warrants that proposer(s) has thoroughly examined and understands the entire Contract Documents (plans and specifications) and the Proposal Documents therefore, and that by submitting said Proposal Documents as its proposal, proposer(s) acknowledges and is bound by the entire Contract Documents, including any addenda issued thereto, as such Contract Documents incorporated by reference in the Proposal Documents.

IF A SOLE OWNER OR SOLE CONTRACTOR SIGN HERE:

(1) Name under which business is conducted SCS Field Services

(2) Signature (Given and surname) of proprietor Galen S. Petoyan

(3) Place of Business (Street & Number) 3900 Kilroy Airport Way, Ste. 100

(4) City and State Long Beach, CA Zip Code 90806

(5) Telephone No. 562-426-9544 xt 3234 Facsimile No. 562-427-0805

(6) Email Address gpetoyan@scsengineers.com

IF A PARTNERSHIP, SIGN HERE:

(1) Name under which business is conducted _____

(2) Name of each member of partnership, indicate character of each partner, general or special (limited):

_____

_____

(3) Signature (Note: Signature must be made by a general partner)

_____

Full Name and Character of partner

_____

_____

(4) Place of Business (Street & Number) _____

(5) City and State _____ Zip Code _____

(6) Telephone No. _____ Facsimile No. _____

(7) Email Address _____

IF A CORPORATION, SIGN HERE:

(1) Name under which business is conducted _____

(2) Signature, with official title of officer authorized to sign for the corporation:

_____

(Signature)

Galen Petoyan

(Printed Name)

Senior Vice President

(Title of Officer)

(Impress Corporate Seal Here)

(3) Incorporated under the laws of the State of Virginia

(4) Place of Business (Street & Number) 8799 Balboa Avenue, Ste. 290

(5) City and State San Diego, CA Zip Code 92123

(6) Telephone No. 564-426-9544 Facsimile No. 564-427-0805

(7) Email Address gpetoyan@scsengineers.com

THE FOLLOWING SECTIONS MUST BE FILLED IN BY ALL PROPOSERS:

In accordance with the "**Proposal Documents**", the proposer holds a California State Contractor's license for the following classification(s) to perform the work described in these specifications:

LICENSE CLASSIFICATION General "A" with Haz Certification

LICENSE NO. 749678 "A" EXPIRES May 31, 2018

DEPARTMENT OF INDUSTRIAL RELATIONS (DIR) REGISTRATION NUMBER:

1000004641

This license classification must also be shown on the front of the proposal envelope. Failure to show license classification on the proposal envelope may cause return of the proposal unopened.

TAX IDENTIFICATION NUMBER (TIN): 54-0913440

E-Mail Address: gpetoyan@scsengineers.com

THIS PROPOSAL MUST BE NOTARIZED BELOW:

I certify, under penalty of perjury, that the representations made herein regarding my State Contractor's license number, classification and expiration date are true and correct.

Signature Gaboor Petoyan Title Senior Vice President

SUBSCRIBED AND SWORN TO BEFORE ME, THIS 15th DAY OF November, 2017.

Notary Public in and for the County of Los Angeles, State of California

Jane E. Webb

(NOTARIAL SEAL)

JANE E. WEBB
Commission # 2071460
Notary Public - California
Los Angeles County
My Comm. Expires Jul 12, 2018

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT **CIVIL CODE § 1189**

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
County of Los Angeles)

On 11/21/17 (Date) before me, Jane E. Webb, Notary Public (Here Insert Name and Title of the Officer),

personally appeared Galen S. Petoyan (Name(s) of Signer(s)),

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

JANE E. WEBB
Commission # 2071460
Notary Public - California
Los Angeles County
My Comm. Expires Jul 12, 2018

Signature Jane E. Webb
Signature of Notary Public

Place Notary Seal Above

OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: Non-collusion Affidavit Document Date: 11/15/17

Number of Pages: 1 Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: Galen Petoyan
☐ Corporate Officer — Title(s): _____
☐ Partner — ☐ Limited ☐ General
☐ Individual ☐ Attorney in Fact
☐ Trustee ☐ Guardian or Conservator
☐ Other: _____
Signer Is Representing: SCS Field Svc

Signer's Name: _____
☐ Corporate Officer — Title(s): _____
☐ Partner — ☐ Limited ☐ General
☐ Individual ☐ Attorney in Fact
☐ Trustee ☐ Guardian or Conservator
☐ Other: _____
Signer Is Representing: _____

PERFORMANCE BOND AND LABOR AND MATERIAL MEN'S BOND

FAITHFUL PERFORMANCE BOND AND LABOR AND MATERIALMEN'S BOND:

Stearns, Conrad & Schmidt, Consulting Engineers, Inc., a corporation, as principal, and Liberty Mutual Insurance Company, a corporation authorized to do business in the State of California, as Surety, hereby obligate themselves, their successors and assigns, jointly and severally, to The City of San Diego a municipal corporation in the sum of for the faithful performance of the annexed contract, and in the sum of **Four Million Four Hundred Twelve Thousand Two Hundred Seventy Four Dollars and Seventy Four Cents ($4,412,274.74)** for the benefit of laborers and materialmen designated below.

Conditions:

If the Principal shall faithfully perform the annexed contract **Aerated Static Pile System**, RFP Number **K-18-1590-DB1-3-A**, San Diego, California then the obligation herein with respect to a faithful performance shall be void; otherwise it shall remain in full force.

If the Principal shall promptly pay all persons, firms and corporations furnishing materials for or performing labor in the execution of this contract, and shall pay all amounts due under the California Unemployment Insurance Act then the obligation herein with respect to laborers and materialmen shall be void; otherwise it shall remain in full force.

The obligation herein with respect to laborers and materialmen shall inure to the benefit of all persons, firms and corporations entitled to file claims under the provisions of Article 2. Claimants, (iii) public works of improvement commencing with Civil Code Section 9100 of the Civil Code of the State of California.

Changes in the terms of the annexed contract or specifications accompanying same or referred to therein shall not affect the Surety's obligation on this bond, and the Surety hereby waives notice of same.

PERFORMANCE BOND AND LABOR AND MATERIALMEN'S BOND (Cont.)

The Surety shall pay reasonable attorney's fees should suit be brought to enforce the provisions of this bond.

Dated February 13, 2018

Approved as to Form

Mara W. Elliott, City Attorney

By _____
Deputy City Attorney
Amanda Guy

Approved:

By _____
Stephen Samara
Principal Contract Specialist
Public Works Department

Stearns, Conrad & Schmidt, Consulting Engineers, Inc.
Principal

By _____
Printed Name of Person Signing for Principal

Liberty Mutual Insurance Company
Surety

By _____
B. Aleman, Attorney-in-fact

790 The City Drive South, Suite 200
Local Address of Surety

Orange, CA 92868
Local Address (City, State) of Surety

213.630.3200
Local Telephone No. of Surety

Premium $ 44,123.60

Bond No. 024231023

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

A Notary Public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California

County of Los Angeles

On FEB 13 2018 before me, Sam Fazzini Notary Public, personally appeared B. Aleman who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/~~are~~ subscribed to the within instrument and acknowledged to me that ~~he/she/they~~ executed the same in ~~his~~/her/~~their~~ authorized capacity(ies), and that by ~~his~~/her/~~their~~ signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____
Sam Fazzini, Signature of Notary Public

THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON RED BACKGROUND.
This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Certificate No. 7859430

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company West American Insurance Company

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, April Martinez; Ashraf Elmasry; B. Aleman; Daravy Mady; Edward C. Spector; KD Conrad; Kristine Mendez; Lisa K. Crail; Marina Tapia; Misty Wright; Nathan Varnold; Paul Rodriguez; Renato F. Reyes; Simone Gerhard; Tracy Aston

all of the city of Los Angeles, state of CA each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 9th day of August, 2017.

The Ohio Casualty Insurance Company
Liberty Mutual Insurance Company
West American Insurance Company

By: _____
David M. Carey, Assistant Secretary

STATE OF PENNSYLVANIA ss
COUNTY OF MONTGOMERY

On this 9th day of August, 2017, before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Teresa Pastella, Notary Public
Upper Merion Twp., Montgomery County
My Commission Expires March 28, 2021
Member, Pennsylvania Association of Notaries

By: _____
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV – OFFICERS – Section 12. Power of Attorney. Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII – Execution of Contracts – SECTION 5. Surety Bonds and Undertakings. Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this _____ day of FEB 13 2018, 20_____.

By: _____
Renee C. Llewellyn, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

To confirm the validity of this Power of Attorney call 1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT **CIVIL CODE § 1189**

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
County of Los Angeles)

On Feb. 14, 2018 before me, S. Helak Notary Public,
Date *Here Insert Name and Title of the Officer*

personally appeared Galen S. Petoyan
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/~~are~~ subscribed to the within instrument and acknowledged to me that he/~~she/they~~ executed the same in his/~~her/their~~ authorized capacity(ies), and that by his/~~her/their~~ signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

S. HELAK
Notary Public - California
Los Angeles County
Commission # 2179362
My Comm. Expires Feb 9, 2021

Signature S Helak
Signature of Notary Public

Place Notary Seal Above

OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document
Title or Type of Document: Performance Bond Document Date: Feb 8, 2018
Number of Pages: 2 Signer(s) Other Than Named Above: B. Aleman

Capacity(ies) Claimed by Signer(s)

Signer's Name: Galen S. Petoyan	Signer's Name:
☒ Corporate Officer — Title(s): SR. VICE PRESIDENT	☐ Corporate Officer — Title(s):
☐ Partner — ☐ Limited ☐ General	☐ Partner — ☐ Limited ☐ General
☐ Individual ☐ Attorney in Fact	☐ Individual ☐ Attorney in Fact
☐ Trustee ☐ Guardian or Conservator	☐ Trustee ☐ Guardian or Conservator
☐ Other:	☐ Other:
Signer Is Representing: Stearns Conrad and Schmidt Consulting Engineers Inc.	Signer Is Representing:

NON-COLLUSION AFFIDAVIT TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID UNDER 23 UNITED STATES CODE 112 AND PUBLIC CONTRACT CODE 7106

State of California

County of San Diego

The bidder, being first duly sworn, deposes and says that he or she is authorized by the party making the foregoing bid that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

CONTRACTORS CERTIFICATION OF PENDING ACTIONS

As part of its bid or proposal (Non-Price Proposal in the case of Design-Build contracts), the Bidder shall provide to the City a list of all instances within the past 10 years where a complaint was filed or pending against the Bidder in a legal or administrative proceeding alleging that Bidder discriminated against its employees, subcontractors, vendors or suppliers, and a description of the status or resolution of that complaint, including any remedial action taken.

CHECK ONE BOX ONLY.

☒ The undersigned certifies that within the past 10 years the Bidder has NOT been the subject of a complaint or pending action in a legal administrative proceeding alleging that Bidder discriminated against its employees, subcontractors, vendors or suppliers.

☐ The undersigned certifies that within the past 10 years the Bidder has been the subject of a complaint or pending action in a legal administrative proceeding alleging that Bidder discriminated against its employees, subcontractors, vendors or suppliers. A description of the status or resolution of that complaint, including any remedial action taken and the applicable dates is as follows:

DATE OF CLAIM	LOCATION	DESCRIPTION OF CLAIM	LITIGATION (Y/N)	STATUS	RESOLUTION/REMEDIAL ACTION TAKEN

Contractor Name: Stearns, Conrad and Schmidt, Consulting Engineers, Inc.

Certified By Galen Petoyan Title Senior Vice President

Name

Galen Petoyan Date November 15, 2017

Signature

USE ADDITIONAL FORMS AS NECESSARY

CONTRACTOR CERTIFICATION

DRUG-FREE WORKPLACE

I hereby certify that I am familiar with the requirements of San Diego City Council Policy No. 100-17 regarding Drug-Free Workplace as outlined in the WHITEBOOK, Section 7-13.3, "Drug-Free Workplace", of the project specifications, and that;

This company has in place a drug-free workplace program that complies with said policy. I further certify that each subcontract agreement for this project contains language which indicates the subcontractor's agreement to abide by the provisions of subdivisions a) through c) of the policy as outlined.

CONTRACTOR CERTIFICATION

AMERICAN WITH DISABILITIES ACT (ADA) COMPLIANCE CERTIFICATION

I hereby certify that I am familiar with the requirements of San Diego City Council Policy No. 100-4 regarding the American With Disabilities Act (ADA) outlined in the WHITEBOOK, Section 7-13.2, "American With Disabilities Act", of the project specifications, and that:

This company has in place workplace program that complies with said policy. I further certify that each subcontract agreement for this project contains language which indicates the subcontractor's agreement to abide by the provisions of the policy as outlined.

.

CONTRACTOR CERTIFICATION

CONTRACTOR STANDARDS – PLEDGE OF COMPLIANCE

I declare under penalty of perjury that I am authorized to make this certification on behalf of the I declare under penalty of perjury that I am authorized to make this certification on behalf of the company submitting this bid/proposal, that as Contractor, I am familiar with the requirements of City of San Diego Municipal Code § 22.3004 regarding Contractor Standards as outlined in the WHITEBOOK, Section 7-13.4, ("Contractor Standards"), of the project specifications, and that Contractor has complied with those requirements.

I further certify that each of the Contractor's subcontractors whose subcontracts are greater than $50,000 in value has completed a Pledge of Compliance attesting under penalty of perjury of having complied with City of San Diego Municipal Code § 22.3004.

CONTRACTOR CERTIFICATION

Equal Benefits Ordinance Certification

I declare under penalty of perjury that I am familiar with the requirements of and in compliance with the City of San Diego Municipal Code § 22.4300 regarding Equal Benefits Ordinance.

AFFIDAVIT OF DISPOSAL

(To be submitted upon completion of Construction pursuant to the contracts Certificate of Completion)

WHEREAS, on the 15th DAY OF Nov, 2017 the undersigned entered into and executed a contract with the City of San Diego, a municipal corporation, for:

Aerated Static Pile System
(Name of Project)

as particularly described in said contract and identified as Bid No. **K-18-1590-DB1-3-A**; SAP No. (WBS/IO/CC) **S-16053**; and **WHEREAS**, the specification of said contract requires the Contractor to affirm that "all brush, trash, debris, and surplus materials resulting from this project have been disposed of in a legal manner"; and **WHEREAS**, said contract has been completed and all surplus materials disposed of:

NOW, THEREFORE, in consideration of the final payment by the City of San Diego to said Contractor under the terms of said contract, the undersigned Contractor, does hereby affirm that all surplus materials as described in said contract have been disposed of at the following location(s)

Stearns, Conrad and Schmidt, Consulting Engineers, inc. dba SCS Engineers/SCS Field Services

and that they have been disposed of according to all applicable laws and regulations.

Dated this 15th DAY OF November, 2017.

By:_____
Contractor

ATTEST:
State of _____ County of _____

On this_____ DAY OF _____, 2_____, before the undersigned, a Notary Public in and for said County and State, duly commissioned and sworn, personally appeared_____ known to me to be the _____ Contractor named in the foregoing Release, and whose name is subscribed thereto, and acknowledged to me that said Contractor executed the said Release.

Notary Public in and for said County and State

ATTACHMENT J

DESIGN-BUILD AGREEMENT

DESIGN-BUILD AGREEMENT

This Design-Build agreement [Contract] is made and entered into this 12th day of February, 2018, by and between The City of San Diego [City], a municipal corporation, and **Stearns, Conrad & Schmidt, Consulting Engineers, Inc.** [Design-Builder], for the purpose of designing and constructing the **Aerated Static Pile System** (Project) in the amount of **Four Million Four Hundred Twelve Thousand Two Hundred Seventy Four Dollars and Seventy Four Cents ($4,412,274.74)**. The City and Design-Builder are referred to herein as the "Parties".

RECITALS

A. The City desires to construct the Project located in the City of San Diego, California.

B. The City desires to contract with a single entity for design and construction of the Project, as set forth in this Agreement.

C. The City has issued Request for Proposal (RFP) number **K-18-1590-DB1-3-A** for **Aerated Static Pile System,** pursuant to which the City solicited Proposals from design-build teams to design, rehabilitate, and build the Project.

D. In accordance with City's RFP, Design-Builder submitted a Proposal for the Project and is prepared to enter into this Agreement.

E. The City has selected the Design-Builder to perform, either directly or pursuant to Subcontracts, hereinafter defined, the design, engineering, and construction services set forth in this Agreement and the Contract Documents, hereinafter defined.

F. The Design-Builder is ready, willing, and able to perform the services required in accordance with the terms and conditions of this Agreement.

G. Execution of this Agreement by the Design-Builder is a representation that the Design-Builder has visited the Site, become familiar with the local conditions under which the Work is to be performed and correlated personal observations with requirements of the Contract Documents.

In consideration of the above recitals and the mutual covenants and conditions set forth herein, and for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby set forth their mutual covenants and understandings as follows.

AGREEMENT

A. Recitals and Attachments. The above referenced recitals are true and correct and are incorporated into this Agreement by this reference. All attachments referenced in this Agreement section are incorporated into the Contract by this reference.

B. Contract Performance. The Design-Builder shall design and construct the Project in a good and workmanlike manner to the satisfaction of the City, lien free and in compliance with the Contract Documents and within the time specified, in return for timely payment by the City in accordance with the Contract.

C. Attachments. All attachments e.g., Reference Standards in the RFP, Supplementary Special Provisions (SSP), the attached Faithful Performance and Payment Bonds, Agreement and Supplemental Agreements, and the attached Proposal included in the Proposal documents by the Contractor are incorporated into the Contract by this reference.

D. Contract Documents. This Contract incorporates the 2015 Edition of the Standard Specifications for Public Works Construction [The GREENBOOK], including amendments set forth in the 2015 edition of the San Diego Specifications for Public Works Construction [The WHITEBOOK]. The Contract Documents

shall include the items mentioned in section 2-5.2 of The WHITEBOOK and shall follow that order of precedence.

IN WITNESS WHEREOF, this Agreement is signed by the City of San Diego, acting by and through its Mayor or designee, pursuant to Municipal Code **§22.3102** authorizing such execution.

THE CITY OF SAN DIEGO

By _____

Print Name: Stephen Samara
Principal Contract Specialist
Public Works Department

Date: April 2, 2018

APPROVED AS TO FORM

Mara W. Elliott, City Attorney

By _____

Print Name: Amanda Guy
Deputy City Attorney

Date: 4/4/18

CONTRACTOR

By _____

Print Name: GALEN S. PETOYAN

Title: SR VICE PRESIDENT

Date: 2/12/18

City of San Diego License No.: B19930008975

State Contractor's License No.: 749628

City of San Diego

CITY CONTACT: Juan E. Espindola, Contract Specialist, Email: JEEspindola@sandiego.gov
Phone No. (619) 533-4491, Fax No. (619) 533-3633

ADDENDUM 1

PROPOSAL DOCUMENTS

(1-Step)

e - Bidding

FOR

AERATED STATIC PILE SYSTEM

RFP NO.:	**K-18-1590-DB1-3-A**
SAP NO. (WBS/IO/CC):	**S-16053**
CLIENT DEPARTMENT:	**2115**
COUNCIL DISTRICT:	**6**
PROJECT TYPE:	**FA**

PROPOSALS DUE:

12:00 NOON
DECEMBER 6, 2017
CITY OF SAN DIEGO
PUBLIC WORKS CONTRACTS
1010 SECOND AVENUE, 14th FLOOR, MS 614C
SAN DIEGO, CA 92101

A. CHANGES TO CONTRACT DOCUMENTS

The following changes to the RFP are hereby made effective as though originally issued with the RFP. The Design-Builders are reminded that all previous requirements to this solicitation remain in full force and effect.

THE SUBMITTAL DATE FOR THIS PROJECT HAS BEEN **EXTENDED AS STATED ON THE COVER PAGE.**

James Nagelvoort, Director
Public Works Department

Dated: *November 9, 2017*
San Diego, California

JN/JB/lji

City of San Diego

CITY CONTACT: Juan E. Espindola, **Contract Specialist**, **Email:** JEEspindola@sandiego.gov
Phone No. (619) 533-4491, **Fax No.** (619) 533-3633

ADDENDUM 2

PROPOSAL DOCUMENTS

(1-Step)

e - Bidding

FOR

AERATED STATIC PILE SYSTEM

RFP NO.:	**K-18-1590-DB1-3-A**
SAP NO. (WBS/IO/CC):	**S-16053**
CLIENT DEPARTMENT:	**2115**
COUNCIL DISTRICT:	**6**
PROJECT TYPE:	**FA**

PROPOSALS DUE:

12:00 NOON
DECEMBER 06, 2017
CITY OF SAN DIEGO
PUBLIC WORKS CONTRACTS
1010 SECOND AVENUE, 14th FLOOR, MS 614C
SAN DIEGO, CA 92101

A. CHANGES TO CONTRACT DOCUMENTS

The following changes to the RFP are hereby made effective as though originally issued with the RFP. The Design-Builders are reminded that all previous requirements to this solicitation remain in full force and effect.

B. BIDDER's QUESTIONS

Q1. Please provide copies of the following permits for the CAS: WDR and / NOI and Technical Report for the RWQCB, Authority to Construct from the APCD, SWFP or RCSI for the facility. If these are not available for the facility, can you please advise on where the facility is in the process of receiving these permits.

A1. The Miramar Greenery is permitted for use of an aerated static pile system as a method for composting. The Miramar Greenery facility is covered under the existing landfill WDR and is enrolled in the Region 9 Compost facility waiver, neither of which contain site specific requirements for aerated static pile composting. The San Diego Air Pollution Control District is not responsible for compost facilities and this project does not include emission control devices for the ASP system.

Q2. What degree of automation does the City desire for the control panel to control air flow, valves at the manifold to each pile, to the ASP piles.

A2. The ASP system shall have the ability to automatically control air flow into the piles to maintain oxygen levels within the adjusted limits set by the operator.

Q3. Attachment A, paragraph 1 states that the Contractor is required to coordinate with permitting agencies and prepare detailed plans for submission to DSD for permit approval. Given that the Miramar Greenery is already permitted for ASP composting, what additional permits does the City anticipate will be needed for this project?

A3. See Question 1. Any additional permits required for this project would be the responsibility of the design builder. Some additive alternates may require permit approval if selected (i.e. electrical permits).

Q4. If any permits, or progress NTPs are required throughout the project and if these items impact project schedule, will City allow additional time to be added to project schedule to accommodate for these possible delays?

A4. The Engineer may grant an extension of time as set forth primarily in Section 6-6.1 of the Greenbook 2015.

Q5. The baseline design and price is to be based on generator power for the specified equipment. Dedicated power is one of the stated optional items. Please clarify.

A5. The City is seeking an ASP system with the ability to operate on portable generator power. If additive alternate 1 is selected, the City would operate the system using the electrical service feed that would be extended from the existing electrical service lines, southwest of the project area.

Q6. If there is a source of water nearby that can be used for this project, does the City know the pressure and flow rate of this line? (City stated during the project walk that there is an existing 2" reclaimed water line near the project site that was said to be available for use at the new piles.)

A6. The City provides water for the Greenery facility via water trucks and a two-inch reclaimed water line. For the purposes of this RFP, water would be provided by water trucks.

Q7. Will turning of compost pipes still be required by the City during operation of the new composting system? (The City assumes the new compost piles will be turned much less frequently than the existing, non-aerated piles. However, they do not assume no turning at all.)

A7. No, the City will not require turning of compost pile or pipes. The City is seeking an ASP system capable of maintaining oxygen levels within the piles with minimal or no turning.

Q8. Does the City have any differential settlement information on the portion of the capped landfill where the composting project is to be expanded upon?

A8. City landfill operations staff provide cover maintenance as needed to correct the effects of differential settlement. For the purposes of this RFP, the topography of the site shall be considered as shown on the map provided in Appendix H.

Q9. Ref. Section 3.1.4.3 page # 22: Is contractor expected to pre grind the feed stock as it is delivered to the site during initial operation?

A9. The City will prepare incoming feed stock during the contractor's startup, demonstration, and training period. The Contractor will participate to the extent needed to ensure that the material is prepared and mixed adequately for processing by the ASP system.

Q10. Who will be responsible to pre-screen the incoming materials for composting to ensure that they do not contain incompatible, or hazardous materials, and if encountered, who will be responsible for disposal

A10. See Question 9.

Q11. Will the City or the Contractor be responsible for payment of finished compost testing during the startup and demonstration phase?

A11. The Design Builder will be responsible for payment for any testing needed to demonstrate the ASP system's ability to produce a stable finished compost product during the startup, demonstration, and training phase.

Q12. Paragraph 1.7 of the RFP stipulates a contract period of 220 working days. Paragraph 2.4 of Attachment A calls for a 3-month demonstration period and paragraph 3.2.3 2. calls for a 60 working day demonstration and training period. Is the 60 working day demonstration period part of the 220 working day contract period, or will it start after the 220 working day contract period?

A12. The first 160 working days of the contract are for design-build of the ASP system followed by 60 working days for the startup, demonstration, and training period for a total contract time of 220 working days.

Q13. Note A on page 164 of the RFP states that the contract price to be used in the selection process will be determined by the Base Proposal. Please confirm that the Base Proposal will be the "Total for Proposal (Items 1 through 10 inclusive)". listed on page 161 of the Price Proposal Forms.

A13. Yes, the base proposal will be the "Total for Proposal (Items 1 through 10 inclusive)" listed on page 161 of the Price Proposal Forms.

Q14. Please clarify what is expected of the contractor during the 3-month demonstration period. Will the City operate the system during this time, or will the contractor be expected to operate it? If the City operates the system, how often will the contractor be expected to be on site to monitor and assist during the demonstration period?

A14. The City will provide staffing for the facility to be trained and operate the system as directed by the Contractor. The Contractor must have personnel onsite during the three (3) month startup, demonstration, and training period to provide direction and training for proper operation, adjusting, processing, and monitoring of the system.

Q15. Attachment A, paragraph 3.1.3 defines the project area as a footprint not to exceed 7 acres within a 10-acre site. Is the new ASP system to be confined to 7 acres? Is the City assuming that the receiving and grinding of all materials will happen within the remaining 3 acres of this 10-acre site? Where will the screening and curing of the composted materials take place? Is it the intent that this activity also be performed within the 10-acre site, or is there more room elsewhere on site for this activity?

A15. The proposed ASP system shall be configured to fit within an area up to seven (7) acres for active composting. The receiving, grinding, screening and curing of incoming feedstock will take place in other areas of the Greenery. As stated in Section 5.1.3 of Attachment G, proposals will be evaluated on the proposed system's ability to provide for possible execution of a future expansion of the system.

Q16. Attachment A, paragraph 3.1.4.1 states that the ASP system be capable of processing a throughput mixture of 50% food waste by weight, up to 20,000 tons per year. What sort of guarantee is the City looking for in term of percentage of food waste in the mix? Our experience shows that mixes higher than 35% food waste become more problematic to manage, and there is a lot of variability based on the moisture content of either material.

A16. The proposed system shall have the ability to process waste mixtures up to 50% food waste by weight.

Q17. Attachment A, paragraph 3.1.3: How does the City expect to control and/or treat leachate? Are we to grade the site to a low point and retain and treat, and use leachate to wet dry feedstock material?

A17. The City is seeking an ASP system capable of being operated without producing leachate. However, if a proposed system requires leachate management, this should be included in the bidder's proposed design concept.

Q18. Attachment A, paragraph 3.1.8: Concrete barriers. Please clarify the intent and quantity of these barriers. Do you mean K-rail to keep the compost mix in a bunker? Will the City require continuous K-rail for the entire length of every compost pile?

A18. Concrete barriers shall delineate piles, anchor covers, and assist in the prevention of storm water runoff from contacting the composting material. Design Builder shall provide the quantity of concrete barriers to meet this requirement. K-rail would be acceptable if it meets the above-mentioned requirement.

Q19. Attachment A, paragraph 3.1.4.2: PFRP is an EPA term. What does the City mean by meeting regulatory standards as set forth in Chapter 3.1, Article 7? Is this a reference to California CFR?

A19. See additional addendum. The regulatory standard that would apply is Title 14, Division 7, Chapter 3.1 of the California Code of Regulations.

Q20. Retention time: Can the City clarify how long they would like the compost feedstocks to be under cover and on aeration so the bidders can provide a uniform facility sizing?

A20. Based on the City's required food waste to green waste mix ratio, it is anticipated that the covered and aerated retention time needed to produce stable compost material would be 60 to 90 days. However, bidders shall propose systems designed to produce stable compost material at 40,000 tons per year as specified in the RFP.

Q21. Attachment A, paragraph 3.1.6.6.1: States that the temperature probe shall be capable to measure at least five (5) temperature point continuous monitoring arranged over a depth of 40 inches within a solid/gas mixture up to a temperature of 212 ° F. Is the City requiring 5 probes per pile or one probe with 5 sensors? Would you allow three probes with two sensors on each probe?

A21. The City is requiring at least five probes per pile. A bidder can propose 5 probes with multiple sensors.

Q22. Please confirm that disturbing existing soils is to be avoided (i.e. no grading/trenching, etc.).

A22. The landfill cover shall not be disturbed or penetrated during this project. Additional soil can be added to the cover if needed for site preparation work.

Q23. Please confirm that all improvements are to be above grade.

A23. Yes, all components of the project must be above grade and portable.

Q24. No ASP system will perform well unless the material is well mixed. Will the City provide a means of adequately breaking up whole food material and blending with the ground yard waste?

A24. See response to Question #9.

Q25. Does the current industrial SWPPP covering the Miramar Greenery consider the proposed improvements?

A25. The City has a SWPPP for the Miramar Landfill site which would be updated if needed as a result of this project. However, the bidder is responsible for Storm Water Management for the project as specified in section 10-3 of the Supplemental Special Provisions and 7-8.6 of the Whitebook and Supplemental Special Provisions.

Q26. It is understood that the covers will serve as a source control BMP by preventing rainfall from directly contacting the composting pile, but they are listed as “semi-impermeable”, so will they also be considered a pollutant source (i.e. subject to PDP SWQMP, hydromodification management, etc.)?

A26. It is up to the Design Builder to determine if their proposed system, including covers, should be considered a pollutant source and subsequent storm water management requirements that apply for the project. See Question 25.

Q27. Ref. Section 3.1.5.5 page # 23: Section states contractor to provide 4 year warranty on covers due to loss of material strength. If contractor is only on site for 3 months, how can warranty of possible mis-treatment or mis-use of the covers be warranted?

A27. Warranty claims should be verified prior to replacement for any parts.

Q28. Ref. Section 3.5 page #6: What does “Limited Notice to Proceed” mean?

A28. The Limited Notice to Proceed gives the Contractor authorization to invoice the City for bonds and insurance.

Q29. Does the subcontractor need to have a Contractors License for the startup and demonstration phase?

A29. The Contractor's license is required for construction and installation of the ASP system.

Q30. The City’s Good Faith Effort (GFE) instructions require that solicitations to subs must state that plans and specs are available at no cost to firms. Is it acceptable to forego this requirement since this is a Design-Build and there are no plans/specs at this stage?

A30. No, Design-Builders must adhere to the requirements listed in the Good Faith Effort instructions.

Q31. The City's GFE instructions require bidders to act in good faith with interested SLBE-ELBE firms and may only reject bids for legitimate business reasons. Can you clarify what "legitimate business reasons" would be?

A31. A legitimate business reason is one where the decision was based on a thorough investigation of a subcontractor's capabilities. A bidder should consider a number of factors including a firm's price, capabilities and contract goals. The fact that there may be some additional costs involved with using a certified firm versus a non-certified firm is not sufficient reason for a bidder to not accept a quote unless the price difference is excessive or unreasonable. A contractor's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations are not legitimate causes for rejection either.

Q32. The City's GFE instructions require the bidders to contact a minimum of 5 local organizations or groups to provide assistance in contacting, recruiting and using SLBE-ELBE firms by written notice. We have found from past outreach efforts that contact information for most of these organizations/groups on the City's list are invalid making it very difficult to obtain 5 email delivery confirmations. Would the City consider lowering the number of organizations/groups to 3?

A32. No, Design-Builders must adhere to the requirements listed in the Good Faith Effort instructions and contact at least five organizations.

Q33. This project includes 4 Additive Bid items. Is the 6.8% SBLE/ELBE mandatory participation based on the original project only or does it include the Additive Bid items?

A33. For the purposes of achieving the mandatory Subcontractor participation percentage, the City will not account for Field Orders, Additive or Deductive Alternate Bid items, and Allowance Bid items designated as "EOC Type II" in the calculation. Allowance Bid items designated as "EOC Type I" are part of the Base Bid integral to the SOW and shall be included in the percentage.

Q34. Can our subconsultant purchase equipment? If so, will the cost of the equipment count towards their SLBE/ELBE percentage?

A34. For the purpose of satisfying subcontracting participation requirements, only 1st tier SLBE–ELBE Subcontractors will be recognized as participants in the Contract according to the criteria found in Part 10, Section B, Item 3 of the Whitebook.

Q35. The RFP states that the SLBE/ELBE percentage breakdown is "recommended". Is it acceptable to use different percentages than those listed in the RFP as long as we meet the 6.8 total mandatory participation percentage?

A35. The recommended breakdown of the SLBE-ELBE subcontracting participation goal is based on availability. The goal can be met with any combination of the City of San Diego certified SLBE or ELBE firm(s).

Q36. Several forms do not include a place to sign. Should bidders modify the forms to include a place for signatures or should we submit unsigned forms with our proposal package? (Such forms include Non-Collusion Affidavit, Drug-Free Workplace, ADA Compliance, and Contractor Standards Pledge of Compliance)

A36. Please refer to page 168 of the Solicitation Document "Certifications and Forms".

Q37. Can Generator be powered by propane?

A37. No. The generator must be powered by diesel gas.

Q38. Would you be allowed to have an appropriately sized propane tank on site within Nursery area?

A38. No.

Q39. Since the City will require a permanent generator to run the operation (due to inconsistent power supply from Fortistar its onsite power purveyor), would the City consider purchasing a new generator (with tier 4 engine) rather than having the contractor rent and presumably maintain the unit long-term?

A39. For the purposes of this RFP, the City is seeking to rent the generator from the Contractor.

Q40. Who owns the power lines with the pole mounted transformer(s) on them directly in front of the Nursery area?

A40. The power lines are owned by the power privatizer, not the City.

Q41. Will the City secure permission / permit from Fortistar (or SDG&E) for a power drop from this power source?

A41. If selected, the City would seek permission from the power privatizer for a dedicated electrical service feed. However, the bidder would provide necessary design and permitting.

Q42. Is the existing overhead power supply a 12KVA line, if not what size is it?

A42. The power lines are 12KVA.

Q43. Once the permanent power supply location is chosen by the City, will the City apply for the connection permit(s) if required, since the project is in their name? Contractor would supply electrical engineering drawings for this for City's permitting needs as part of the project.

A43. All permits are the responsibility of the Design Builder. See Whitebook Section 7-5.

Q44. Will the blower station and presumed concrete pad(s) be located on trash fill areas for the locations either up on the project deck, or if remotely constructed, in the Nursery area?

A44. The system shall be portable with no paving or poured-in-place concrete. The "Option 2" location for remotely locating blowers is not over the waste footprint.

Q45. Does the City have any settlement data for the Nursery area?

A45. See question 44.

Q46. Can the white storage trailer be moved by the City to a new location in the Nursery area if this area is chosen for the remote blower station and controls?

A46. Storage trailers that are temporarily located in the "Option 2" area would be relocated by the City.

Q47. Are concrete pads going to be allowed (e.g., for blowers), or does equipment need to be skid mounted?

A47. Concrete pads will not be allowed. All proposed system components shall be portable. Skid mounted equipment would be acceptable if it meets the above-mentioned requirement.

Q48. During the site tour we noted the existing 2" PVC water line up on the edge of the project location deck. Does this come from the Nursery area, and could a new line be run up to the project site from the Nursery area?

A48. The existing water line does not come from the Nursery Area and no new water lines would be added for this project. See question 6.

Q49. If so, what size water supply line, GPM, and pressure is that line rated for?

A49. No new water lines would be added for this project. See question 6.

Q50. Will a backflow protection device be required for the water line?

A50. No new water lines would be added for this project. See question 6.

Q51. Will a water meter be required on the project water line?

A51. No new water lines would be added for this project. See question 6.

Q52. Can the pad be graded so that surface water or sheet flow goes in a westerly direction, presumably toward where the City has the current cobblestone desilting BMPs? This would allow having one point for run-off discharge.

A52. No, the existing site topography shall be maintained.

Q53. It is assumed that the City has a SWPPP for storm water runoff. Will the City be making any necessary engineering recommendation and adjustments to this plan as the project progresses?

A53. See Question 25.

Q54. Does the City have a detailed set of plans showing the current storm water collection system and current BMP's for the existing green waste operations?

A54. See Question 25.

Q55. At the 11-1-17 project job walk it was asked if the City was going to handle clearing off the existing mulch and debris from the project area. The City verbally indicated that it was going to handle this work. RFP Section 2.5 on page 21 seems to indicate the contractor would be responsible for this. Please let us know who will handle this. It seems to make sense that the City would handle this operation rather than double- or triple-handling the mulch.

A55. Existing compost rows or piles will be removed by the City. Contractor will be responsible for any additional clearing or site preparation needed as stated in the Section 2.5 of Attachment A in the RFP.

Q56. The City at the 11-1-17 project job walk indicated that it would be responsible for supplying prepared feed stock to the mulching operation, including the pre-screening and removal of non-approved materials. Is this this going to be the procedure?

A56. See question 9 and Section 3.2.3.5 of Attachment A in the RFP.

Q57. Will the local APCD or CARB have any special requirements such as permits for the onsite generator to run the green waste operation?

A57. Contractor will be responsible for permitting by the local APCD or CARB for the generator, if required.

Q58. Are there any special Health & Safety requirements (i.e., 40- or 24-hour OSHA training, special monitoring for noise or air)?

A58. Design Builder shall determine any special Health and Safety measures required.

Q59. Are there restricted work hours for the site due to dust or noise? What are the approved work days and hours for this project?

A59. See Section 1.7 of the RFP for working days. See Section 1-2 of the Supplementary Special Provisions (Attachment E) of the RFP for normal working hours.

Q60. Does the City have an onsite source of fill dirt if needed for grading at the project site above the existing in place cover?

A60. Yes, Design Builder to coordinate with Operations staff for use of fill dirt.

C. CHANGES TO THE REQUEST FOR PROPOSALS

1. To Section 1, Introduction and Project Overview, Sub-section 1.1, page 4, Solicitation, item 1.1.7, **DELETE** in its entirety and **SUBSTITUTE** with the following:

   1.1.7 Any architectural firms, engineering firms, specialty consultants, or individuals retained by the City to assist in drafting the RFPs or the Project's preliminary design may not be eligible to participate in the competition with any Design-Build Entity. It is the responsibility of the Design-Build entity to obtain the required legal advice necessary to resolve such matters.

2. To Attachment A, Project Description, Scope of Work, and Specifications, Section 3, System Requirements, Sub-section 3.1, ASP System, item 3.1.4.2, page 23, **DELETE** in its entirety and **SUBSTITUTE** with the following:

   3.1.4.2 The proposed ASP system shall be utilized for the Process to Further Reduce Pathogens (PFRP) stage of composting and meet regulatory standards as set forth in, Title 14, Division 7, Chapter 3.1 of the California Code of Regulations.

James Nagelvoort, Director
Public Works Department

Dated: *November 21, 2017*
San Diego, California

JN/JB/lji

City of San Diego

CITY CONTACT: Juan E. Espindola, **Contract Specialist**, **Email:** JEEspindola@sandiego.gov
Phone No. (619) 533-4491, **Fax No.** (619) 533-3633

ADDENDUM 3

PROPOSAL DOCUMENTS

(1-Step)

e - Bidding

FOR

AERATED STATIC PILE SYSTEM

RFP NO.:	**K-18-1590-DB1-3-A**
SAP NO. (WBS/IO/CC):	**S-16053**
CLIENT DEPARTMENT:	**2115**
COUNCIL DISTRICT:	**6**
PROJECT TYPE:	**FA**

PROPOSALS DUE:

12:00 NOON
DECEMBER 6, 2017
CITY OF SAN DIEGO
PUBLIC WORKS CONTRACTS
1010 SECOND AVENUE, 14th FLOOR, MS 614C
SAN DIEGO, CA 92101

A. CHANGES TO CONTRACT DOCUMENTS

The following changes to the RFP are hereby made effective as though originally issued with the RFP. The Design-Builders are reminded that all previous requirements to this solicitation remain in full force and effect.

B. ADDENDUM

1. To Addendum 2, Section B, Question and Answer 21, page 7, **DELETE** in their entirety and **SUBSTITUTE** with the following:

   Q21. Attachment A, paragraph 3.1.6.6.1: States that the temperature probe shall be capable to measure at least five (5) temperature point continuous monitoring arranged over a depth of 40 inches within a solid/gas mixture up to a temperature of 212 º F. Is the City requiring 5 probes per pile or one probe with 5 sensors? Would you allow three probes with two sensors on each probe?

   A21. The City is requiring at least five continuous monitoring points per pile. A proposal that included three temperature probes with two sensors each would be acceptable.

James Nagelvoort, Director
Public Works Department

Dated: *November 28, 2017*
San Diego, California

JN/JB/lji

SCS FIELD SERVICES







Proposal

for

Aerated Static Pile System

Presented to:

City of San Diego

1010 Second Avenue, 14th Floor, MS 614C
San Diego, CA 92101
(619) 533-3426

Presented by:

SCS Engineers and SCS Field Services
8799 Balboa Avenue, Suite 290
San Diego, CA 92123
(858) 571-5500

December 6, 2017
File No. 070183217

Offices Nationwide
www.scsengineers.com

Proposal

for

Aerated Static Pile System

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City of San Diego
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December 6, 2017
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Environmental Consultants
and Contractors

8799 Balboa Avenue
Suite 290
San Diego, CA 92123

858 571-5500
FAX 858-571-5357
www.scsengineers.com

SCS FIELD SERVICES

COVER LETTER

December 6, 2017
File No. 070183217

City of San Diego
Public Works Contracts
1010 Second Avenue, 14th Floor, MS614C
San Diego, CA 92101

Attention: Contract Specialist

Subject: Proposal for Aerated Static Pile Composting System (RFP No. K-18-1590-DB1-3)

Dear Sir/Madam:

The City of San Diego (City) requires comprehensive design, planning, equipment procurement, permitting, construction, start up, demonstration and training of City staff for an Aerated Static Pile (ASP) Composting System at the City's Miramar Greenery Operation (Greenery). The ASP must effectively process 40,000 tons per year of organic waste and provide enhanced storm water quality and/or control.

Stearns, Conrad and Schmidt, Consulting Engineers, Inc., (dba) SCS Field Services, in association with Sustainable Generation, LLC, IO Environmental, Inc., and Frank's Industrial Services, have developed a well-thought-out proposal in response to the City's Request for Proposal (RFP) No. K-18-1590-DB1-3-A, Addenda Nos. 1 through 3, and attendance at the pre-proposal meeting and site visit held on November 1, 2017.

We are pre-qualified with the City, registered to bid using the City's electronic bidding site, and are submitting via the ebidding system.

Please contact either of the undersigned to discuss any questions you might have regarding our proposal.

Sincerely,

Patrick S. Sullivan, CPP, BCES, REPA
Senior Vice President
SCS ENGINEERS

Galen S. Petoyan
Senior Vice President
SCS FIELD SERVICES

PSS/GSP/jml
Enclosure

ADDENDA TO THIS RFP

SCS has received, reviewed, and acknowledged the following Addenda issued by the City:

- K-18-1590-DB1-3-A – Addendum 1, issued November 9, 2017.
- K-18-1590-DB1-3-A – Addendum 2, issued November 21, 2017.
- K-18-1590-DB1-3-A – Addendum 3, issued November 28, 2017.

PROPOSER EXCEPTIONS TO THIS RFP

SCS has reviewed the City's contract and takes no exceptions. We have worked with the City for many years and anticipate no problems in negotiating contract terms in the event we are selected for this project.

We have noted some assumptions/conditions related to pricing and schedule in those sections of our proposal.

EXECUTIVE SUMMARY

The City of San Diego plans to convert its existing composting operation into two paths, diverting more than 100,000 tons of food waste out of the landfill by composting 40,000 per year tons and ensuring diverted food reaches food rescue non-profits before it is disposed. These approaches include a covered ASP-type compost system that will process 40,000+ tons per year of organic waste, and provide enhanced stormwater management and odor control.

The SCS Team wants to be a part of this unique opportunity to make such a profound difference in the lives of local San Diegans. We have selected a strong team of organics experts, engineers, construction specialists, and material providers to manage all aspects of this important project. We understand that the City is requiring a fabric cover system for the ASP. We are proposing to use the Gore System, which delivers not only first-hand owner/operator knowledge, but also the reliability of the proven Gore® Cover system, including the following:

- 200+ installations in more than 20 countries with +3.5M tons annual processing capacity.
- 20+ installations with +1M tons annual processing in North America.
- Small footprint with a low energy requirement.
- Modular, expandable customized designs.
- Feasible for all organic content feedstocks.
- Facilities range from 2,000 to 200,000 tons/year.
- Produces a consistent, stable compost in as little as 4 weeks.
- Easy to operate with lowest operating costs.

SCS is a boots-on-the-ground design-build contractor capable of delivering projects through its own engineering professionals and crews of construction professionals, including superintendents, equipment operators, pipe layers, welders, laborers and other technicians.

The SCS Project Team proposed for this opportunity includes both the engineering and field services construction divisions (SCS Engineers and SCS Field Services), as well as the

Sustainable Generation/Gore Partnership (SG Team), IO Environmental (IOE), and Franks Industrial Services (FIS). The City is familiar with all of the above firms, and SCS has an established working history with these firms; there will be little to no learning curve associated with this combination of engineering design, planning, equipment procurement, permitting, construction, start up, and training experts.

SCS is also committed to the City's Equal Opportunity Contracting Program (EOCP), and has always made efforts to comply with the EOCP requirements. We are meeting the City's EOCP compliance goal.

TECHNICAL PROPOSAL

1. COMPANY INFORMATION

Requested information on the firm is provided below.

- Stearns, Conrad and Schmidt, Consulting Engineers, Inc. (dba SCS Engineers, SCS Field Services, SCS Energy, SCS Aquaterra, SCS Tracer Environmental). SCS Field Services is the proposing entity for this project.
- SCS is an S-Corporation founded in 1970 and incorporated in the State of Virginia in 1972. We began operation in California in 1972.
- Corporate office address: 3900 Kilroy Airport Way, Long Beach, CA 90806.
- Local San Diego office: 8799 Balboa Avenue, Suite 290, San Diego, CA 92123.
- Primary contact for the firm: Srividhya Viswanathan, PE: (858) 571-5500 (*Office*); (858) 583-7757 (*Direct*).
- Current number of SCS staff in San Diego County is ***54.***
- SCS is a licensed General A Contractor with Haz certification (#749678 "A"). A copy of our Contractors License, valid through the end of May 2018, is provided as ***Appendix A*** to this proposal.
- Our City of San Diego Business License number is B1993000875; a copy of our license, which expires ***February 28, 2018***, is provided in ***Appendix A***.

2. FIRM DESCRIPTION

SCS's mission is to be the environmental consultant of choice for our clients and employees. Since our founding in 1970, SCS has focused on environmental projects specifically in the area of solid waste management. SCS has a strategic focus on sustainable materials management which includes compost facilities and operations.

SCS offers services in eight major practice areas: Solid Waste; Compliance and Permitting; Sustainable Materials Management (SMM); Environmental Services; Field Services-OM&M (operations, monitoring, and maintenance); Field Services-Construction; SCS Energy; and SCS Tracer. Services on this project will be provided by our solid waste engineering, SMM, permitting, and construction practice areas.

SCS's Construction Division was founded in 1985 specifically to provide specialized construction support to the solid waste industry. Since that time, SCS has been a leader in the solid waste construction field. Historically about 50 percent of SCS's construction projects are design-build projects utilizing our in-house engineering and construction capabilities to deliver successful projects for our clients.

SCS provided design, permitting, and operations services for a compost facility in Medfield, MA

SCS's design-build projects are too numerous to list, but significant projects include: transfer stations; landfill gas to electric energy; landfill gas direct use; landfill gas projects; landfill cell closures; hazardous substance remediation; facility decontamination and demolition; stormwater controls; impoundments; and a host of other projects. Additionally, SCS has recent and relevant experience collaborating with vendors that provide covered ASP composting systems that include an engineered membrane fabric cover, as well as other types of composting systems. SCS also has a number of contracts to manage composting operations. SCS owns composting equipment, including a windrow machine, mix truck, and related equipment for its compost facility operations practice. SCS has a significant depth of design and operational experience with compost facilities on which to draw for this project to supplement the expertise provided by SG.

STRENGTH OF THE PROJECT TEAM

As one company with the engineering and construction expertise, SCS truly is a single point of responsibility which is one of the reasons a design-build approach can be so valuable to a client. It allows for a collaborative process from proposal development stage through ultimate project delivery—a single company with broad expertise that includes engineering, permitting, construction and OM&M, and avoids the vagaries sometimes encountered with newly formed consortiums. We know each other. We work together day after day, project after project. We are all employee owners with the same goals for our client's and our company's success.

SCS is highly qualified and experienced in recycling and composting of organic materials. Our SMM practice knowledge allows SCS to seek out a variety of solutions for clients. Our engineers recommend the best solutions and turn them into practical, buildable improvements that can be built by SCS's Construction Division. This design-build capability for solid waste and recycling is unique to SCS. There are a number of engineers and contractors in the industry, but rarely are they so specialized and under the same roof.

The focus on organic materials management is being driven by existing and emerging state regulations for diversion of organic material (food scraps, yard waste, wood waste, mixed paper)

destined for landfills. SCS helps California counties and cities comply with these regulations by evaluating waste streams, analyzing the applicability of established and emerging technologies (e.g., composting, anaerobic digestion) to specific communities and circumstances, and supporting program development, implementation, and management. Our knowledge of the organics industry in California will beneficial to the City beyond the design-build efforts.

NATIONAL RANKING

McGraw Hill's Engineering News Record *(the engineering industry's pre-eminent national rankings publication) has ranked SCS the No. 1 or 2 solid waste design firm in the U.S. the past 11 years in succession.*

SCS is one of the oldest and largest privately held environmental service firms in the United States, and is a recognized world leader in the field of solid waste engineering, particularly landfill gas (LFG). The firm was founded in 1970 and employs over 770 professional and support staff located in 66 offices throughout the nation, including nearly 300 employees in California. For over 47 years, SCS has been on the leading edge in LFG control and recovery technologies. We design, build, operate, and maintain LFG collection, control, and energy recovery systems throughout the world. Related engineering services include feasibility studies, LFG testing, and design of LFG collection systems, condensate management systems, leachate systems, and blower/flare stations.

LOCATION, SIZE, AND COMPOSITION OF STAFF

SCS currently has 283 staff in our California offices alone. A breakdown of our California office employee numbers is provided in ***Exhibit 1***.

Exhibit 1. SCS Professional Staff in California

Office Location	State	Number of Staff
Bakersfield	California	1
Rancho Cucamonga	California	13
San Diego	California	42
Santa Rosa	California	8
Pleasanton	California	8
Modesto	California	22
Sacramento	California	9
Carlsbad	California	14
Santa Maria	California	10
West Covina (BKK)	California	22
Long Beach	California	117
Huntington Beach	California	4
Sylmar	California	11
Pasadena	California	2
Total		**283**

3. PROJECT TEAM

The SCS Team primarily considers this project to be civil engineering design and construction, except for the Gore® Compost Cover System. These civil engineering elements will be evaluated and designed by certified SCS staff.

The SCS Project Team proposed for this opportunity includes both SCS Engineers and SCS Field Services, as well as the SG Team, IOE and FIS. The City is familiar with the above firms, and SCS has working history with all of the firms; there will be little to no learning curve associated with this combination of engineering design, planning, equipment procurement, permitting, construction, start up, and training experts.

The overall goal of our team is to reduce costs and provide efficiency to our design and construction process.

WHAT THE CITY NEEDS FROM THE TEAM

The City requires a team that can deliver integrated design and installation of semi-impermeable covers to cover organic materials during composting, above-grade aeration, aeration blowers, oxygen and temperature sensors, controllers, computers, cover handling system, concrete barriers, training, start up, demonstration, and all related equipment, appurtenances, and work for proper installation of an ASP system run on portable generator power to meet site constraints, as well as local, state, and federal standards. Our proposed Team can deliver these integrated services. Full resumes are located in ***Appendix B***.

CIVIL

Ambrose McCready, PE, Lead Design Engineer, and Srividhya (Vidhya) Viswanathan, PE, Project Manager, are licensed civil engineers in California. They will provide the majority of the civil design required for the project.

Ambrose McCready, PE, QSD, Lead Design Engineer. Mr. McCready has over 40 years of engineering experience—the past 21 with SCS. An SCS Vice President, he specializes in the planning, design, and construction management of solid and hazardous waste landfills and environmental remediation systems, including the planning and design of composting facilities. His experience includes projects subject to review and approval by Regional Water Quality Control Boards (RWQCBs) and Air Quality Management Districts (AQMDs) throughout California, the U.S. Environmental Protection Agency (U.S. EPA), U.S. Army Corps of Engineers (USACE), and the Atomic Energy Commission (AEC). Mr. McCready has managed numerous multidiscipline/multimillion-dollar projects involving planning, design, and construction of buildings, concrete pads, composting facilities, roads, large dams, and drainage structures. Recent composting projects include the Harvest Power at City of Palo Alto and Lancaster, County of Sonoma, Oroville Landfill Properties, and Cold Creek Compost Facility in California. For Oroville Landfill Properties in Oroville, CA, he prepared compost facility layout and processing plans for 20-ton-per-day open windrow process. The project included analysis and design of storm water and drainage facilities, and SCS prepared a Report of Compost Information and preliminary drawings for the compost area. For the Cold Creek Compost

Facility in Ukiah, CA, he designed compost pad improvements and retention basin to capture storm water runoff from the compost operation. SCS prepared a design and oversaw construction for a perimeter containment curb around the compost area, and an earth embankment with an HDPE liner system that formed the basin.

Srividhya Viswanathan, PE, Project Manager. Ms. Viswanathan has over 12 years of engineering experience related to solid waste, stormwater, water and sewer infrastructure design projects. Her experience includes permitting, design, and construction of a variety of municipal projects, including landfill expansions and liner installation. Since joining SCS in 2012, she has been involved in the preparation of feasibility studies, and the permitting, design, and construction of various landfill, LFG, and leachate management projects in Southern California and Arizona. Her work includes design and installation of LFG collection systems, landfill dewatering systems, and LFG blower-flare station (BFS) planning, design, and construction oversight for many LFG-related projects. She also designs 5-year operational fill and gas collection and control system (GCCS) sequence plans, and has prepared Joint Technical Document (JTD) updates for various landfills. She also performs analysis of airspace consumption and remaining life assessments using AutoCAD Civil 3D, and routinely prepares closure and post-closure care costs for various landfills. She is the Engineering Manager responsible for design, permitting, and construction for LFG recovery improvements at Miramar Landfill in San Diego.

MECHANICAL (DVBE/SLBE SUBCONTRACTOR)

IO Environmental (IOE): *IOE is a Service-Disabled Veteran-Owned Small Business that specializes in providing full service, customer-focused environmental services in a wide array of programs.* A City-certified SLBE, IOE's mission is to become the preeminent Service-Disabled Veteran-Owned Small Business (SDVOSB) in both the environmental services industry and the civil infrastructure and facilities construction industry while maintaining at least a 40 percent Veteran workforce. IOE recognizes that many skilled veterans need new work opportunities after their military service, yet too often employers don't recognize a vet's full potential. IOE provides meaningful jobs that put veterans' skills to work and allow veterans to explore new career opportunities.

IOE self-performs, subcontracts to larger firms, and partners with other small businesses to provide key resources to successfully execute work, and specializes in providing expert design, construction, project management, and superior technical services for all phases of environmental remediation and compliance to include the Comprehensive Environmental Response, Compensation, and Recovery Act (CERCLA), the Resource Conservation and Recovery Act (RCRA), all aspects of the National Environmental Policy Act (NEPA), the Clean Water Act (CWA), and the Clean Air Act (CAA). In addition, IOE offers environmental construction oversight, site investigations/testing, and Geographic Information System (GIS) service.

Chris Marino, PE, Construction Support. Mr. Marino has 10 years of professional environmental and solid waste experience, including Superfund sites and landfills, and encompassing an extensive span of environmental issues, such as vapor intrusion, compliance, and hydrogeology and geology conducting. He has provided air permit compliance and post-

closure monitoring at multiple landfills and provided assistance in all stages of site investigation and remediation, including soil, soil vapor, and groundwater sampling, drilling, and well installation. Mr. Marino will be IOE's lead manager on this project. He will coordinate and communicate with other teams members for the successful completion of the project.

Daniel R. Parker, Construction Support. Mr. Parker 20 years of experience in landscape restoration, comprised of multiple aspects of operations, including plant installation, irrigation, heavy equipment, pesticides, and turf. His project experience spans multiple sites, diverse settings, and a wide range of concurrent environmental issues. Mr. Parker's experience enables him to coordinate with personnel from various disciplines on large-scale environmental investigation, remediation, and construction management projects. He also provides assistance with cost and estimates, vendor negotiations, implementation of personnel safety programs. On this project, Mr. Parker will provide field support under the guidance of Mr. Marino.

ELECTRICAL (SUBCONTRACTOR)

Franks Industrial Services (FIS) is a small firm that has provided services to the solid waste industry for nearly 40 years. FIS will provide electrical design and construction services in the event the Alternate bids are awarded. FIS is an industrial electrical engineering and construction firm based in Southern California. They design, fabricate and program their own control panels and are UL508A certified. Their staff of engineers, project managers and certified electricians will provide the City with reliable and professional services, both on and off site.

COMPOST TECHNOLOGY VENDOR (SUBCONTRACTOR)

Sustainable Generation/Gore (SG/Gore): Today's increasingly regulated organic waste disposal climate coupled with the decreasing number of disposal options and the increasing cost of those options, has made organic waste disposal a potentially expensive endeavor.

The SG Gore Project Team is comprised of a deeply experienced and diverse group of dedicated industry leaders with 25-100+ years of experience and business ownership:

- Design and construction engineers – have built a combined 200 Gore® Cover composting facilities worldwide.
- Business development associates – have 20+ years' experience in delivering organic treatment solutions.
- Application engineers – have 20+ years providing project management and regulatory compliance performance.
- Compost operators – have 20+ years' experience in composting.
- Compost owner operators – have 20+ years in the business.
- Global partner network of supply partners and technical consultants.

SG/Gore is in a unique position in the composting technology industry because they are former owner/operators and have taken valuable lessons learned and created solutions that are right for the environment and right for business by helping owner/operators:

- Increase process productivity.
- Lower total cost of ownership – lower capital costs and ongoing operational expenses.
- Manage environmental compliance.
- Reduce contaminants.
- Produce consistent/reliable high-quality, high-value output.

SCS and SG/Gore have collaborated on a number of projects described later in this proposal.

Brian Fuchs, Design Team/OM&M Support. Mr. Fuchs has been serving the environmental field for over 25 years with experience in implementing various chemical and mechanical technologies into municipal drinking water, wastewater and solid waste treatment applications. His responsibilities include key account management, field sales, industry event planning, project management, contracting and regulatory affairs. He received a B.S. in Architectural Technology from New York Institute of Technology (1991), and an MBA from the University of Delaware (2006). He is a USCC Certified Compost Operator.

Scott Woods, Design Team/OM&M Support. Mr. Woods is the former CEO of The Peninsula Compost Group, which designed, built, owns, and operates the Wilmington Organic Recycling Center in Wilmington, DE. Former Remote Services Vice President at Sun Microsystems with +25 years of experience in applying technology to solve business problems and create competitive advantages in the Telecom, Information Technology, Government Services and Waste Conversion industries. He holds a degree in Electrical Engineering from Montana State University, and an MBA from the University of Denver. He was also a Leading Clean Energy Ventures Fellow at Boston University, and a Technology Intern Program at Bell Core (formerly Bell Labs) Fellow.

ENVIRONMENTAL

Environmental services will be provided by SCS Engineers and will include storm water, permitting and compliance, and other environmental services. Specifically, Paul Wisniewski, PG, QISP/QSD, will lead the storm water management work, and Patrick Sullivan, CPP, BCES, REPA, will lead the permitting and compliance work.

Patrick Sullivan, CPP, REPA, BCES, Reviewing Principal (Engineering/Permitting). Mr. Sullivan has 28 years of experience in the area of environmental engineering, specializing in solid waste management. He is the Managing Director of SCS's consulting and engineering operations within the Southwestern United States, the largest of SCS's engineering business units. He also serves as the Practice Leader for SCS's Solid Waste Practice in the same region.

Mr. Sullivan is the National Expert for SCS's companywide Clean Air Act program. He also oversees SCS's company-wide GHG and Risk Assessment programs and is one of the national experts on risk assessment and toxic exposure issues for solid waste facilities. Mr. Sullivan is a company Senior Vice President and Member of the Company's Management Advisory Committee. He is also Principal-in-Charge for projects related to solid waste facility permitting and compliance. He has been involved with the permitting of over 20 composting facilities in California, including 2 in San Diego County.

Paul Wisniewski, PG, QISP, QSD/QSP, Stormwater Management. Mr. Wisniewski is a surface water, water quality, and stormwater expert. Mr. Wisniewski specializes in eliminating discharge locations, streamlining stormwater conveyance systems by designing Best Management Practices (BMPs) that redirect, reuse, retain, infiltrate, and evaporate stormwater. Over the course of Mr. Wisniewski's 20 year career, he has systematically closed compliance gaps and worked with facilities to reduce/eliminate pollutants, eliminate stormwater discharge (zero discharge), and prevent discharge to Waters of the United States (WOTUS), thereby reducing facility liability.

Mr. Wisniewski also provides expert testimony, declarations, negotiation / strategy expertise, and regulatory compliance services for the successful litigation and settlement of lawsuits filed in California courts that allege violations of laws (e.g., Clean Water Act, Porter-Cologne Water Quality Act, and Clean Harbors Act), regulations (e.g., California Water Code, Fish & Game Code, Fire Code, and Health & Safety Code), and permits (e.g., IGP and CGP). He has successfully defended numerous Materials Recovery Facilities (MRFs) against lawsuits and assisted these facilities to comply with federal and state laws and regulations in a cost effective manner.

ENGINEERING SUPPORT STAFF

Mark Erickson, EIT, Design Support. Mr. Erickson has over 12 years of environmental project experience, with particular emphasis in engineering design of landfill gas (LFG) systems, assistance with SCS Energy projects for site retrofits to incorporate LFG-to-energy (LFGTE) and compressed natural gas (CNG) facilities, construction quality assurance (CQA) monitoring, and landfill closure projects. His general civil design project experience includes design of regulatory-prescribed landfill covers and liner systems, and LFG system design and equipment selection for over 20 sites in California. As part of this work, Mr. Erickson has determined blower/flare station (BFS) component sizing and facility locations, LFG extraction well placement and spacing, and affiliated gas pipe sizing for projects in excess of $50 million. Additional civil experience includes providing design of LFGTE facility layouts with emphasis on civil structural components for these facilities, including piping and process configuration. Project work has also included providing technical specifications and coordination with multiple structural and facility engineers. He has also conducted design review for landfills and Material Recovery Facilities (MRFs) that have planned to incorporate CNG options for over five sites under direction of SCS's Senior Technical Engineers. He has also been closely involved with the Landfill Gas Recovery Improvements at Miramar Landfill in San Diego.

Art Violenta, Design Support. Mr. Violenta has over 35 years of professional engineering design and construction experience. He has prepared designs for a number of composting

facilities in California and Colorado. He specializes in planning, surveying, design, and structural detailing of solid waste disposal sites, including landfills and compost operations; the preparation of road improvement plans; and road construction. He is skilled in the use of graphics and design programs, such as AutoCAD 3D Civil, Photoshop, Canvas, Corel Draw, and various Microsoft software programs.

CONSTRUCTION STAFF

Steven Cooper, Construction Manager. Mr. Cooper has over 30 years of experience in environmental compliance reporting, landfill gas (LFG) control and recovery, emissions monitoring and reporting, and liquids recovery/ distribution systems associated with solid waste facilities. He is responsible for field supervision and implementation of environmental gas testing, monitoring, and construction projects. He also has participated in field activities related to energy resource development for municipal and industrial solid waste site owners/operators and site developers and has successfully managed OM&M support at numerous San Diego solid waste disposal sites. Mr. Cooper works closely with design and field staff to optimize project outcomes and ensure that project milestones are completed on time. He also facilitates project team communication to maximize efficiency and ensure client satisfaction.

Kyle T. Kranz, Construction Support. Kyle Kranz has over 30 years of experience in the environmental/pollution control field, with emphasis on LFG migration and control and recovery. His related experience includes cost estimating, construction, routine OM&M, non-routine repair and emergency call-out response, O&M of recovery facilities, surface sampling and VOC emissions, and groundwater and soil sample collection and monitoring. His experience with LFG recovery systems includes maintenance and adjustment of well fields, maintenance of compressors, boilers and flares, and maintenance of distribution pipelines. Mr. Kranz provides support for construction-related project requirements, coordinating field work with staff and outside subconsultants and working closely with engineering personnel.

Chad Salmons, Construction Support. Mr. Salmons has nearly 30 years of experience in construction. His extensive project experience encompasses multiple aspects of solid waste disposal site operations, including the installation of holding tanks, pumps, and soil vapor extraction wells; trench excavations, HDPE pipe fusion, and header line survey and placement; liquids diversion, irrigation, and leachate collection systems implementation; and landfill gas collection and control. Having worked on numerous San Diego County landfills, Mr. Salmons is well-versed in city, county, state, and federal health and safety regulations in South Orange County region. He works closely with the engineering personnel in design development and implementation to provide perspective from a construction point of view.

INSTRUMENTATION AND CONTROLS

SCS uses state-of-the-art data collection methodologies to provide clients with up-to-date and secure data to facilitate decisions on environmental control systems management. In 2002, SCS launched an internet based program to help manage landfill monitoring data, project documents, and tasks. SCSeTools consists of several modules to manage several types of landfill data. Currently, over 500 sites are managed by SCSeTools across the United States. The web-accessible server is located in a Tier 1 data center approved to store sensitive records, including financial

data. The centerpiece of the system is a client-specific application that accepts and stores multiple types of facility monitoring records, continuous data streams, and facility documents.

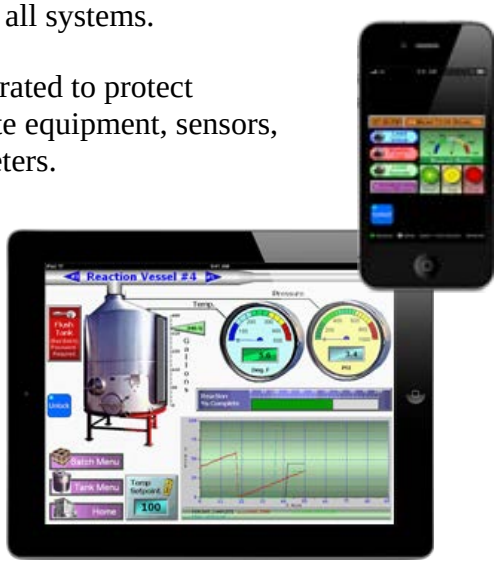
User-specified login roles customize access to the site to provide SCS and its clients with readily accessible and up-to-date project information. Duplication of project files is eliminated as data are stored and accessed from a single secure location. The SCSeTools solution is particularly useful for managing compliance monitoring results. Email notices are sent automatically to designated project personnel upon data file upload. Non-compliant data are highlighted on a data review screen to assist with tracking and scheduling responses. By using a database format, record searches and queries are efficient and easy to create. One-button trend graphing further facilitates data review. Data output is done via Microsoft Excel®, and includes standard client report formats. Project documents are uploaded and organized in a user-defined file tree system.

Additional "internal monitoring data analysis reports" will be created and uploaded for use in project meetings, and to serve as a record that in-depth project evaluation is consistent. Advance data analysis helps to identify developing trends and successful system adjustments. SCS DataServices® and SCS MobileTools® (modules within the SCS eTools suite of technologies) will be provided to the City ***at no additional charge***.

SCS Remote Monitoring and Control®

SCS Remote Monitoring and Control (SCS RMC), a module of SCSeTools, bridges connection to on-site continuous monitoring devices and security cameras to collect and organize large data sets. SCS RMC technology integrates LFG systems, Programmable Logic Controllers (PLCs), Smart Data Recorders, and sensor data streams, and encrypts and transfers it to the SCSeTools online application to allow for advanced data management.

Benefits include:



- SCS RMC is easy to operate and integrate with all systems.
- A high level of network security has been integrated to protect equipment and data, and to control and automate equipment, sensors, security cameras, GPS locations, and Smart Meters.
- Alarms, alerts, and specified monitoring data are automatically emailed to designated users.
- Monitoring triggers are customized for alerts and custom reporting.
- All monitoring data are backed up daily to a secure database.
- Historic monitoring data are analyzed using trend charts, and real-time streaming data can be viewed with the HMI (human-machine interface).

- Multilevel logon control settings allow view-only, full control, and Lockout and Tagout Functionality.
- A user can remotely monitor and control systems from any internet location.

Project Organization

An Organizational Chart is provided here as ***Exhibit 2***. It details the Team reporting structure and management.

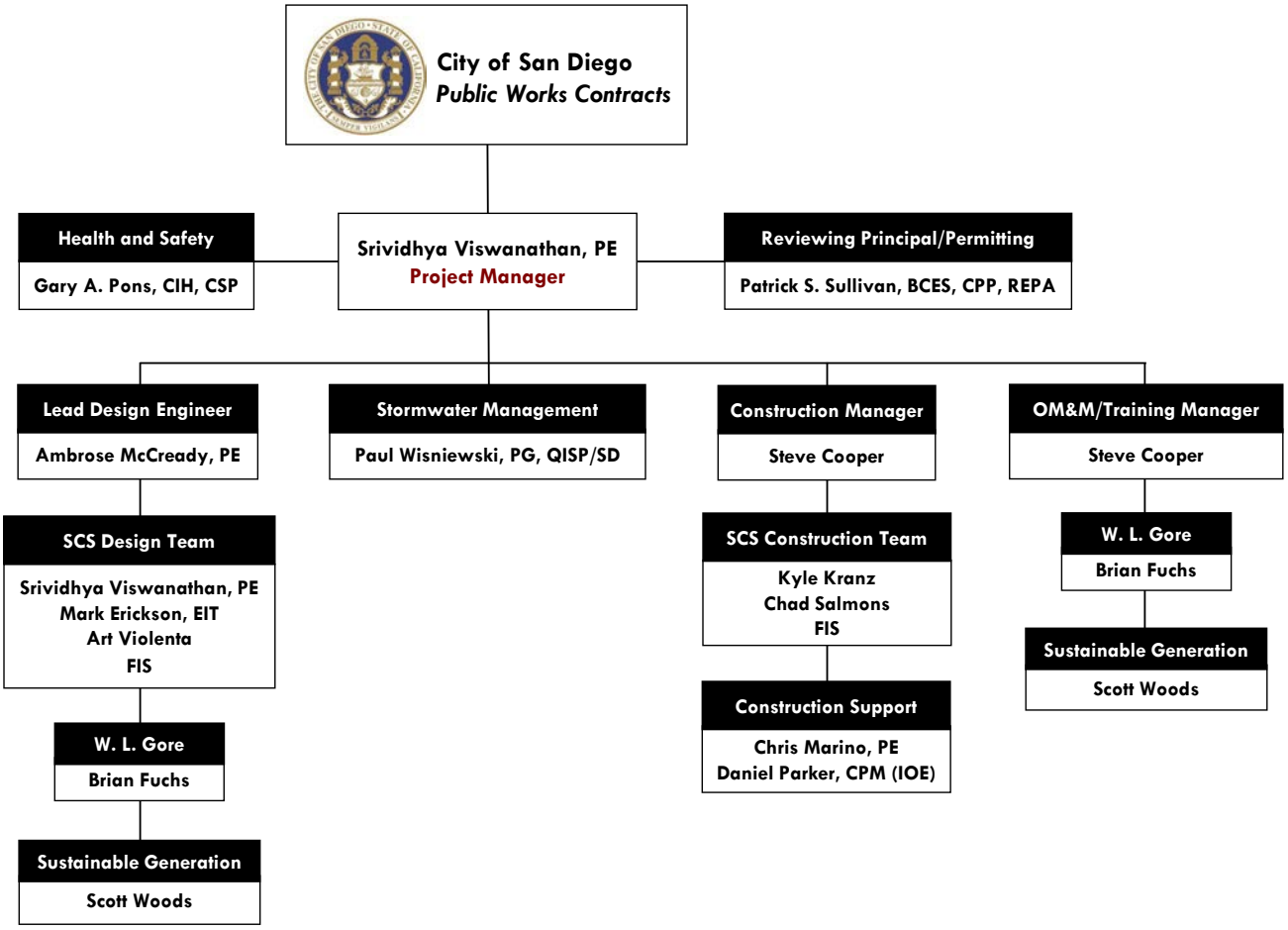


Exhibit 2. Chart of Organization

QUALIFICATIONS AND EXPERIENCE

SCS's history in solid waste is extensive—we've completed more solid waste engineering projects for compost facilities, transfer stations, material recovery facilities, and landfills than most other solid waste firms in the United States.

Exhibit 3 (*below*) provides details on our solid waste services, and ***Exhibit 4*** provides details specific to our compost services.

Exhibit 3. SCS Solid Waste Services

Landfill Services	***Design and Permitting*** Alternative Liner Demonstrations Alternatives Evaluation Bid Documents Bioreactors Cell Development Capacity Optimization Construction Plans Construction Services Feasibility Studies Geotechnical Engineering Hydraulics Hydrogeology Landfill Designs (all phases) Leachate Collection Systems Liner System Design Master Planning Permitting, Expansions Permitting, Greenfield Sites Site Investigations Siting ***LFG Management*** Air Quality Permitting Construction Design and Permitting Due Diligence for Financing LFG Control Systems LFG-to-Energy (LFGE) Operation and Maintenance Monitoring & Reporting Site Investigations	***Operations Program Development*** Airspace Management Alternate Daily Cover Alternate Materials Application Hazardous Waste Exclusions Special Waste Management ***Remediation*** LFG Migration Remedial Measures Feasibility Studies Design Construction Management ***Closure/Post-Closure*** Planning and Permitting Final Cover Designs Closure Documentation End Use Planning Post-Closure Monitoring and Inspection Financial Assurance Landfill Redevelopment ***Groundwater Monitoring*** Well Installation Monitoring & Reporting Corrective Action Investigation and Modeling Permitting ***Construction*** Construction Quality Assurance Construction Management Design-Build
Compliance Management and Regulatory Compliance	Computerized Compliance Tracking Systems Economic Analysis Environmental Compliance Audits Expert Testimony Feasibility Studies Solid Waste Management Plans Due Diligence Reviews	Public Hearings Public Participation Rate Studies Record Keeping Regulatory Reporting Composting Operations Waste Reduction and Recycling Waste Stream Characterization

Exhibit 4. Organic Materials Management Services

Program Planning and Development	• Regulation Review • Program Planning • Zero Waste Planning • Evaluation of Public-Private Partnership Planning • Development of Waste Diversion Programs • Organic Waste Collection • Greenhouse Gas Inventory Studies • Sustainability Plans • Solid Waste Management Plans
Design and Permitting	• Composting Systems: open windrow; aerated static piles; in-vessel • Anaerobic Systems: wet and dry digesters; landfill pods; biogas treatment • Biogas-to-Energy: engines, turbines, boilers, CNG • Technical assessment of design • Siting studies • Solid waste permits • Air permits • Stormwater, Leachate, Odor Control
Construction; Operations & Monitoring; Sales	• Construction quality assurance • Compost Operations: mixing, turning and screening • Temperature and moisture monitoring • Noise, dust, and odor monitoring • Tracer odor monitoring and studies • Biogas power plants and processing facilities • Marketing and sales of compost products
Financial and Economic Analysis	• Feasibility studies • Rate Analysis • Cost of Service Studies • Cost, Financial, and Economic Analysis • Pay-As-You-Throw (PAYT) and Alternative Rate Programs • Development of LOI/RFQ/RFP/Bid Documents • Assistance with grant funding applications • Customer Billing and Service Reviews
Other Services	• Development of Public Education Programs • Facilitation of Public Meetings • Public Opinion Surveys • Business Waste Audits • Waste Characterization Programs • Benchmarking Surveys of Service and Fees • Regulatory Reporting

SCS has several ongoing relevant projects in the organics field, both nationally and in California. ***Exhibit 5*** provides details on these and other completed projects. The exhibit can be viewed here: https://drive.google.com/drive/my-drive.

PROJECT EXPERIENCE

Material Recovery Facility Design-Build
Pala Band of Mission Indians, Pala, CA

Background

In 2006, the Pala Band of Mission Indians (PBMI) retained SCS to design and construct a community recycling center and refuse transfer facility by modifying an existing vacant steel building on site. The steel building was previously used as a maintenance and storage building. The transfer facility was constructed within the existing 60-foot by 160-foot steel building. To accommodate the lower bin floor, a portion of the existing building floor will be demolished and support columns on the west side of the building will be temporarily shored so that a new lower floor with parapet wall and extended columns can be constructed. The 25-foot by 58-foot lowered floor will accommodate a total of six (6) 40-cubic-yard roll-off bins. A 38-foot by 58-foot concrete paved ramp was constructed west of the building for use by the roll-off trucks that drop off and pick up the bins. A new steel canopy structure was constructed over the Household Hazardous Waste (HHW) collection and storage area. Site work included construction of underground storm drain pipes to collect drainage from the truck ramp area and the green waste storage areas. A retention basin bas constructed for the collection, analysis and possible treatment of stormwater.

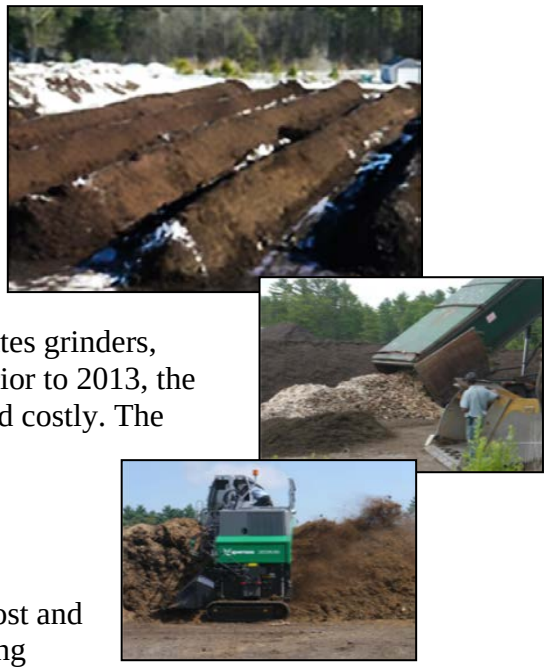
Challenges

- Trash disposal on the reservation was indiscriminate and a dedicated area was needed for recycling and buy-back options.
- Educating the PBMI on how to handle green waste, household hazardous waste and MSW was an ongoing challenge.

Outcomes and Benefits

Through strong planning, design and design-build services, SCS brought the PBMI am integrated facility that will serve the residents as a centralized drop-off location as well as HHW collection center and buy-back center. A green waste processing area was also constructed on site. The project was completed in 2008.

Process Design, Operation, and Permitting for a Large-Scale Organic Material Recycling Business
Middleboro, MA



Background

Sam White and Sons, Inc. (SWS), with whom SCS Engineers has teamed on numerous projects, is a family-owned and operated, large-scale, organics material recycling business with a lean operations budget. The Middleboro facility produces bark mulch, compost, topsoil, leaf mold, and various aggregates derived from raw materials brought to the site. SWS operates grinders, screeners, loaders, excavators and various dump trucks. Prior to 2013, the composting operation was inefficient, time-consuming, and costly. The process required 9 months to 1 year to produce stable, screenable compost.

Challenges

- Produce higher-quality compost at a reduced cost and less owner involvement, and navigate a changing state permitting environment.
- Produce higher quality compost through improved methodology: compost turner, improved workflow, better record keeping and improved process monitoring schedules.
- Develop a site plan and prepare certification notices to MassDEP and Board of Health to note compliance with the General Permit (310 CMR 16.04).
- Source new feed stocks (e.g., food scraps and fish waste) to improve compost quality and to satisfy MassDEP's food waste diversion strategy.
- Prepare a Facility Management Plan that employs current best management practices (BMPs) in accordance with the General Permit.

Outcomes and Benefits

Through clear focus on SWS's immediate needs, and by introducing SWS to new opportunities, SCS has added value through a compost operation that is well-run, produces a superior product, and saves money. Processing time has been cut in half, while screening "overs" are being kept to a minimum, saving significant time and money. Also, SCS now sources added feed stocks to satisfy the site's increased capacity.

Evaluation of Collecting, Hauling, and Processing of Food Waste for Eastern Placer County
Auburn, California

Background

SCS was contracted to provide an evaluation of alternatives available for collecting, hauling, and processing food waste in the eastern portion of Placer County (Tahoe Area). The driver behind the study was state law AB 1826, which requires communities to divert organic waste from landfills and develop an organics management program by January 1, 2016.

Challenges

- Model the waste characterization to estimate and project the types and quantities of organic material generated in the region.
- Identify site constraints and other criteria for new organics processing technologies.
- Evaluate site location options and develop a pro/con matrix.
- Research potential technologies and score/develop a list of viable options.
- Assess feedstock and product markets.
- Identify permitting requirements and regulations.
- Develop a cost model to assist with the evaluation.
- Develop an Organics Management Plan.

Outcomes and Benefits

SCS provided the County with reputable short- and long-term cost information on waste processing technologies that best suited the County's needs and objectives, and helped the County identify next steps for implementation of its organics program.

Food Scrap Composting and C&D Waste Recycling/Processing Feasibility Study
Toledo, Ohio

Background

The City of Toledo retained SCS to conduct an economic and technical feasibility study for the development of organics processing facilities and construction and demolition (C&D) recycling/processing facilities. The City and its partner, the University of Toledo, wanted to boost their recycling of several different waste materials, including: leaves and green waste, food scraps, and C&D debris.

Challenges

SCS was commissioned to assess:

- The quantity of food waste available and its sources in the region.
- Companies that were collecting food and assessing pricing for feedstock.
- Upgrading leaf composting sites into leaf/green waste/food composting sites.
- Site alternatives for expanded operations (site limitations; advantages and disadvantages).
- Open windrow, aerated static pile (ASP), and anaerobic digester alternatives.
- Markets for compost (customers, locations, volumes, quality, and pricing).
- The City's potential operation of a demolition concrete recycling operation.

Outcomes and Benefits

- The City received a comprehensive report and two in-person presentations from SCS, which provided the City with the thoroughly researched and well-reasoned direction and focus it was seeking.
- The City received economic pro formas for each scenario involving composting, anaerobic digesters, and C&D recycling, which provided the financial information needed to make wise decisions and advance implementation of its organics program.

Design, Permitting, and Construction of Reclaimable Anaerobic Composter
Lancaster Landfill, CA

Background

Waste Management Inc. retained SCS to complete the design, permitting, and construction of a reclaimable anaerobic composter (RAC) at the Lancaster Landfill. The RAC system allows the operator to control the waste stream being included in the system. With a RAC, the operator can separate out only those wastes which will decompose and produce biogas most rapidly with the addition of liquids (i.e., green waste and food waste). Separating out and isolating these specific wastes into small RAC cells (or pods) gives the operator greater and more efficient control over biogas production and collection and the quantity of liquids needed for recirculation. The design of this RAC system is very similar to a covered aerated static pile composting system.

Challenges

SCS was commissioned to:

- Prepare design plans and specifications for six RAC pods with an access ramp, one waste storage and mixing area; a bio-filter; a liquids collection and distribution system; a gas collection and control system, an air injection system, a stormwater drainage system for the RAC area to divert stormwater away from the pods and mixing area to a retention pond; and an access and haul roads for operations equipment in and out of the working areas.
- Provide air permitting and compliance support.
- Provide CEQA compliance support.
- Provide stormwater and solid waste permitting services.
- Construct and start-up of the system.

Outcomes and Benefits

- Benefits include greater biogas production and collection as well as the quantity of liquids needed for recirculation.

Design-Build Services for Site Closure and Permitting for Covered Aerated Static Pile Composting Operation
West Contra Costa, CA

Background

Republic Services owns and operates the West Contra Costa Landfill in the San Francisco Bay area. SCS provided design-build services related to site closure and air permitting services to increase the scale of its current windrow composting operation from 19,000 to 130,000 tons per year and to convert it to Covered Aerated Static Pile (CASP) composting with biofilter for volatile organic compound (VOC) emission control.

Challenges

SCS was commissioned to:

- Prepare design plans and specifications and construction services for partial final closure of a 10-acre slope area (completed under a design-build contract to accommodate accelerated schedule) and a second 10-acre area at the site. The work on the second area included construction management services to facilitate cover soil receipt and placement during construction. Related site improvements that were part of the design and construction work included roads and stormwater controls.

- Prepare airspace capacity, site life, and capital expenditure estimates as part of budgetary forecasts for the landfill.

- Prepare preliminary closure/postclosure maintenance plan and cost estimates for the landfill.

- Develop project specifications (bid documents) for groundwater, leachate and surface water monitoring at the landfill.

- Provide operations and maintenance (O&M) and monitoring of the landfill gas (LFG) system, including air quality permitting and compliance.

- Prepare a permit application, including permit forms and supporting documentation, for submittal to the Bay Area Air Quality Management District (BAAQMD) related to the covered aerobic static pile (CASP) composting operation. Conducted a major source evaluation, including New Source Review (NSR) balance and evaluation of project offset needs; provided BACT cost effectiveness analysis for emission controls on composting; performed agency liaison services with BAAQMD; provided assistance in obtaining emission reduction credits (ERCs); reviewed and commented on BAAQMD's health risk assessment results; and responded to agency comments and/or requests for additional information.

- Prepare a conceptual design and project description for major equipment, emission control devices, storage and transfer equipment and stockpiles for the composting operation.

Outcomes and Benefits

- For the composting facility, SCS's work represented the first permitting of a CASP in the BAAQMD jurisdiction. We also completed the first BACT analysis related to controlled composting operations. The permit has become the template for subsequent permits at other facilities. SCS was able to obtain the permit for the CASP in record time as compared to typical permitting in the BAAQMD and through our permit negotiation skills; SCS was able to convince the BAAQMD to eliminate numerous overly onerous permit requirements.

- The landfill closure project was performed under a design-build approach. This offered the client several benefits. The SCS team was able to meet the project operational goals of meeting all regulatory deadlines and conditions of approval, under changing conditions. For example, soil availability and weather conditions changed the client's landfill operation and fill plans. SCS was able to realign access roads and related stormwater infrastructure to allow continued site and customer access. SCS was able to identify and perform acceptance tests for cover soil materials on a fast-track basis. All regulatory and client performance deadlines were met by SCS.

Compost Facility – Design Fresh Kills Landfill
New York, New York

In 2016, ***SCS provided design services to SG/Gore*** to support installation of 16 Gore cover systems at the Fresh Kills composting facility. The covered ASP system will process up to 100 tons per day of food scraps, and 100 tons per day of mixed yard waste. SCS's tasks included site visits and preparation of layout drawings.

Composting Facility Design
Rainier, Washington

The Silver Springs Organics (SSO) Commercial Composting Facility is a covered state-of-the-art organic waste composting facility that processes yard debris and other organics into stable, high-quality soil amendments and other beneficial products. The covered processing and composting structure is designed to treat potentially odorous air emissions and help mitigate noise, dust, and water impacts. SCS provided system design, engineering, and permitting support to the SSO Facility. Tasks included:

- Assisted with land application of process water (leachate) and sludge and received approval from the Washington State Department of Ecology.
- Prepared a sampling plan and performed a 12-week sampling and monitoring program to evaluate the efficiency of the initial compost system and provided recommendations.
- Performed an ambient odor study that included air sampling and site modeling.
- Assisted with facility re-design to a state-of-the-art aerated system beneath a 200,000-square-foot roof structure.
- Designed process water systems that included leachate collection, condensate collection, ***storm water drainage***, fresh water rooftop collection and water delivery systems for fresh water and process water.
- Prepared materials required for and received a Notice of Construction Air Permit from the Olympic Regional Clean Air Agency (ORCAA).
- Prepared a site Plan of Operations and received approval from ORCAA and the Thurston County Department of Solid Waste.
- Prepared materials required for revision of the site Special Use Permit and the Solid Waste Permit issued by Thurston County.
- Prepared As-built drawings and permitted a Group B drinking water system.

4. TECHNICAL APPROACH AND DESIGN CONCEPT

PROJECT APPROACH

Our approach will include the use of local specialty construction subcontractors, so as to take advantage of their local knowledge and to keep revenues from the project within the local economy. Being local also cuts down on costs for travel and mobilization.

SCS' strategy will also utilize the existing infrastructure to the extent possible (e.g. existing grading, access roads etc.). The majority of the site is covered with soil, so SCS plans to lay out the new project components using the existing slope as much as possible for the processing and handling areas. This includes using existing access haul roads that SCS believes can play a role in the efficiency of the compost process.

We understand the importance of communications between the team and the City during this project. This will be accomplished through regular meetings and monthly progress reports. SCS has an existing file sharing system, NewForma, one of our tools that will minimize the time required to exchange draft and final documents. NewForma will allow us to place in-progress and final documents on an accessible website for review and comment by the City and other agencies. This also allows our internal reviewers to have access to all documents to perform Quality Assurance/Quality Control (QA/QC) review of all documents.

SCS has other tools for project management including Vision for tracking of costs and for invoicing. Our preferred schedule software is Microsoft Project, which we have used to prepare our project schedule for this work.

The compost cells for this facility will be located on the soil surface of the landfill cover as shown in the cell layout on ***Figure 1***. There will be no concrete or asphalt surfacing due to potential settlement of the landfill in the future, which would damage such a material. The cells will be sloped to allow accumulation of the liquids from the cells and to prevent run-on drainage from other areas of the landfill cover. Any contact liquids will be contained by a compost berm and will be absorbed and placed back into the compost process. Surface water runoff will be routed around the compost area so it does not mix with the contact water.

Push walls will be located at the center of the compost area. They will be comprised of two pre-cast concrete barriers per cell, similar to those used on highways. The purpose of the barriers is to provide a fixed wall that a front-end loader can push against to load compost. The blower piping and connections will be made to a pair of perforated pipes that extend the length of each cell. It will be necessary to arrange the compost cells to allow 120 feet of clear space for pulling the pipe from the cells after compost is complete.

Project Area
Miramar Greenery - ASP System
City of San Diego - Environmental Services Department

FIGURE No. 1

System Description

We are proposing an aerated static pile composting system based on the proven Gore® Cover technology (or a covered system of equal quality and effectiveness). This modular system is simple, compact, and scalable, which will readily facilitate expansion as the project's feedstock volume increases. The features and benefits of the Gore Cover System are described in the Enhanced Compost Process section. The Gore Technical Data Sheet is attached in ***Appendix C***.

Facility Design

SCS will help the City identify the optimum layout for the facility and the best usage of available area. We recommend optimizing compost pad layout by considering all of the following:

- Practicality for the front-end loader to move between the bunkers, and to and from the receiving area and the screening/storage area.
- Placement and removal of above-grade aeration piping.
- Leachate and stormwater management.
- Phasing the expansion and capacity of the facility.

EFFICIENCY

The SCS Team has developed a compost system layout that provides the most efficient use of available space (see ***Figure 2***). The layout will allow all system components to be positioned in an efficient manner and for feedstock and finished product to be effectively moved from stage to stage of the composting process.

ENHANCED COMPOSTING PROCESS

The City has listed specific system requirements in *Attachment A* of the RFP. The following paragraphs describe how the proposed Gore® system meets or exceeds those requirements.

System Requirements

ASP System Description

SG Heap™, Bunker™, or Mobile™ System using Gore® Cover

The Gore® Cover technology is the most widely distributed composting system in the world with over 200 facilities located in more than 20 countries treating more than 3.5 million tons of organic waste annually. The system has proven to provide a low risk, low cost solution which can sustainably process a wide range of organic waste in the most varied climate conditions while controlling odors and emissions. More importantly, its simplicity in both construction and operation ensures that a facility can be maintained many years into the future without escalating operating costs which is not often the case with other technologies.

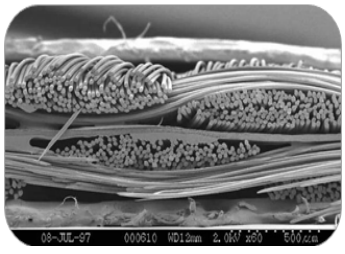
Layout #2


Sign in
3D
Google
Imagery ©2017 Google, Map data ©2017 Google
United States
Terms
Send feedback
200 ft

Facilities can be built to any size and can also be easily expanded after construction which provides the most flexibility to the end user during the development of its organics processing facility. W.L. Gore & Associate's "Gore® Cover" is centered on membrane laminate technology similar to that of its world famous Gore-TEX® fabrics used for outerwear and footwear. **The integrated system includes the Gore® Cover, in-floor or on-floor aeration, aeration blowers, oxygen and temperature sensors, controllers, computers, software, cover handling systems, training, engineering guidance, installation support and the experience gained through the many installations over the last 10 years.** Official certificates and approvals have been granted to the Gore® Cover as delivering "in-vessel" performance and approved in several countries, including USA and Canada, meeting strict PFRP and high-quality compost standards, obtaining Animal by Product Approval, as well as meeting strict regulatory compliance standards worldwide. In the United States, according to the U.S. EPA, for biosolids, the Gore® Cover heap model is currently categorized as a covered aerated static pile (CASP).

Facilities using the Gore® Cover technology experience a reduction in odor and is California compliant for reduction of VOCs through the Gore® Cover as recently proven in a demonstration for the Los Angeles County Sanitation Districts, CA USA (pictured right). Taking the odor dispersion modelling of a defined location with the same throughput into consideration the Gore® Cover System has been assessed as equal or better to a tunnel/building system using a biofilters as air treatment. The German Environmental Protection Agency showed that the Gore® Cover technology compared to other in-vessel and open windrow technologies showed lowest GHG emission, Gore having the best control. Other system attributes include a small facility footprint, low energy requirements, low operating costs, short installation times, greater than 99 percent containment of bio-aerosols and particulate matter, and the production of stable compost in 4 to 8 weeks.

Making the right choice of membrane impacts the air permeability and the extraction of moisture during composting. The membrane influences the composting process; it prevents the compost product from being too dry or too wet. The membrane allows for an even distribution of air through the entire volume of material, thus ensuring temperatures are achieved throughout the heap. The micro-porous structure of the Gore® Cover membrane practically avoids the penetration of microbes and particulate matter through the membrane.



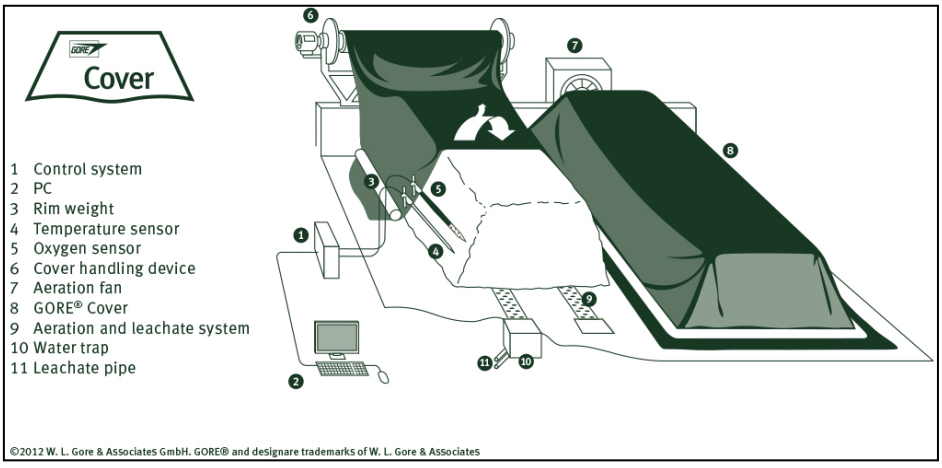
Microbiological tests have proved that microbes can be reduced by > 99 percent, thus ensuring that workers and nearby residents are protected and safe. The insulating effect of the Gore® Cover and the pressurization by which the system ensures even temperature distribution mean that achieving the necessary temperature for sanitizing (PFRP) the material across the entire cross section of the heap can be assured, even during the winter months and extreme climates. Pathogenic microorganisms are safely destroyed throughout the entire composting material.

Portable System – SG Mobile™ System using Gore® Cover

SG is proposing the SG Mobile ™ System using Gore® Cover. The SG Mobile™ System is designed as a portable system. There will be no requirement for paving or poured concrete. Simply lay down the On-Floor aeration pipe according the Design, Operating Manuals and Trainings. Connect the On-Floor pipe to the SG Mobile™ control unit, which contains the blower and control panel. Connect the SG Mobile™ unit to a power source (generator or direct clean power). Grind and mix organic material for placement over the On-Floor Aeration pipe. Place the Gore® Cover over the heap and secure using a perimeter weighting system. Insert Oxygen and Temperature probes, start the computer based control system and start composting.

The SG Mobile™ System is plug and play and completely portable. The system is modular in design, which can be run as a single unit, or connected to multiple units to meet your capacity requirements.

SG Mobile™ System using Gore® Cover Equipment and Service Supply Package



The system supply includes:

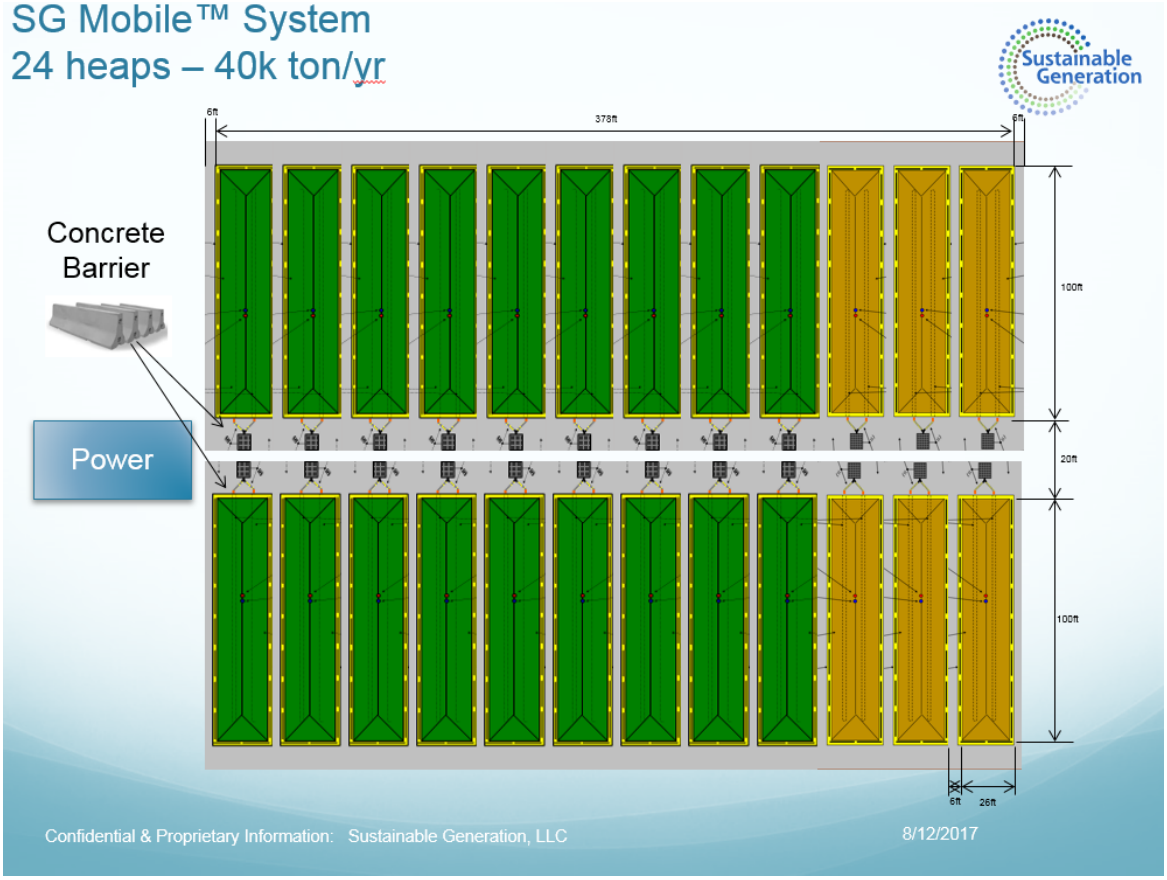
- Gore® Cover.
- In-floor aeration or on-floor aeration.
- Oxygen and Temperature sensors.
- Aeration system – blower.
- Controllers/data loggers and software.
- Mobile Winder Machine.
- Operation manual.
- Remote wireless (optional).
- Web-based system monitoring, inventory management and technical support.

The service supply includes:

- Experience gained from Gore® Cover system global users.
- Gore® Cover system guarantees and warranty on covers and system components.
- Engineering and system design consultation:
  - Installation and start-up services.
  - Post commissioning and ongoing technical support.
- Comprehensive training for site management and operators:
  - Classroom and on-site training:
    - Training I – At a Gore® Cover System reference plant.
    - Training II – During system check and start-up (see ***Appendix D***).
    - Training III – 12 weeks after commissioning.
- Additional customized trainings upon request.
- Periodic site visitation and system performance check-up.

Project Area

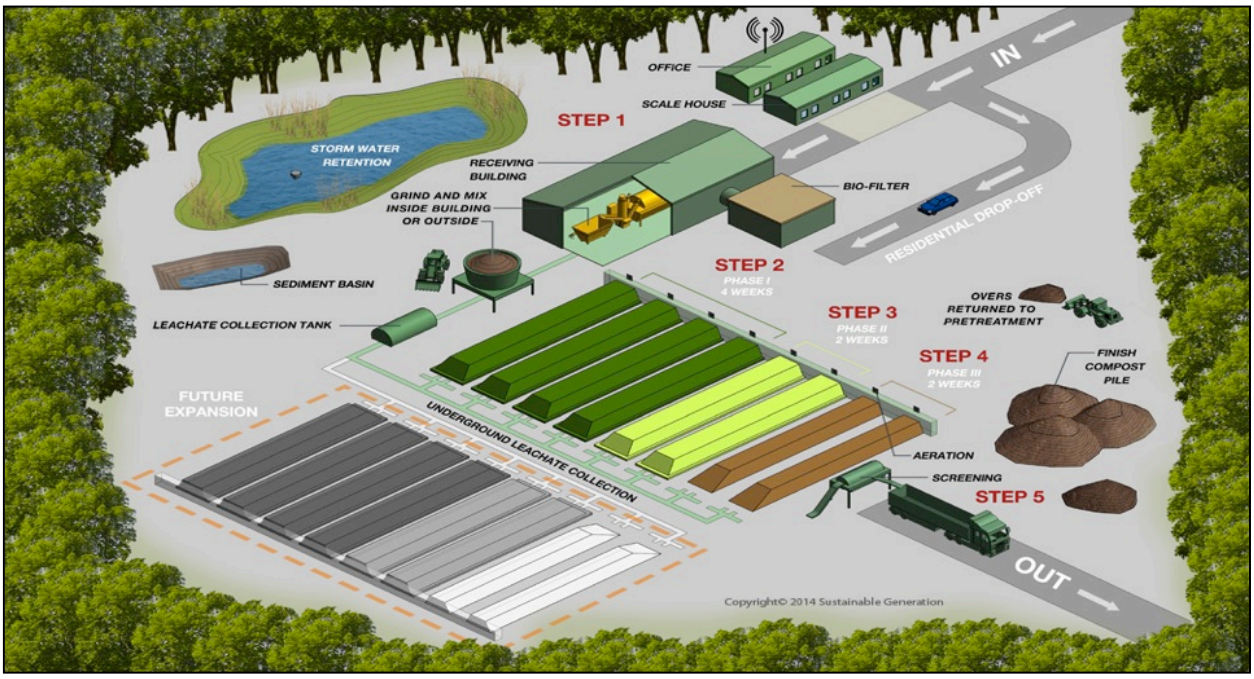
- Initial build – 40,000 ton/year capacity requires 24 heaps.
- Each heap is 100 feet in length by 26 feet in width by 10 to 12 feet in height.
- The space required for the active composting pad is **390 feet by 220 feet**, plus driving space in front of heaps for movement of material and pulling of pipe (up to 120 feet).



Capacity

Process Description

The process begins by mixing the organic food waste and bulking materials (wood waste, yard waste and screened overs). The moisture content, particle size, porosity, and carbon/nitrogen ratio are adjusted to optimal conditions for composting. Utilizing proprietary technology by Gore, the composting begins. The total composting process takes four (4) to eight (8) weeks depending on the quality output desired for the finished product. A typical Gore® Cover system will utilize a 3 phase process over an 8-week period to achieve the highest quality of output. Shorter treatment time periods are acceptable for meeting minimum regulatory and product quality standards.



The Gore® Cover heap model utilizes forced aeration coupled with a semi permeable membrane cover to achieve a fully encapsulated composting process. Gore® Cover is accepted and permitted worldwide as both in-vessel and covered aerated static pile technology. The size and number of heaps is determined based on the total capacity of the project via mass balance calculations.

Facility Layout

The throughput of the processing facility is based on the “mixed material” entering the process in Phase 1, not the amount of material coming across the scale. The mixed material is comprised of the food waste, shredded green waste and screened overs which make up the mixed recipe entering the composting process.

Mix Recipe – Pretreatment

Contamination may impact the process. It is recommended that contamination be removed prior to entering Phase 1 of the process. Contaminates remaining in the mix recipe during the composting process should be removed in post-treatment by screening, air lift separators, or other – supplied by owner.

Typical Feedstock Requirements

System sizing calculations are based on the following mix recipe recommendations and assumptions:

- Starting mix recipe of food waste to bulking material (not to exceed):
  - 1:1 by weight.
  - 1:3 to 1.5 by volume.

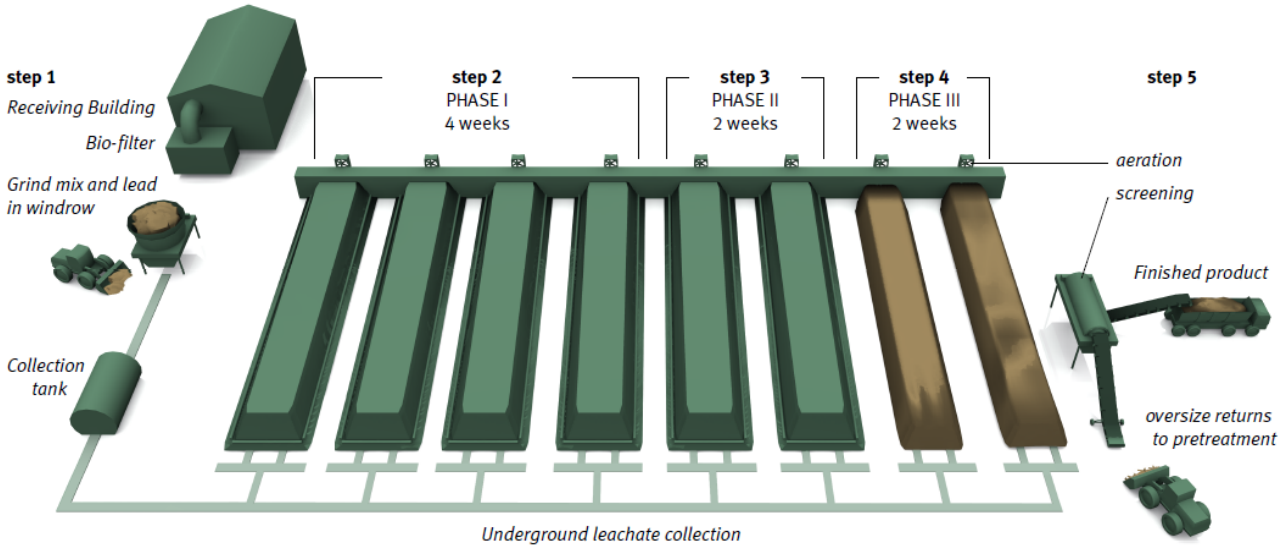
- Starting mixed moisture: 55 to 65 percent.
- Starting mixed C:N ratio: 25 to 30:1.
- Starting mixed porosity: >35 percent.
- Particle size: 3-inch minus for shredded green waste material and screen over's Bulk Density shall have density range between 800 to 1,000 lbs/y^3. Based on experience from similar projects with similar inputs materials, we will use 925 lbs/y^3 for our calculations.

Screening and Expected Output

Fully stabilized, finished compost, having met time and temperature requirements for meeting PFRP (Process to Further Reduce Pathogens) and compost quality as described by USCC STA program.

Based on experience, the operator will experience a mass reduction from the composting process with additional reductions due to screening size configuration and the percent level and removal of inorganic contaminants; it can stated that for a typical food waste compost operation, one (1) ton of mixed material entering the composting process will yield approximately one (1) cubic yard of finished compost.

Process Flow - Typical Composting Operation Layout



Step 1: Receiving Area/Tipping Building

The feedstock material will be received inside the Tipping Building, where it will be inspected for quality control. Inside the Tip Building, the feedstock materials will be mixed to create mix recipe. Mixing/grinding equipment: *to be supplied by other*.

Step 2: Phase 1: Active/High-Rate Composting: 21 to 28 Days[1]

The composting process begins with a front-end loader moving the material from the mixing area to a heap in the Phase I section to begin the active composting period. Once a heap is built, it is covered, the temperature and oxygen probes are installed and the software is turned on, which then controls the rate of aeration.

Step 3: Phase 2: Maturation: 14 to 28 Days[1]

After 28 days in Phase I, the Gore® Cover is removed from the heap and the compost is moved by front- end loader to a heap in the Phase II area. Once a heap is built in Phase II, it is bucket turned weekly.

Step 4: Phase 3: Finishing/Curing: 14 Days[2]

After 28 days in Phase II, the compost is moved by front-end loader to a heap in the Phase III area. The material remains in the Phase III area for 2 weeks minimum.

Step 5: Screening Equipment

To be supplied by other.

Storage: Finished compost material can then be screened upon leaving Phase III of the process. Typically, the screened material can be sold directly or placed into storage for additional curing/aging.

Pathogen Reduction (PFRP) and Vector Attraction Reduction (VAR)

Gore® Cover is permitted to operate in over 20 countries worldwide. In addition to receiving operating permits in various countries meeting strict environmental requirements for odors, VOC emissions, water protection management and pathogen reduction. Gore® Cover has also received permits for a proper technology to meeting specific hygenization standards, such as Animal by-Product Regulations in the UK. In the United States of America (USA) and Canada, Gore® Cover compost facilities are producing Class A and Class AA exceptional quality compost according to U.S. EPA and individual state regulations, the CCME and BQN standards.

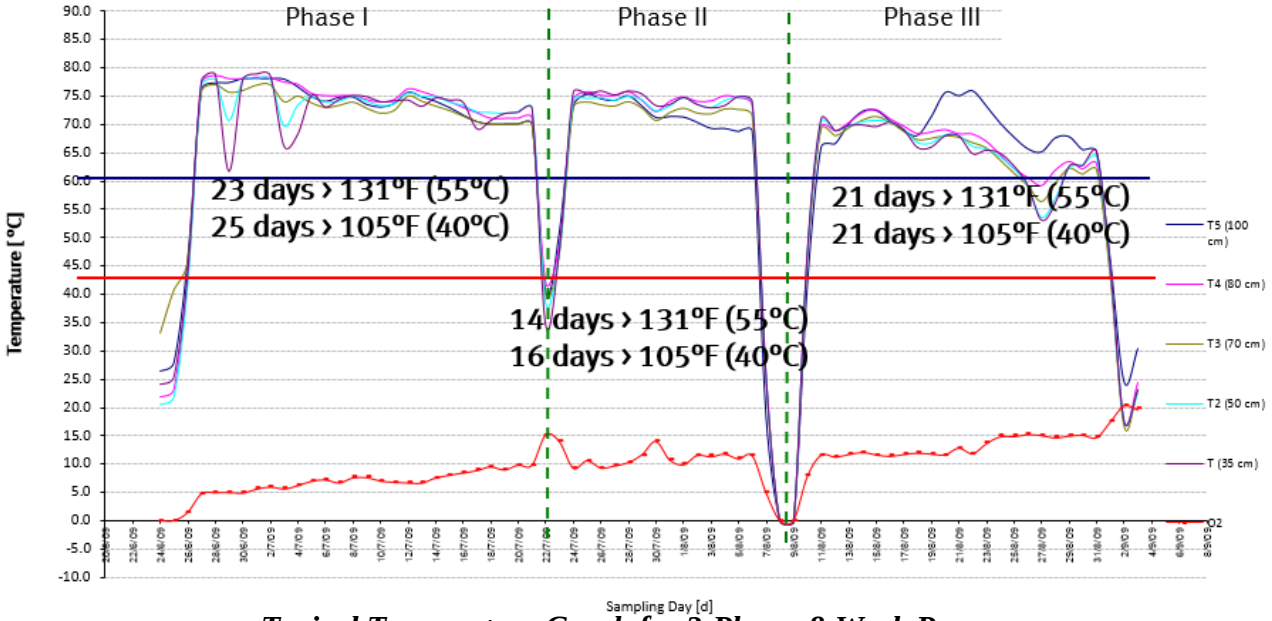
Examples of hygenization certificates that have been issued for Gore® Cover include:

- Hygiene Design and Encapsulated System/In-Vessel (Europe).
- U.S. EPA Pathogen Equivalency Committee Recommendation for National Equivalency for Alternative 5: Use of PFRP [503.32(a) (7) and (B) (1) of *Appendix B* (USA).

[1] Active, maturation, and curing treatment times are flexible, depending on the quality of product being produced and the market that the finished compost is being applied.

[2] Finishing treatment is optional and is generally used for temperature and moisture management prior to screening and storage.

April 2010: USA Nationwide Class A Biosolids Compliance: The Gore® Cover technology also received a recommendation of national equivalency from the EPA Pathogen Equivalency Committee (PEC) that the Gore® Cover is capable of meeting and/or exceeding criteria for achieving Class A Biosolids as described in Alternative 5: Use of PFRP [503.32(a) (7) and (B) (1) of *Appendix B* in a covered aerated static pile without the use of an insulating layer of material (such as finished compost).

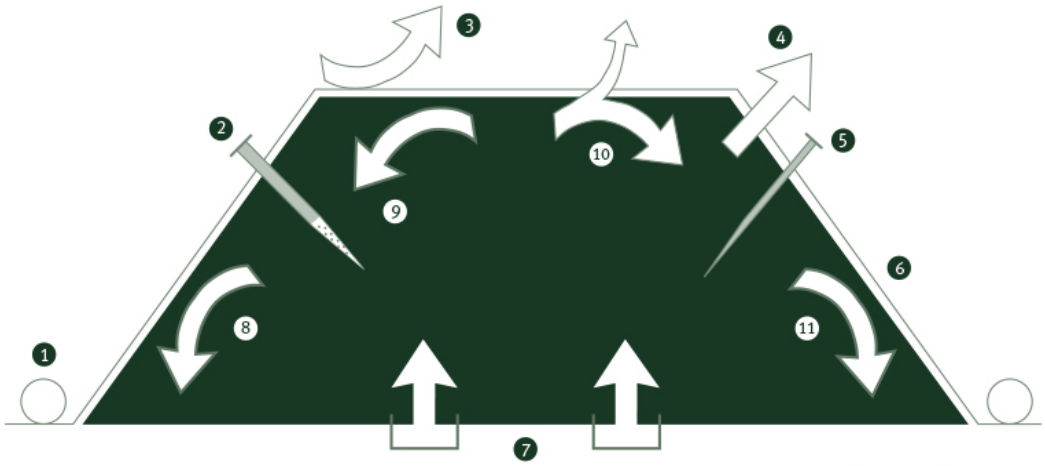


Typical Temperature Graph for 3-Phase, 8-Week Process

Gore® Cover

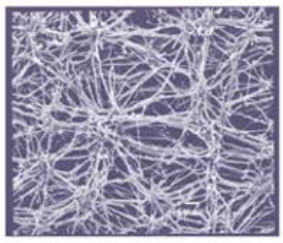
Gore® Cover is based on positive aeration in combination with the Gore® Cover. Composting is a biological process with naturally occurring batch to batch variations in input material. The processing technology has to flexibly adapt to these changing conditions. The oxygen controlled aeration of the Gore® Cover System reliably adapts the aeration intensity to the batch by batch variations as well as to the changing oxygen demand in the course of the composting cycle.

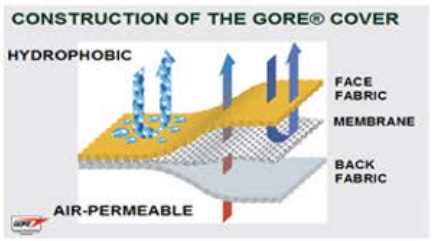
1 Rimweight
2 Oxygen sensor
3 Weather resistant impact
4 Air
5 Temperatue sensor
6 GORE® Cover
7 Positive aeration
8 Heat
9 Odour
10 Moisture retention
11 Microorganisms

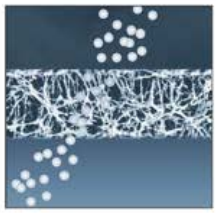


Cover

- The Gore® Cover has unique physical properties in regards to air permeability which is selectively designed into the membrane and allows evenly distributed air and pressure within a heap.
- The Gore® Cover has unique physical properties in regards to control of moisture transportation which is selectively designed into the membrane and allows specific control of moisture to optimize the composting process.
- The Gore® Cover is weighted (sealed), creating a complete in-vessel enclosure the entire pile can then be pressurized ensuring an even distribution of air throughout the pile.
- The Gore® Cover has even distribution of temperatures across the composting volume.







Each membrane pore is 20,000 times smaller than the smallest water drop.

VOC Emission Compliance

The following data is in chronological order by date of the testing from demonstration projects and existing full-scale composting facilities that are using Gore® Cover having provided data for VOC emission reduction.

Source Testing Prior to California Rule Implementation			
Facility Description	**Input Materials**	**VOC Emission Reduction**	**Regulatory Requirement**
Site 1a: Oceanside, CA	Green Waste	98 percent	Rule 1133.3[1]
Site 1b: Oceanside, CA	Biosolids Green Waste	94 percent	Rule 1133.3[1]
Site 2: Everett, WA	Food Waste Green Waste	96 percent	Air Permit
Site 3: Los Angeles County Sanitation District (LASCD), CA	Biosolids Green Waste	91 percent	Rule 4565[2]
Site 4: Vancouver, BC	Food Waste Green Waste	95 percent	Pilot Study for Odor/Emissions
Source Testing for Existing Full-Scale Facilities			
Site 5: Fontana, CA	Food Waste Green Waste	89 percent	Rule 1133.3[1]
Site 6: Tulare Lake Compost c/o Los Angeles County Sanitation District (LASCD), CA	Biosolids Green Waste	87 percent Summer	Rule 4565[2]
Site 6: Tulare Lake Compost c/o Los Angeles County Sanitation District (LASCD), CA	Biosolids Green Waste	96.3 percent Winter	Rule 4565[2]

[1] South Coast Air Quality Management District (SCAQMD).
[2] San Joaquin Valley Air Pollution Control District (SJVAPCD).

San Joaquin Valley Air Pollution Control District has issued an assessment that the Gore® Cover System is capable of meeting and/or exceeding the emission requirements for Rule 4565, Rule 4565 and BACT when installed, operated, and maintained per Gore® Cover specifications:

- BACT (Best Available Control Technology):
  - Co-composting operations.

- Rule 4565:
  - Biosolids, animal manure, poultry litter.
- Rule 4566:
  - Organic material.

South Coast Air Quality Management District completed source testing and achieved 90 percent reduction for VOC emission, and 99.3 percent for NH_3:

- Rule 1133.3.

Control System

Each heap has an oxygen and temperature control module. This feeds information back to a central computer as well as controls the aeration fan.

The *Process Control Unit (PCU)* is designed to control and log the composting process 24/7 by means of connected temperature and oxygen measuring sensors. The PCU controller is used to control the compost decomposition and to log the temperature values and the oxygen content. The PCU controller can be connected to any standard PC over RS232, fiber optic or Ethernet or Wi-Fi (IP-Network) interface which allows the use of any standard computer on site or via remote monitoring and control.

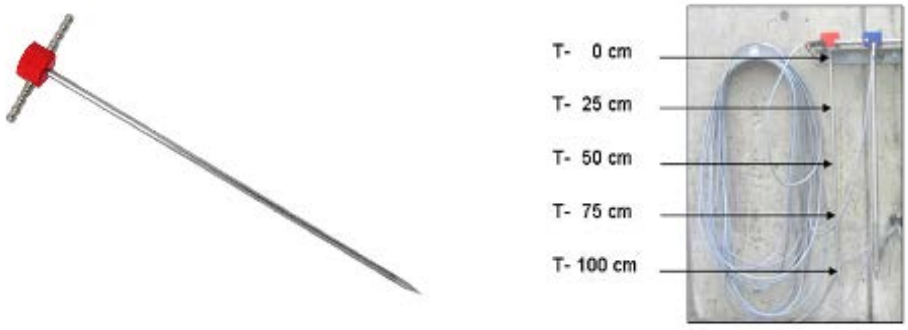
Control Box

SG PCU Software

Temperature Probe

The temperature sensor measuring system determines the temperature profile within a gas/solid mixture up to a temperature of 212°F (100°C). For this, 5 sensor points in the probe, which are regularly arranged over a measured distance of 40 in (100 cm), determine the temperature at each measuring point. The measuring system is extremely robust and nevertheless precise. It is especially suited to be used in compost applications.

The 5 values are measured; they are evaluated and processed further in a data logger



5-Point Temperature Probe

Oxygen Probe

The extremely robust oxygen measuring system is especially suitable for measuring the oxygen content in compost up to 212°F (100°C). As a means of protection against the aggressive medium, the electronics are accommodated in a weather proof housing and the bar probe is arranged in a special stainless steel probe protection tube (insertion probe). Standard measuring range is from 0.1 to 21 by volume percent oxygen. The central element of the oxygen measuring system is a dynamic oxygen sensor. The oxygen sensor determines the absolute oxygen content – contrary to a lambda probe, which measures the relative oxygen content. The measuring system monitors its own function during the operation and signals malfunctions in the hardware and sensor. It can be operated in fail-safe mode, if required.

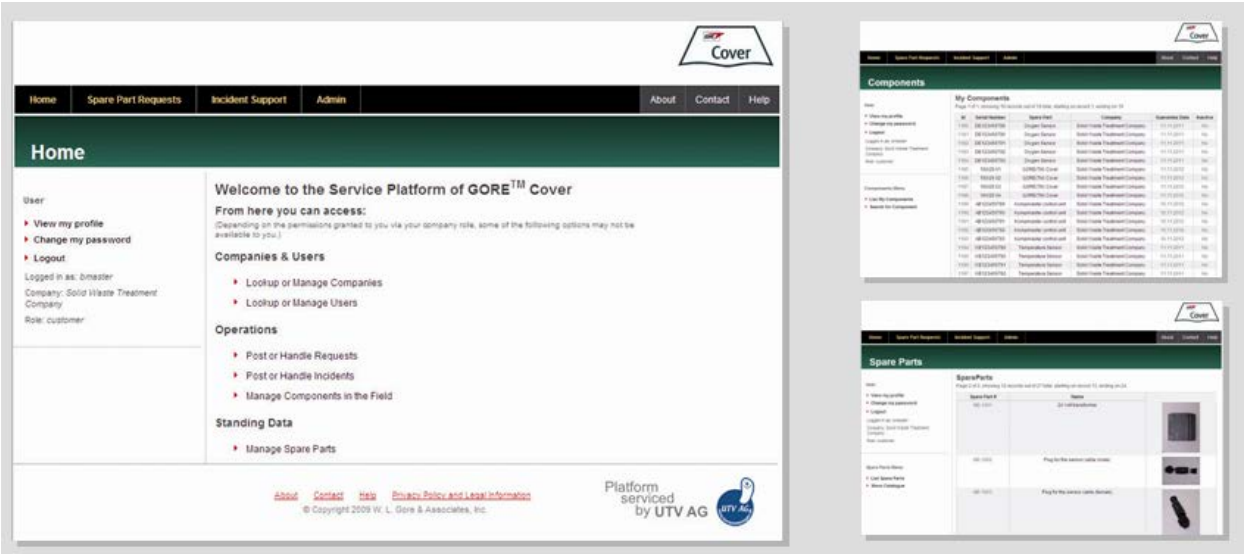
The measured values are evaluated and processed further in subsequent devices.

Oxygen Probe

Service Platform

SG offers a web-based service platform unique to the customer with the following capabilities:

- Inventory all components and tracks the warranty.
- Online ordering for technical support, component repairs, and spare parts.
- 24/7 technical support with 24-hour response time.
- Tracking tool for technical support.

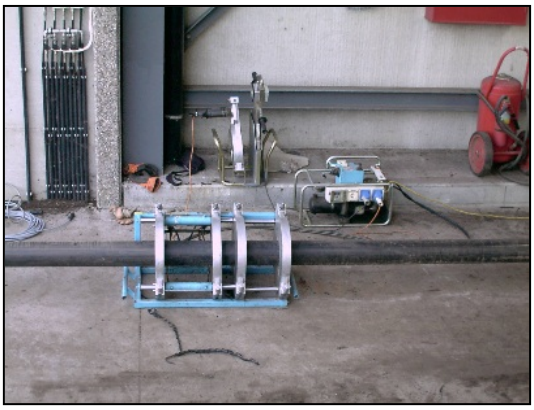


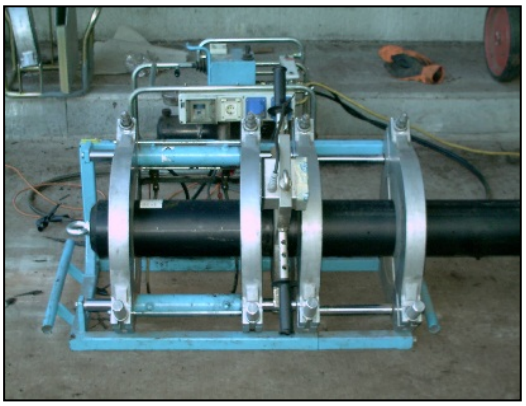
Above-Grade Piping

Above-Grade Piping and Perimeter Weighting System (pipe) shall be *supplied by other*. SG will provide the specification for the "Above Grade Piping and Perimeter Weighting System." The specification will describe the materials of construction, dimensions and provide installation guidance. SG will provide connectors, flex pipe, y-tube to the blower and control box.

- Length per aeration pipe: 100 feet
- Diameter outside: 6 inches
- Material content: HDPE (high-density polyethylene)
- Wall thickness: SDR11

HDPE Pipe Welding





- Pipe requires to be capped a one end using welded cap with D-ring or bolted flange end.

- Hole pattern to be provided by SG technician during installation.

Perimeter Weighting System

- 3 HDPE in 10-foot sections capped and filled with sand/water capped at both ends.

Mobile Winding Machine

Power Winding Machine: PWM

The PWM is a self-propelled machine driven by an operator and used to deploy the cover during heap construction and deconstruction. The PWM is designed and built specially for the Gore® Cover system for heaps 26 feet (8m) in width and up to 12 feet (3.5m) in height. Heaps or Bunker must have minimum 6 feet (2m) driving space for the PWM. Upon delivery SG will send technicians to construct the PWM at the compost site and conduct training on operations and maintenance. An Operating Manual will also be provided along with a troubleshooting guide. The PWM meets all California emission control standards and is capable to operate in extreme hot or cold climates. For the purpose of calculating power consumption, it has been Gore experience that the PWM can deploy a cover for heap construction and deconstruction within a 10 minute or less time period. Maintenance can be accomplished locally.

For this project, SG is supplying the "PWM" diesel-powered mobile winding machine:

- For use with Gore® Cover Standard Heap or Bunker Design.
- One Mobile Winder which is able to handle the width of the Gore® Cover selected.
- Self-Propelled unit able to deploy or remove Gore® Cover in under 10 minutes.
- Power by electric motor.
- Includes charging station.

The Project Team can offer an electric alternate to the diesel winding machine that would be a cost reduction. ***Appendix E*** contains information about the "PWM-E" electric winding machine.

Power Winding Machines for handling Gore® Cover

Functionality

The Gore® Cover operating process is a good match with the composting arrangement that the City has selected for Miramar Landfill. The Gore® system is flexible in its configuration as well as its method of operation. Our proposed layout has be configured to fit on the limited top deck space to allow loading and unloading of the cells and efficient placement of power, controls, and blowers. In this arrangement, the City will be able to operate at a capacity of up to 50,000 tons per year producing high-quality compost for end users.

Serviceability and Quality/Durability

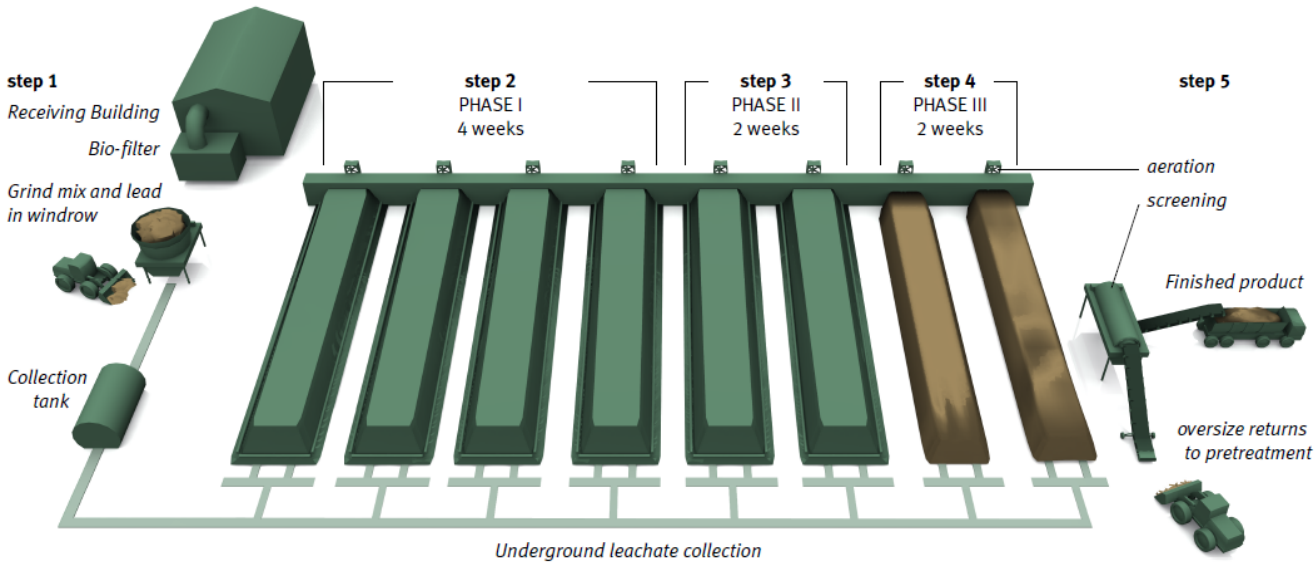
Service Requirements

Full Written Description of Proposed System and Method of Operation

Treatment Guideline: The recommend treatment time for the use of the standard Gore® Cover operating process is 8 weeks (4+2+2), which is the best management practice for active and curing composting to achieve a highest quality finished product output.

Note: Keep in mind that if the active and curing compost definition is met in a shorter time period than stated, than the designed facility will be capable to handle a higher amount of throughput in the same number of heaps or foot print. However, shorter treatment also can reduce the finished product quality.

It is Gore's experience that the following treatment time period and phases will produce the highest quality of output while meeting regulatory compliance for PFRP/VAR and with optimal performance for control of moisture and odors/emission.



Process Flow - Typical Composting Operation Layout

Step 1: Receiving Area/Tipping Building

The feedstock material will be received inside the Tipping Building where it will be inspected for quality control. Inside the Tip Building the feedstock materials will be mixed to create mix recipe. Mixing/Grinding Equipment: to be supplied by other.

Step 2: Phase 1: Active/High-Rate Composting: 21 to 28 Days[3]

The composting process begins with a front-end loader moving the material from the mixing area to a heap in the Phase I section to begin the active composting period. Once a heap is built, it is covered, the temperature and oxygen probes are installed and the software is turned on, which then controls the rate of aeration.

Step 3: Phase 2: Maturation: 14 to 28 Days[3]

After 28 days in Phase I, the Gore® Cover is removed from the heap and the compost is moved by front- end loader to a heap in the Phase II area. Once a heap is built in Phase II, it is bucket turned weekly.

[3] Active, maturation, and curing treatment times are flexible, depending on the quality of product being produced and the market that the finished compost is being applied.

Step 4: Phase 3: Finishing/Curing: 14 Days[4]

After 28 days in Phase II, the compost is moved by front- end loader to a heap in the Phase III area. The material remains in the Phase III area for 2 weeks minimum.

Step 5: Screening Equipment

To be supplied by other.

Storage: Finished compost material can then be screened upon leaving Phase III of the process. Typically, the screened material can be sold directly or placed into storage for additional curing/aging.

Mix Recipe and Sampling

Starting Mix Recipe of: food waste to bulking material (not to exceed):

- 1:1 by weight.
- 1:3 to 1.5 by volume.
- Starting Mixed Moisture: 55 to 65 percent.
- Starting Mixed C:N ratio: 25 to 30:1.
- Starting Mixed Porosity: >35 percent.
- Particle Size: 3-inch minus for shredded green waste material and screen over's Bulk Density shall have density range between 800 to 1,000 lbs/y^3. Based on experience from similar projects with similar inputs materials, we will use 925 lbs/y^3 for our calculations.

Sample Analysis

Samples analysis recommended: 1 to 2 samples each batch or per every 3- to 4-month period:

- Input material – individual feed stocks.
- Mixed material.
- Phase 1 material.
- Phase 2 material.
- Phase 3 material.
- Screened material.
- Storage material.

[4] Finishing treatment is optional and generally used for temperature and moisture management prior to screening and storage.

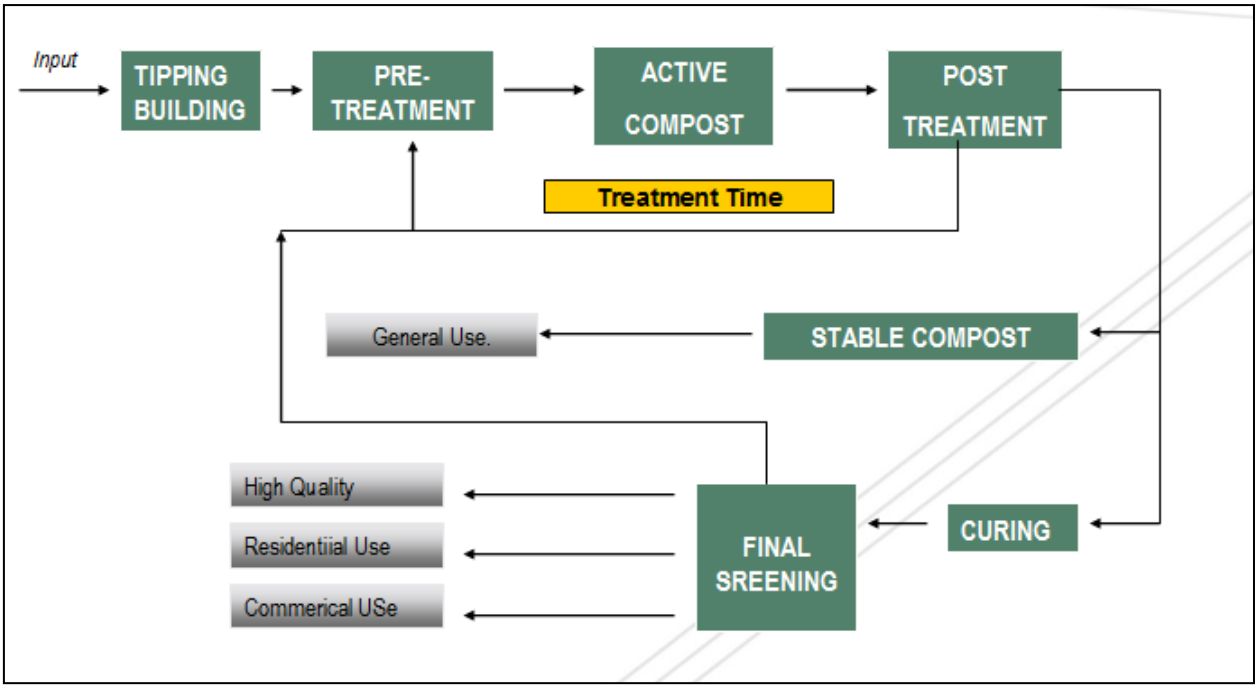
Frequency of sampling: For new composters, it is recommended to conduct sampling more frequently for the first 12 months of operation:

- To fully understand the seasonal fluctuations in the input materials and mixed materials.
- To monitor composting process.
- To show finished product quality.

Additional information about operating schedule and other technical details of the composting system are attached as ***Appendix F***.

Flow Diagram and Mass Balance

Flow Diagram



Mix Recipe Calculations

	All INPUTS				
	lbs/cy	**cy**	**tons**	**% volume**	**% weight**
Over's	650	-	-	0%	0%
Green Waste	500	80,000.00	20,000	78%	50%
Foodwaste	1,750	22,857.14	20,000	22%	50%
	Total	**102,857**	**40,000**	100%	100%
	Mass Reduce (15%)	87,429	32,000		
	Contaminents (10%)	-	-		
	Mix Adjusted	**-**	**-**		

Mix	**Initial**				
		by volume **1 to**	**3.5**	by weight **1 to**	**1.0**
		Food	22%	Food	50%
		Bulking	78%	Bulking	50%
			0.29		1.00

Design Mass Balance at 925 lbs/y^3 Bulk Density Moisture Adjusted to 65 Percent

Standard Heap Design								
Process Time	**8**	**weeks**	**Active**	**Curing**	**Finishing**			
			Phase 1	**Phase 2**	**Phase 3**			
Days per Week Operation	**5**							
# of Heaps	**24**		12	6	6		Metric Conversion	
Heap Length	100	ft					30	m
Heap Width	26	ft					8	m
Heap Height	12	ft					3.7	m
Actual Mix*	**925**	**lbs/y3**		0.46	US ton/y3		0.55	M-ton/m3
Volume per heap	678	y3					518	m3
Volume on pad	16270	y3					12439	m3
Total Throughput Volume								
per year	**105756**	**y3**					80851	m3
per week	**2034**	**y3**					1555	m3
per day	**407**	**y3**					311	m3
Tons per heap	314	US ton					284	M-ton
Tons per pad	7525	US ton					6826	M-ton
Total Throughput Tons	**Actual mix***							
per year	**48912**	**US ton**					44368	M-ton
per week	**941**	**US ton**					853	M-ton
per day	**188**	**US ton**					171	M-ton

Minimum Mass Balance at 800 lbs/y3 Bulk Density Moisture Adjusted to 60 Percent

	800	**lbs/y3**	**Target**	0.40	US ton/y3		0.47	M-ton/m3
Tons per heap	271	US ton	**Moisture**				246	M-ton
Total Throughput Tons/year	**42303**	**US ton**	**60%**				38373	M-ton

Maximum Mass Balance at 1,000 lbs/y^3 Bulk Density Moisture Adjusted to +65 Percent

	1000	**lbs/y3**	**Over**	0.50	US ton/y3		0.59	M-ton/m3
Tons per heap	339	US ton	**Moisture**				307	M-ton
Total Throughput Tons/year	**52878**	**US ton**	**65%**				47966	M-ton

Expected Output

Fully stabilized, finished compost, having met time and temperature requirements for meeting PFRP (Process to Further Reduce Pathogens) and compost quality as described by USCC STA program. Based on experience, the operator will experience a mass reduction from the composting process with additional reductions due to screening size configuration and the percent level and removal of inorganic contaminants; it can stated that for a typical food waste compost operation one (1) ton of mixed material entering the composting process will yield one (1) cubic yard of finished compost.

CONSTRUCTION PLAN

Upon award of the project, SCS and other Team members will meet with City staff at the project site. We anticipate discussing the City's goals and developing a concept design plan during the meeting. Upon review and approval of the concept design, SCS will prepare preliminary construction plans, including, but not limited to, civil, environmental, electrical, and compost technology drawings. After review and approval of the preliminary construction plan, design/build-level final construction plans will be prepared. Technical specifications will be

incorporated within the construction plans. No separate technical specifications will be prepared/submitted. Approved final construction plans, along with the Water Pollution Control Plan, will be prepared for City building, electrical, and storm water permit review, in addition to construction by SCS and others. Based on the City's guidance on permitting outlined in *Addendum No. 2*, we have made the following assumptions related to permitting for this project:

- Waste Discharge Requirements (WDR): *No modifications or permits required.*
- Air Pollution Control District (APCD): *No permits required.*
- California Environmental Quality Act (CEQA) Study: *Excluded.*
- Solid Waste Facility Permit (SWFP): *No modifications or permits required.*
- Building Permit: *Required.*
- SWPPP Permit: *Required.*
- Electrical Permit: *Required.*

Since permitting fees can vary significantly from project to project, a total budget of $25,000 towards permitting fees has been assumed. Any fees beyond the budget or additional permits will be paid for under a change order. While the permits are in process, the team will request the City's approval to procure the components of the Gore® Compost system. Once approved, these components will be brought to the site in containers. SCS, along with the support of local subcontractors, will supply the concrete barriers, HDPE piping and pipe fusion, materials, equipment, and tools required to perform the work.

Minimal on-site construction activity other than pipe fusion, assembling, and fabricating parts of the cover winder and alignment of concrete barriers, is anticipated on site. Most of the system will be assembled in a relatively short timeframe. The longest times will be associated with electrical conduits and permanent power alternatives, should these alternatives be awarded.

Construction Approach and Methods (Including Safety)

SCS plans to utilize local companies as material suppliers and subcontractors to meet disadvantaged goals for the project. These companies will work under SCS Team direction to complete the needed work. We anticipate that this will include electric and mechanical components of the compost system that will be installed by local companies using local labor from the San Diego Region. SCS will coordinate and direct these companies in completing their design and construction activities throughout the project. We will hold regular meetings in the design and construction stages.

The SCS Project Manager (PM) will be the primary contact with the City, and will oversee the design, procurement, and construction of the aerated compost system. During design, the PM will review all levels of drawings and specifications, and will coordinate the Storm Water Best Management Practices (BMPs) to incorporate these requirements into the project documents. The PM is licensed in the State of California and will stamp and sign all final documents.

During construction, the PM will work with the SCS Construction Superintendent to assure that the work is performed according to City approved documents. The PM will attend site meetings and will act as the mediator when problems or concerns arise in the work.

All work performed on the project will follow strict state, federal, and local health and safety standards that will be implemented by SCS and the individual companies assisting in building the project. Each company will be responsible for their employees and will provide any personal protection equipment required for the project.

Plan for Operation of Facility during Construction

Current compost activity will be temporarily relocated outside the footprint of the new compost cells. This will allow positioning of push walls, piping, and other components without interfering with ongoing compost activities. This will require close scheduling with City staff to keep the operation going and be able to construct the aeration modules. We envision weekly meetings with City staff in planning and implementing the construction activities, as well as on-site discussions, when necessary, to fully coordinate on-site activities. Certain parts of the project may require scheduling outside the normal City operations hours or on weekends.

Plan for Phasing of Construction Activities

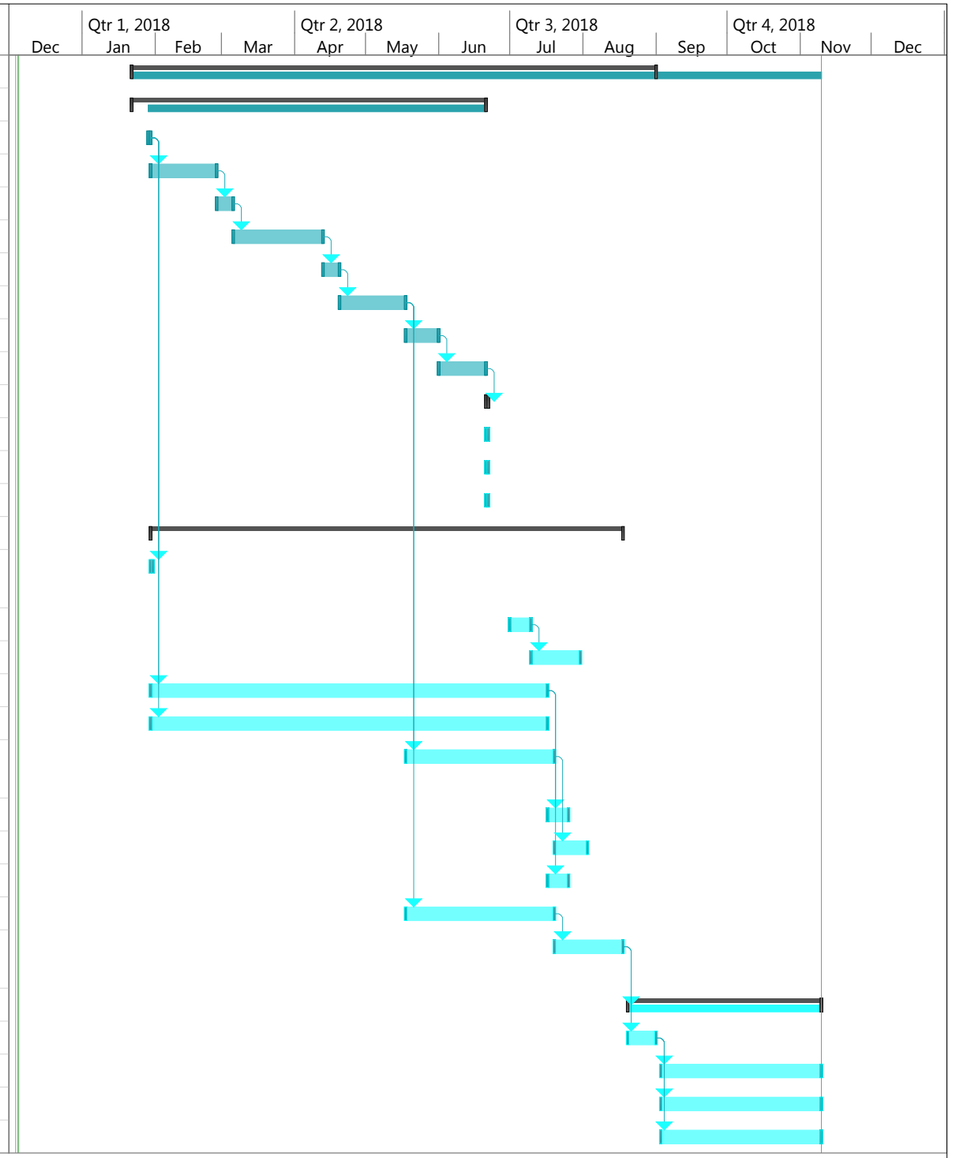
Phasing of the work will be planned and coordinated with the City to allow continued operation of the City's compost operations, to the as best extent possible, while construction takes place. Upon authorization from the City, the SCS Team will procure the Gore® Compost system components, including, but not limited to, power winder, SG Mobile System, Gore® covers, aeration and perimeter weighting piping, and generators. Equipment and materials will be delivered to the site, assembled, and tested for function. After the completion of piping and electrical conduit installation, functional start-up testing and performance testing will be conducted. A tentative construction schedule is included in the next section.

5. PROPOSED CONSTRUCTION SCHEDULE

Our proposed Construction Schedule is shown below in ***Exhibit 6***.

CONSTRUCTION SCHEDULE : AERATED STATIC PILE SYSTEM (TENTATIVE SCHEDULE)*

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names
1		**Design-Build Services for Aerated Static Pile System**	**150 days**	**Mon 1/22/18**	**Fri 8/17/18**		
2		**Design Phase Services**	**108 days**	**Mon 1/22/18**	**Wed 6/20/18**		
3		Project Initiation + Site Meeting	1 day	Mon 1/29/18	Mon 1/29/18		
4		Concept Design	20 days	Tue 1/30/18	Mon 2/26/18	3	
5		Review concept design	5 days	Tue 2/27/18	Mon 3/5/18	4	
6		Preliminary Design (Civil, Environmental, Electri	28 days	Tue 3/6/18	Thu 4/12/18	5	
7		PD Comments	5 days	Fri 4/13/18	Thu 4/19/18	6	
8		Final Design	20 days	Fri 4/20/18	Thu 5/17/18	7	
9		Final Design Comments	10 days	Fri 5/18/18	Thu 5/31/18	8	
10		WPCP Development	14 days	Fri 6/1/18	Wed 6/20/18	9	
11		**Permit Phase Services**	**1 day**	**Thu 6/21/18**	**Thu 6/21/18**	**10**	
12		Electrical	1 day	Thu 6/21/18	Thu 6/21/18		
13		Building	1 day	Thu 6/21/18	Thu 6/21/18		
14		WPCP	1 day	Thu 6/21/18	Thu 6/21/18		
15		**Construction Phase Services**	**144 days**	**Tue 1/30/18**	**Fri 8/17/18**		
16		NTP to order composting equipment Order Winder, Covers and other Materials	1 day	Tue 1/30/18	Tue 1/30/18	3	
17		Mobilization	7 days	Sun 7/1/18	Mon 7/9/18		
18		WPCP Implementation	15 days	Tue 7/10/18	Mon 7/30/18	17	
19		Delivery of Winder	120 days	Tue 1/30/18	Mon 7/16/18	3	
20		Delivery SG Mobile System + Gore Covers	120 days	Tue 1/30/18	Mon 7/16/18	3	
21		Delivery of Aeration and Perimeter Weighting Piping	45 days	Fri 5/18/18	Thu 7/19/18	8	
22		Assembly & Functional testing of Winder	7 days	Tue 7/17/18	Wed 7/25/18	19	
23		Pipe fusion for SG Mobile System	10 days	Fri 7/20/18	Thu 8/2/18	21	
24		Electrical Conduits/Relays/Wiring	7 days	Tue 7/17/18	Wed 7/25/18	19	
25		Delivery of Generators	45 days	Fri 5/18/18	Thu 7/19/18	8	
26		Final Assembly, Installation of Gore Cover System and Testing	21 days	Fri 7/20/18	Fri 8/17/18	25	
27		**Startup, Demonstration, and Training**	**60 days**	**Mon 8/20/18**	**Fri 11/9/18**	**26**	
28		Start-up and Commissioning	10 days	Mon 8/20/18	Fri 8/31/18	26	
29		Demonstration/Performance Testing	50 days	Mon 9/3/18	Fri 11/9/18	28	
30		Collection and shipment of Samples	50 days	Mon 9/3/18	Fri 11/9/18	28	
31		Training	50 days	Mon 9/3/18	Fri 11/9/18	28	



Notes:

1. Schedule provided is tentative and can vary depending on factors such as design drawings review periods, permitting, lead items for materials and availability of feedstock.
2. A significant level of coordination between Contractor and City will be required at various milestones during the project , especially when it nears the 'Startup, Demonstration and Training' Phase.
3. Permitting times can vary greatly between different agencies, hence no permitting time has not been included in the schedule.
4. Schedule is based on current lead items for winder, Gore covers and other materials.These can vary in the future.

Project: Project Schedule
Date: Tue 12/5/17

Task	Project Summary	Manual Task	Start-only	Deadline	
Split	Inactive Task	Duration-only	Finish-only	Progress	
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress	
Summary	Inactive Summary	Manual Summary	External Milestone		

6. REFERENCES

We encourage the City to contact any of the references below to discuss SCS's performance on a contract similar in scope and nature. A reference letter from Placer County follows.

Client	Project	Contact/Phone/Email
County of Placer	Landfill, LFG, OM&M, Groundwater, and Final Cover Expansion Projects (*see below*); also Evaluation of Food Waste Management in Eastern Placer County	Walter Schwall, PE, Senior Civil Engineer Placer County, Public Works and Facilities (530) 886-4942 wschwall@placer.ca.gov
Sam White & Sons, Inc.	Process Design, Operation, and Permitting for Large-Scale Organic Material Recycling Business, Middleboro, MA	Dan White, Manager Sam White & Sons (508) 359-7291 White.dt@gmail.com
Republic Services, Inc.	Design-Build Services for Site Closure/ Permitting for ASP Composting Operation – West Contra Costa Landfill, San Francisco, CA	David Penoyer Republic Services, Inc. (818) 362-2096 dpenoyer@republicservices.com
Silver Springs Organics	Composting Facility Design and Permitting, Rainier, WA	Wes Gavett Waste Connections, Inc. (503) 288-7844, Ext. 319 WesG@WasteConnections.com

May 12, 2017

Ambrose A. McCready, PE
SCS Engineers
3117 Fite Circle, Suite 108
Sacramento, CA 95827

RE: SOLID WASTE CONSULTING FOR COUNTY OF PLACER

Ambrose:

I am pleased to provide this reference letter regarding SCS's support on various projects for the County of Placer (County). SCS has been providing various consultant services through competitive proposals for the County since 1997 including the following:

- SCS has provided landfill gas (LFG) monitoring, operations and maintenance (MO&M) services at the County's closed landfills starting in 1997. SCS has provided these services at the Loomis, Meadow Vista, and Eastern Regional Landfill;
- SCS has been performing ongoing groundwater quality monitoring and reporting services at the Loomis, Meadow Vista, Foresthill and Eastern Regional Landfill since 2006;
- SCS has also performed LFG system engineering at several of the sites including an expansion of the LFG system at the Eastern Regional Landfill.
- SCS prepared five-year aerial photograph and topography maps for Loomis, Meadow Vista, Foresthill, and Eastern Regional Landfills in 2012;
- SCS designed the final cover expansion for the ERL in 2014-2015.

SCS continues to provide ongoing groundwater monitoring/reporting services, LFG system O&M services at various active and closed landfill sites in the County and is currently on the County's list of pre-qualified firms for *Water Quality* and *Landfill Operations, Engineering and landfill Gas System.*

I have work with you and your staff since 2006. SCS provides a high level of expertise and provides services in a timely and cost conscience manner. I appreciate the services you have provided over the years and would be happy to respond to any inquires for other potential clients.

Sincerely,

Walter Schwall, P.E.
Senior Civil Engineer
530 886-4942
wschwall@placer.ca.gov

WS:ws

Public Works and Facilities ▪ Environmental Utilities ▪ 11476 C Ave ▪ Auburn, CA 95603
(530) 889-6846 office ▪ (530) 889-6809 fax ▪ www.placer.ca.gov

Appendix A

Contractor's License and San Diego Business License

STATE OF CALIFORNIA
dca
DEPARTMENT OF CONSUMER AFFAIRS

CONTRACTORS
STATE LICENSE BOARD
ACTIVE LICENSE

License Number **749678** Entity CORP

Business Name STEARNS CONRAD AND SCHMIDT
CONSULTING ENGINEERS INC

Classification(s) A HAZ

Expiration Date 05/31/2018 www.cslb.ca.gov

POST IN CONSPICUOUS PLACE OR KEEP ON PERSON

CITY OF SAN DIEGO * CERTIFICATE OF PAYMENT OF BUSINESS TAX

Certificate Number: B1993000875

Business Name: SCS ENGINEERS / ENVIRONMENTAL BUSINES
Business Owner: STEARNS CONRAD & SCHMIDT CONSULTING E
Business Address: 8799 BALBOA AVE #290
SAN DIEGO CA 92123-1568

SCS ENGINEERS / ENVIRONMENTAL BUSINES
AMY MILANES
3900 KILROY AIRPORT WAY #100
LONG BEACH CA 90806-6816

Primary Business Activity: PROFESSIONAL, SCIENTIFIC & TECHNICAL SERVICES

Secondary Business Activity:

Effective Date: 03/01/2017
Expiration Date: 02/28/2018

PLEASE NOTIFY THE CITY TREASURER'S OFFICE IN WRITING OF ANY CHANGE IN OWNERSHIP OR ADDRESS – BUSINESS TAX PROGRAM, PO BOX 122289, SAN DIEGO, CA 92112

BUSINESS FILE COPY

CITY OF SAN DIEGO
CERTIFICATE OF PAYMENT OF BUSINESS TAX

PO BOX 122289, SAN DIEGO, CA 92112-2289
1200 3RD AVENUE, MS 51T, SAN DIEGO, CA 92101
(619) 615-1500; FAX (619) 533-3272
www.sandiego.gov/treasurer

Certificate Number: B1993000875

Business Name: SCS ENGINEERS / ENVIRONMENTAL BUSINES
Business Owner: STEARNS CONRAD & SCHMIDT CONSULTING E
Business Address: 8799 BALBOA AVE #290
SAN DIEGO CA 92123-1568

Primary Business Activity: PROFESSIONAL, SCIENTIFIC & TECHNICAL SERVICES

Secondary Business Activity:

Effective Date: 03/01/2017
Expiration Date: 02/28/2018

SCS ENGINEERS / ENVIRONMENTAL BUSINESS SOLUTIONS
AMY MILANES
3900 KILROY AIRPORT WAY STE 100
LONG BEACH, CA 90806-6816

00014
1

Mailing Address: SCS ENGINEERS / ENVIRONMENTAL BUSINES
AMY MILANES
3900 KILROY AIRPORT WAY #100
LONG BEACH CA 90806-6816

This certificate acknowledges payment of business taxes pursuant to the San Diego Municipal Code. This **is not** a License to do business within the City of San Diego in violation of any section of the Municipal Code or regulation adopted by the City Council including, but not limited to: Zoning restrictions; Land Use specifications as defined in Planned Districts, Redevelopment areas, Historical Districts, or Revitalization areas; Business Tax Regulations; Police Department Regulations; and Fire, Health or Sanitation Permits and Regulations.

This document is issued without verification that the payer is subject to or exempt from licensing by the State of California.

Payment of the required tax at the time or times due is for the term and purpose stated and is pursuant to City Ordinance. Please refer to delinquency information under "Notice".

NOTICE: It is the responsibility of the certificate holder to renew this certificate of payment of business tax within the proper time limits. Failure to do so, even if you have not received a renewal notice, will result in the assessment of a penalty. Please note your expiration date on this certificate above. The certificate holder is requested to notify the City Treasurer's Office upon sale or closure of the business, change of location, or change of business activity.

The tax or fees collected are **Not Refundable** unless collected as a direct result of an error by the City of San Diego.

This certificate is NOT transferable for a change in business ownership.

This information is available in alternative formats upon request.

Appendix B

Resumes

SRIVIDHYA VISWANATHAN, PE

Education

MS – Civil Engineering, University of Oklahoma, 2005
BE – Civil Engineering, Delhi College of Engineering, New Delhi, India, 2002

Professional Licenses

Registered Civil Engineer – California (No. 80360), Arizona (No. 59485), Oklahoma (No. 24265)

Professional Affiliations

Solid Waste Association of North America (SWANA)
American Society of Civil Engineers (ASCE)

Professional Experience

Ms. Viswanathan is a registered civil engineer with over 10 years of experience, specializing in solid waste management. During her tenure as a municipal engineer, she was involved in the permitting, design, and construction of a variety of municipal projects, including landfill expansion and liner installation. Since joining SCS, she has been involved in the preparation of feasibility studies, and the permitting, design, and construction of various landfill and landfill gas (LFG) projects.

Her work includes design and installation of LFG collection systems, landfill dewatering systems, LFG Blower-Flare Station (BFS) planning and site civil design, and construction oversight for LFG-related projects. She has also designed 5-year operational fill and gas collection and control system (GCCS) sequence plans, and prepared Joint Technical Document (JTD) updates for various landfills.

Ms. Viswanathan also has experience performing analysis of airspace consumption and remaining life assessments using AutoCAD Civil 3D, and in estimation of closure and post-closure care costs for various landfills. She is currently an Engineering Manager, responsible for reporting to the US Environmental Protection Agency (EPA) on the Salt River Landfill bioreactor cell (Scottsdale, AZ), and is involved in the permitting, design, construction, and operations and maintenance (O&M) of LFG systems across Southern California and Arizona.

Ms. Viswanathan's project experience is summarized below.

California

Republic Services, Inc., GCCS Expansion for Otay Landfill, Chula Vista, CA. As Project Manager, Ms. Viswanathan was responsible for the design of vertical LFG extraction wells and associated header and lateral piping.

Republic Services, Inc., De-watering System for Otay Landfill, Chula Vista, CA. As Project Manager, Ms. Viswanathan was responsible for the design of the de-watering system and associated air supply and force main piping.

Republic Services, Inc., 5-Year Permit Review/Joint Technical Update for Otay Landfill, Chula Vista, CA. As Engineer of Record, Ms. Viswanathan was responsible for updating the JTD in accordance with California Code of Regulations Title 27.

Republic Services, Inc., Regulatory Support for Otay Landfill, Chula Vista, CA. As Project Manager, Ms. Viswanathan was responsible for providing routine regulatory support for landfill and LFG issues.

Republic Services, Inc., GCCS Expansion for Sycamore Landfill, Santee, CA. As Project Manager, Ms. Viswanathan was responsible for the design of vertical LFG extraction wells and associated header and lateral piping.

Republic Services, Inc., 5-Year Permit Review/Joint Technical Update for Borrego Landfill, Borrego Springs, CA. As Engineer of Record, Ms. Viswanathan was responsible for updating the JTD in accordance with California Code of Regulations Title 27.

Republic Services, Inc., Routine Inspection for Ramona Landfill, Ramona, CA. As Project Manager, Ms. Viswanathan was responsible for providing routine inspection, reporting, and on-call engineering services.

Republic Services, Inc., Routine Inspection for Imperial Landfill, Imperial, CA. As Project Manager, Ms. Viswanathan was responsible for providing routine inspection, reporting, and on-call engineering services.

County of San Diego, Enclosed Flare and Blower System Replacement for Bell Jr. High School Landfill, San Diego, CA. As Project Manager, Ms. Viswanathan was responsible for design and installation of a replacement enclosed flare and blower system at Bell Jr. High School Landfill.

County of San Diego, Enclosed Flare and Blower System Replacement for Hillsborough Landfill, San Diego, CA. As Project Manager, Ms. Viswanathan was responsible for design and installation of a replacement enclosed flare and blower system at Hillsborough Landfill.

County of San Diego, Routine Inspection for Various Landfills, CA. As Project Manager, Ms. Viswanathan was responsible for providing routine inspection, reporting, and on-call engineering services. Projects included design and oversight of the installation of LFG extraction wells, evaluation of LFG impacts on groundwater, environmental impacts of a possible air crash at an airport constructed on a landfill, permitting assistance for the addition of a flare condensate injection system, and general technical support.

City of San Diego, Feasibility Study for a New BFS, Civil Design, and Permitting for a BFS at Miramar Landfill, San Diego, CA. As Project Manager, Ms. Viswanathan was responsible for preparation of a feasibility study investigating the potential design, permitting, and economic considerations for possible locations of the new BFS, and design plans for the construction of the new BFS.

County of San Bernardino, US Army Garrison Amended JTD for Ft. Irwin Sanitary Landfill, Ft. Irwin, CA. As Project Manager, Ms. Viswanathan was responsible for updating the JTD for the Ft. Irwin Sanitary Landfill, in response to the addition of a waste-to-energy (WtE) facility, as a subconsultant to ECORP Consulting, Inc.

County of San Bernardino, Excavation Management Plan (EMP) for Mid-Valley Sanitary Landfill, Rialto, CA. As Project Manager, Ms. Viswanathan was responsible for the preparation of an EMP for air monitoring, mitigation, and excavation management during construction activities associated with the waste excavation and partial closure of the Unit 1 fill area and construction in the Unit 3 fill area.

Arizona

Pima-Maricopa Indian Community, Engineering, Inspection, and Reporting Services for Salt River Landfill, Scottsdale, AZ. As Project Manager, Ms. Viswanathan was responsible for providing engineering, inspection, and reporting services for bioreactor operations to the EPA. She was also responsible for the estimation of airspace consumed and the remaining site life, and preparation of closure/post-closure care costs.

Republic Services, Inc., GCCS Expansion for Apache Junction Landfill, Apache Junction, CA. As Project Manager, Ms. Viswanathan was responsible for the design of vertical LFG extraction wells and associated header and lateral piping.

Republic Services, Inc., GCCS Expansion for Southwest Regional Landfill, Buckeye, CA. As Project Manager, Ms. Viswanathan was responsible for the design of vertical LFG extraction wells and associated header and lateral piping.

Santa Cruz County, Engineering Services for Rio Rico Landfill, Rio Rico, AZ. As Project Manager, Ms. Viswanathan was responsible for providing engineering services for the estimation of airspace consumed and the remaining site life, and preparation of closure/post-closure care costs.

Santa Cruz County, Engineering Services for Rio Rico Landfill, Rio Rico, AZ. As Project Manager, Ms. Viswanathan was responsible for providing engineering services for the estimation of airspace consumed and the remaining site life, and preparation of closure/post-closure care costs.

Town of Huachuca City, Closure and Post-Closure for Huachuca City Landfill, Huachuca City, AZ. As Project Manager, Ms. Viswanathan was responsible for preparation of closure and post-closure care costs for financial assurance.

Oklahoma

City of Lawton, Feasibility Study for LFG-to Energy (LFGTE) Facility, Lawton Landfill, Lawton, OK. Ms. Viswanathan was responsible for providing research support as a City of Lawton employee for the design of the LFG system and LFGTE facility for the City of Lawton Landfill. Tasks included delineation of waste limits, assessment of waste depths, and review of historical data for assistance in waste characterization.

City of Lawton, Management and Oversight of Construction Quality Assurance (CQA) Services, Lawton Landfill, Lawton, OK. As Project Manager, Ms. Viswanathan was responsible for providing management and oversight of CQA services and construction surveying for Landfill Cells 4 and 5. Her responsibilities included review of technical submittals for

construction materials, preparation of contract change orders and cost analyses, and review of field and laboratory geotechnical and geosynthetic test reports for conformance with project specifications and permit requirements.

City of Lawton, Engineering Services for Lawton Landfill, Lawton, OK. As Project Manager, Ms. Viswanathan was responsible for providing engineering services for the design and/or management of various municipal infrastructure projects (water, sewer, and drainage improvement) as a City of Lawton employee. She managed the preparation of construction plans and specifications, contract administration, review of construction material submittals, site inspections to ensure conformance with project plans and specifications and state and federal regulations, and approval of pay estimates and any change orders.

PATRICK S. SULLIVAN, BCES, CPP, REPA

Education

BA – Harvard University, Biology/Ecology, 1989

Professional License/Certifications

Board Certified Environmental Scientist, No. 15-ES009, American Academy of Environmental Engineers & Scientists (AAEES)
South Coast Air Quality Management District (SCAQMD), Certified Permitting Professional (No. A-1716)
Registered Environmental Property Assessor, No. 519692, National Registry of Environmental Professionals (NREP)
Approved Lead Verifier under California Air Resources Board (CARB) AB 32 Greenhouse Gas (GHG) Program, Executive Order H-15-137

Professional Affiliations

Solid Waste Association of North America (SWANA); Director, Landfill Gas (LFG)/Biogas Division
Air and Waste Management Association (AWMA); Vice Chairman, Mother Lode Chapter
Waste Industry Air Coalition (WIAC); Co-Chairman
California Biomass Collaborative; Executive Board
Solid Waste Industry for Climate Solutions (SWICS), Co-Chairman
Research Associate, Columbia University, Earth Engineering Center for Sustainable Waste Management

Professional Awards

Certificate of Excellence, Publication of over 100 Articles and Presentation, SCS Engineers (SCS), 2015
Distinguished Service Award, National Solid Waste Management Association (NSWMA, now National Waste and Recycling Association, NWRA), 2009
Hall of Flame, SWANA, LFG/Biogas Division, 2007

Professional Experience

Mr. Sullivan has over 27 years of experience in the area of environmental engineering, specializing in solid waste management. He is the Managing Director of SCS's consulting and engineering operations within the Southwestern United States, the largest of SCS's engineering business units. He also serves as the Practice Leader for SCS's Solid Waste Practice in the same region. Mr. Sullivan is the National Expert for SCS's companywide Clean Air Act program. He also oversees SCS's company-wide GHG and Risk Assessment programs and is one of the national experts on risk assessment and toxic exposure issues for solid waste facilities. Mr. Sullivan is a company Senior Vice President and Member of the Company's Management Advisory Committee. Mr. Sullivan has conducted hundreds of solid waste projects during his 27

years with SCS. Because of this experience and expertise, Mr. Sullivan has been involved with the following practices and projects related to composting, anaerobic digestion (AD), and other organics projects:

Air Quality and Other Permitting

Permitting of Organics Recycling Operations. Mr. Sullivan has been the project manager for the air quality and other environmental permitting for over 20 organics facilities [e.g., composting, AD, organics processing, and organics material recovery facilities (MRFs)], in the western U.S., including over 15 facilities in California. This includes 6 facilities in the Bay Area Air Quality Management District (BAAQMD) jurisdiction.

Permitting, Compliance, and Due Diligence Projects for Biogas Projects. Mr. Sullivan has completed technical and financial due diligence for over 50 existing and proposed projects, as well as permitting and compliance activities for over 75 projects. Mr. Sullivan has permitted over 40 biogas to energy plants across the country, including 20 in California and 7 in the BAAQMD.

Technical Analyses as Part of Environmental Impact Reports (EIRs) for approximately 50 solid waste projects in California, including AD facilities, composting operations, landfill expansions, new landfills, transfer stations, hauling operations, MRFs, and other solid waste facilities, including evaluations of health risks, air quality, GHG, and/or odors. This has included the preparation of a variety of California Environmental Quality Act (CEQA) documentation.

Commenting on Air District Composting Rules. Mr. Sullivan reviewed and provided critical comments on behalf of the solid waste for compost rules in the San Joaquin Valley Air Pollution Control District (APCD) and SCAQMD.

Odor Evaluations

Mr. Sullivan has also managed 10 odor evaluations for organics facilities, including ambient air testing, air dispersion modeling, tracer studies, siting of meteorological stations, odor panel participation, and/or testimony at public meetings. These have included facilities in Mariposa County, Los Angeles County, Placer County, San Bernardino County, San Diego, Milpitas, San Leandro, Novato, and Richmond, California.

Litigation Expert on Odor, Organics Facilities in Washington and California.

Greenhouse Gas

Climate Action Reserve GHG Reduction Project Services

Organic Waste Composting Protocol

- American Organics OWC
- Grover Environmental Products
- Jepson Prairie Organics
- South Valley Organics

Publications

Mr. Sullivan has published/presented over 100 papers in trade journals/at industry conferences.

GARY A. PONS, CIH, CSP

Education

BA – Biological Science, California State University, Fullerton, 1988

Specialty Certifications

Certified Industrial Hygienist (CIH), Comprehensive Practice (No. CP7375), American Board of Industrial Hygiene
Certified Safety Professional (CSP), Comprehensive Practice (No. 18810), Board of Certified Safety Professionals
California Department of Public Health (DPH), Certified Lead Inspector/Assessor (No. I 3067), Project Designer (No. D 3067), and Project Monitor (No. M 3067)
US Department of Homeland Security, National Incident Management System (NIMS): IS 100, 200, 700, and 800 Certificates
OSHA Certified Hazardous Waste Operations and Emergency Response Supervisor, Competent Person and First Responder (Operations Level)
EPA Accredited Asbestos Building Inspector, Contractor Supervisor, and Management Planner

Professional Affiliations

Diplomate – Academy of Industrial Hygiene
Professional Member (National/Local Section) – American Society of Safety Engineers (ASSE)

Professional Experience

Mr. Pons' professional career consists of over 23 years of Environmental Health and Safety (EH&S) management experience in the public, private, and research and development sectors. As SCS's Corporate Health and Safety Director, he is responsible for managing, administering, and implementing the organization's health and safety (H&S) program. This includes all relevant H&S program functions for the SCS Field Services Construction (landfill gas distribution and treatment systems construction) and Energy (design, construct, and operate landfill gas-to-electrical energy plants) business units. Mr. Pons has a proven record of enhancing an organization's EH&S program performance by implementing effective EH&S management practices and communication techniques. His effective communication skills, developed over years of construction safety management projects, have given him a keen ability to oversee EH&S activities for large (more than $100 million) civil and public works projects, including sanitary sewer plant/pumping station, university/public school, restaurant, science/research facility, and sports center projects. Additional examples of Mr. Pons' project work for SCS are detailed below.

Environmental Management

Ongoing Landfill Control System Maintenance of the Closed Class I and Class III Landfill Facility, BKK Landfill, West Covina, CA. Under a current Consent Decree regulated by the

California Department of Toxic Substances Control (DTSC), the combined Class I and III Landfill was managed on behalf of Potentially Responsible Parties (PRPs) by on-site SCS personnel. SCS was responsible for maintaining all site control systems (e.g., landfill gas, hazardous waste, landscaping, etc.) and for verifying their conduct was consistent with the requirement of the DTSC Consent Decree. Mr. Pons was responsible for verifying compliance with the site's H&S program by all on-site and contractor personnel.

Chevron Energy, Design-Build and Landfill Gas-to-Energy (LFGTE) Plant for Marine Corps Air Base, Albany, GA (2011). As H&S Manager, Mr. Pons was responsible for overall implementation and oversight of the project's H&S management system. This included ensuring that project specifications and H&S requirements were met and were consistent with the US Army Corps of Engineers, EM 385-1-1 H&S Manual requirements (for both SCS and subcontractor personnel), supervising day-to-day activities of the Site Safety and Health Officers, providing technical review and approval of the project's H&S documentation (e.g., Accident Prevention Plan, Activity Hazard Analyses, etc.), coordinating written and verbal correspondence with the client (which was forwarded to the Marine Corps Logistics Base hierarchy), and participating in project progress meetings.

Prior to his tenure at SCS, Mr. Pons held the following positions:

California State University, Long Beach (CSULB), EH&S Director, Long Beach, CA. Mr. Pons managed and coordinated activities and operations of the CSULB's EH&S department. The EH&S operated programs including occupational safety, environmental compliance, construction safety management, EH&S education and training, and emergency response. During these projects, Mr. Pons provided leadership and guidance on all EH&S activities related to CSULB's construction projects (capital and non-capital projects). This included specification evaluation, pre-bid drawing evaluation, preconstruction contractor safety orientation, construction phase submittal evaluation, participation in project meetings and acting as the university regulatory agency liaison. Mr. Pons formulated, organized, administered, and audited university EH&S policies, programs, and procedures. He also provided recruiting, training, and development of EH&S staff. Mr. Pons served as lead university liaison with governing state and local regulatory agencies. He provided continuous consultation to deans, directors, researchers, department chairpersons and administrators to facilitate maintenance of the University's safety culture and EH&S program compliance. Mr. Pons planned, managed, and forecasted the EH&S department operating budget. He served as designated authority for implementation of CSULB's Injury and Illness Prevention Program (IIPP). Mr. Pons represented the department on various campus-wide and system-wide committees as required. He completely revised CSULB's construction specifications to include all applicable EH&S disciplines involved in construction processes. This included development of a Job Safety Analysis document for completion by CSULB contractors prior to the project start up. Mr. Pons also established a model electronic EH&S program survey for use by all CSU campuses. This was the work of a system-wide working group of EH&S directors working in cooperation with the CSU Chancellor's office. The team was awarded the 2009 CSU Quality Improvement Award for its efforts. Mr. Pons completed the development of CSULB's Return to Work (RTW) Program. This was the first campus-based RTW Program to be approved by the CSU Chancellor's Office. Mr. Pons reestablished CSULB's H&S Committee as well. This included establishing an operating guideline for the committee's activities. He coordinated CSULB's efforts in complying with newly established regulatory requirements in the disciplines of sanitary sewer management (SWRCB) and

worker protection (Cal-OSHA) related to the Hazard Communication and Aerosol Transmissible Disease standards.

Orange County Sanitation Districts (OCSD), Safety and Health (S&H) Specialist, Fountain Valley, CA. In this role, Mr. Pons coordinated, participated, and oversaw all activities in support of the District's S&H Division. The operational programs included Construction Safety, Occupational Safety, Environmental Compliance, Emergency Management, and Workers' Compensation. He provided leadership and guidance for all EH&S activities related to OCSD construction projects. This included in-plant and collection system projects that were managed under public works contracts. Mr. Pons developed and implemented S&H policies and programs, integrated them into the organizations business process, managed and planned the departmental budget, coordinated training curricula/instruction, and executed program auditing. Mr. Pons coordinated the development, implementation, and staff training for the OCSD Integrated Emergency Response Program. This included natural disasters and plant/collection system spill response. He participated in the development of a pre-award contractor evaluation program for OCSD construction projects. The program was developed by an inter-departmental working group and consisted of evaluation criteria, including contractor's historical loss control data, regulatory citation history and IIPP compliance. Mr. Pons revised the two highest risk safety programs for the organization: the Hazardous Energy Control and Confined Space Entry Programs. He led the S&H Division team that completed the revision of the OCSD S&H training program. This included establishing training matrices for all applicable staff, developing/revising training curriculum and effectively implementing the revised program into OCSD's daily business operations. Mr. Pons also assisted in the development and implementation of a construction contractor pre-award qualification program. Working cooperatively with the Orange County Flood Control District (OCFCD), created a Memorandum of Understanding (MOU) which allowed a cooperative response for responding to sanitary sewer releases in the OCFCD storm water receptors. The team also developed a Request for Proposal (RFP) to retain qualified contractors to assist in these efforts.

Los Angeles Unified School District (LAUSD), Supervising Industrial Hygienist, Los Angeles, CA. In this role, Mr. Pons managed LAUSD's industrial hygiene (IH)/safety program. This incorporated over 1,000 facilities over a service area in excess of 500 square miles. The primary focus was to develop and maintain IH/safety programs, facilitate effective IH safety program implementation with all operating entities, and mitigate organizational risk related to EH&S compliance. He recruited, supervised, mentored, and evaluated a staff of 22 supervisory and professional personnel. He also conducted presentations to the LAUSD Board of Education, and participated in public meetings with community, faculty, and parent groups. Mr. Pons served as Technical Advisor on internal working groups in the disciplines of asbestos, lead, and pest management and workers' compensation. He participated in two nationally recognized school safety programs: (1) the US Environmental Protection Agency (EPA) Tools for Schools (TFS) Indoor Air Quality Program; and (2) the California Department of Public Health Childhood Lead Poisoning Prevention Branch (CLPPB). Mr. Pons developed the original LAUSD construction specifications for hazardous materials remediation and disposal processes; coordinated organizational implementation with the Construction and Facilities Management Departments; conducted field audits to ensure contractor compliance; and coordinated activities with the LAUSD Owner Controlled Insurance Program (OCIP) consultant. Mr. Pons also served as original member of the LAUSD team that developed the new school site evaluation program in cooperation with the California DTSC. This program is currently active and viable.

AMBROSE A. MCCREADY, PE

Education

BS – Civil Engineering, California State University, Sacramento, 1972

Professional Licenses

Registered Civil Engineer – California, Colorado, Washington

Professional Affiliations

American Society of Civil Engineers (ASCE)
Solid Waste Association of North America (SWANA)

Professional Experience

Mr. McCready has 44 years of engineering experience. Throughout his career, he has specialized in the planning, design, and construction management of solid and hazardous waste landfills and environmental remediation systems. He is recognized for his expertise in the design and construction management of solid and hazardous waste landfills. During his career, he has provided technical guidance for the use of geotextiles, geomembranes, and clay liners, as well as supervision and quality assurance/quality control (QA/QC) testing during construction. He has also served as Project Director and Project Manager for landfill projects involving a full range of services, including investigation and remediation of old and abandoned sites; site selection, permitting, environmental compliance, and alternate liner and cover designs; and closure engineering for permitted sites.

Landfill Engineering, Liners, and Geosynthetics

Since 1977, Mr. McCready has been involved in the evaluation, design, and construction of clay and geosynthetic liner systems for a variety of applications, including landfill expansions and closures, sludge drying basins, evaporation ponds, acid-retention basins, mining waste leach pads, holding ponds, and tailings impoundments, and recreational lakes.

Landfill Engineering for Otay Landfill, Chula Vista, CA. Mr. McCready provided landfill engineering for leachate management, landfill gas (LFG) extraction and compliance, and fill sequencing planning for a 4,200-ton-per-day (tpd) landfill. High volumes of leachate required evaluation of short- and long-term options for collecting, handling, and disposal.

County of Stanislaus, Updated Joint Technical Document (JTD) for Fink Road Landfill, Crows Landing, CA. Mr. McCready prepared and updated the JTD for the Fink Road Landfill in Stanislaus County. He estimated remaining disposal volumes and site life for the municipal solid waste (MSW) landfill and the waste-to-energy (WTE) ash landfill on site. He also prepared an updated Storm Water Pollution Prevention Plan (SWPPP) under the new Industrial Storm Water Permit (IG) in California.

Groundwater Investigation and Evaluation for Carpenter Road Landfill, Modesto, CA. Mr. McCready conducted an investigation and evaluation of groundwater for this old interim closed landfill. He prepared a Preliminary Closure and Post-closure Maintenance Plan (PCPMP) to close the landfill, and PS&Es for partial clean closure of the landfill. Waste from the east portion of the landfill will be relocated to the west landfill to create sufficient grades for a final cover.

Solar Facility Permitting, Riverside, CA. As Project Manager, Mr. McCready was responsible for engineering firm developing a 9.135-megawatt solar generating facility on a portion of the closed West Riverside Landfill. The project included preparation of a closure and post-closure maintenance land-use plan and an Environmental Impact Report (EIR) for the solar Brownfields project. Project review and approvals were performed by the Local Enforcement Agency (LEA), CalRecycle, and RWQCB.

Non-Water Foreseeable Release Cost Estimates for Various Landfills, CA. Mr. McCready prepared non-water foreseeable release cost estimates for various landfills in California, including landfills at Geer Road, Fink Road, Highway 59, Ponderosa, 28th Street, Toland Road, Coastal, Imperial, Hot Spa, Rio Tinto, Sunnyvale, Burlingame, and Bailard. He determined foreseeable release scenarios and developed costs associated with mitigation repairs to the landfills.

City of Sacramento, Solar Permits for Closed Landfill, Sacramento, CA. Mr. McCready assisted the City of Sacramento in securing agency permits for a 1.5-megawatt solar generating facility on a closed portion of the 28th Street Landfill. Work included preparing a post-closure land-use plan for the solar facility and an update to the closure and PCPMP for the landfill.

Landfill Expansion Design, Solano County, CA. Mr. McCready prepared contractor plans and specifications for a 12-acre new landfill cell at the landfill. The liner system was a Subtitle D, single-composite liner system.

County of Placer, Landfill Master Plan, Lincoln, CA. Mr. McCready prepared fill sequencing plans for the ultimate development of the Western Regional Sanitary Landfill. The landfill consists of 14 cells that are 12 to 18 acres in size. The current and future cells are Subtitle D lined and extend 55 to 60 feet below the surrounding ground surface. Soil balance was a critical goal for the sequencing plan. This was accomplished by limiting the depth of excavation to balance the daily cover needs of the project. Haul roads, soil stockpiles, and environmental controls were shown on the plans.

County of Stanislaus, Solid Waste Landfill Expansion, Crows Landing, CA. Mr. McCready performed services for the expansion of the Fink Road Landfill onto parcels of property near the permitted site. The work included geotechnical investigations of the vacant property, and preparation of preliminary design and fill sequencing, an EIR, JTD, and PCPMPs.

Design and Permitting for a Proposed 100-acre, New Class III Landfill, Northern CA. Initial construction was expected to commence in 2013 at what would be California's first new landfill site built since the 1990s. Mr. McCready served as Engineer of Record for seismic stability evaluation (dual-composite base liner), preparation of preliminary design and sequencing plans, preparation of closure plans, cost estimating, permitting, and liaison with both federal and local regulatory agencies.

Sonoma Central Disposal, Engineering and Permitting Services, Landfill Expansion, Cotati, CA. As Project Director, Mr. McCready served as engineer of record for permitting of a 9-million-cubic-yard airspace volume expansion at the Sonoma County Central Disposal Site. Work included design of a dual-composite base liner system; seismic stability analyses; leachate system sizing; preparation of fill sequencing plans; soil balance analyses; capacity and site life estimates; and permitting. SCS also prepared construction-level plans, specifications, and cost estimates for a 20-acre cell to be constructed in an undeveloped canyon area at the site.

Landfill Closure and PCPMP, Eureka, CA. As Project Manager, Mr. McCready was responsible for the preparation of a PCPMP for a 32-acre solid waste landfill in a wet climate. He prepared fill sequencing and final grading plans, and computed annual site life and remaining capacity for three consecutive years of operation. He responded to agency comments and prepared cost estimates for closure and post-closure maintenance.

Landfill Partial Final Closure, Merced County, CA. Mr. McCready prepared plans, specifications, and estimates for an 89-acre partial final closure for a Class III landfill Phases I to 4 at the Highway 59 Landfill. He prepared a partial final closure and post-closure maintenance plan for the portion of the landfill undergoing closure. The alternate cover design included an evapotranspiration (ET) cover system made of compacted onsite soils. He performed laboratory testing of on-site soils and conducted computer modeling to demonstrate the equivalency of the ET cover.

County of Contra Costa, Landfill Partial Final Closure, CA. Mr. McCready prepared PS&Es for the 23-acre partial closure of a Class II landfill. The alternate cover design included both clay and synthetic barriers in the cover system in accordance with CCR Title 27. He prepared drainage system design for the full landfill cover system for down chutes, bench ditches, road crossings, and discharge aprons along bay waters.

County of Butte, Landfill Closure Design, Chico, CA. Mr. McCready prepared contractor plans and specifications for a 33-acre landfill closure cover at the Neal Road Landfill, located near Chico. The alternate cover system consisted of a low-permeability foundation layer, a high-density polyethylene (HDPE) membrane, and vegetative layer.

County of Monterey, Landfill Closure Plans and Specifications, CA. Mr. McCready evaluated the existing closure and post-closure maintenance documents and prepared final closure plans and specifications for a 14.5-acre landfill located in Monterey County. The alternate final cover system will consist of a 1-foot foundation layer, a geosynthetic clay liner, a geosynthetic drainage net, and a 2-foot vegetative layer. The closure documents will be revised according to the final cover design. The work was scheduled for construction in 2003.

County of Stanislaus, Solid Waste Landfill Closure, Crows Landing, CA. Mr. McCready served as Project Manager for the design of a final closure cover for the 18-acre LF-1 unit at Fink Road Landfill. Services included preparation of construction drawings, specifications, engineer's estimate, and bid support in selecting a contractor to construct the cover. He performed CQA during construction and prepared the construction certification report. The work was completed in 1997.

County of Contra Costa, Landfill Closure Design, Richmond, CA. Mr. McCready prepared the design/build plans for 2005 landfill closure cover at West County Sanitary Landfill. He also prepared contractor plans and specifications for a 45-acre 2006 landfill closure project at the site.

County of Contra Costa, Solid Waste Landfill Closure, Martinez, CA. The closure at the site was evaluated by the EPA. The project involved the arbitration of the closure and post-closure costs associated with closing the Acme Landfill. The owner of the landfill had estimated closure and post-closure costs to be $60 to $70 million. He subsequently brought legal action against a group of responsible parties. Mr. McCready acted as Technical Consultant to the Judicial Arbitration Mediation Service (JAMS) in the process of obtaining contractor bids, evaluating the bids in the light of the required closure and post-closure plan. The results of the evaluation showed that the closure costs were actually in the range of $30 to $40 million.

County of Riverside, Solid Waste Landfill Closure, Riverside, CA. Mr. McCready served as Project Manager for closure of Tequesquite Landfill. The project entailed detailed hydrogeologic and treatability studies for groundwater, flood protection evaluation, groundwater sampling and analysis, and design of a final cover system. The site location near the Santa Ana River raised major concerns regarding potential flooding and degradation of surface/groundwater quality.

County of Sacramento, Landfill Closure Design, Sacramento, CA. Mr. McCready prepared plans and specifications for a 7-acre landfill closure at Aerojet General Corporation, located near Sacramento. The cover consisted of a soil foundation layer, a geosynthetic clay liner as the barrier, and a vegetative layer.

County of San Mateo, Solid Waste Landfill Closure, CA. Mr. McCready prepared final closure and post-closure maintenance plans for 31-acre landfill located along San Francisco Bay. Design challenges included necessary reconstruction to correct erosion of the shoreline and exposure of refuse.

County of Stanislaus, Fill Sequencing and Drainage Master Plan, Crows Landing, CA. Mr. McCready prepared detailed fill sequencing and development plans for operation of the Fink Road Landfill. He performed 20 project assignments related to the site.

County of Placer, Landfill Operation Audits, Placer County, CA. Mr. McCready performed quarterly landfill operations audits for a 1,000-tpd solid waste landfill. The audits addressed landfill operations with respect to the site's permit documents, identification of deficiencies, and recommendations to improve ongoing operations. The issues that were addressed included grading and drainage, refuse cover, vector control, erosion of soil, operational access, leachate management, and environmental controls.

County of Placer, Technical Support for Landfill Operation, Lincoln, CA. Mr. McCready provided routine technical support for operation of the Western Regional Sanitary Landfill during development, and performed CQA during construction of Cell No. 13. The cell design consisted of a Subtitle D single-composite liner system, including a geosynthetic drainage net on the slopes.

Calaveras and Placer Counties, Solid Waste Landfill Expansion, CA. Mr. McCready served as CQA Officer for separate landfill expansion projects. He prepared construction certification report which documented field and laboratory testing, observations, and modifications.

Solid Waste Landfill Permit, Novato, CA. Mr. McCready prepared a Report of Disposal Site Information, Report of Waste Discharge, and PCPMP for a 420-acre MSW disposal site. He managed geotechnical, groundwater, and storm water monitoring programs at the site. He also provided technical support during California Environmental Quality Act (CEQA) review process through EIR certification and application for a revised solid waste facility permit.

County of Calaveras, Solid Waste Landfill Permit, San Andreas, CA. Mr. McCready served as Project Manager for preparation of Periodic Site Review Report, Site Development Plan, Report of Disposal Site Information, and PCPMP at Rock Creek Landfill.

Landfill Expansion Design, Corona, CA. Mr. McCready provided technical oversight of the design and construction of El Sobrante Landfill expansion. The expansion area included a clay-lined cell, which was designed and constructed on a fast-track schedule.

County of Imperial, Design of Class I RCRA Disposal Unit for Sludge Drying, Imperial County, CA. The project involved the preparation of PS&Es for a 3-acre sludge-drying unit to be used in dewatering hazardous sludges arriving at a Class I landfill in Imperial County. The design was prepared in accordance with EPA guidance documents for RCRA facilities.

Liner Design, Valencia, CA. Mr. McCready designed and directed construction observation of combined geomembrane and clay liner system with leachate collection and recovery system. The system was designed for three new cells that were constructed on an accelerated schedule.

Structures and Drainage Facilities

Mr. McCready has managed a number of projects involving the planning, design, and construction of structures, including buildings, concrete pads, fuel facilities, roads, and drainage structures.

Design and Construction for Fuel Facility, South San Francisco, CA. As Project Manager, Mr. McCready was responsible for the design and construction of diesel and gasoline fuel facility for transfer station located in South San Francisco. He obtained local building permits and directed construction fuel tanks, piping, and controls.

LFG Flare Station Design and Construction, Various Landfill Sites. As Project Manager, Mr. McCready was responsible for the design and construction over site of new and modified LFG flare systems, including concrete pads, mechanical, piping, electrical, and control systems.

Drainage Structures, Various Landfill Sites. As Project Manager, Mr. McCready was responsible for the design and construction of concrete and rock drainage facilities to control and collect runoff from paved and unpaved sites.

PAUL A. WISNIEWSKI, PG, QSD/QSP

Education

MS – Geological Sciences, Fluvial Geomorphology, University of New Mexico, Albuquerque (Magna Cum Laude), 1999
BA – Government, The College of William and Mary, Virginia, Williamsburg, Virginia, 1994

Professional Licenses

California Professional Geologist (PG) (No. 7543)
California Real Estate Broker (No. 01817768)

Specialty Certifications

40-Hour OSHA/RCRA Hazardous Waste Operations and Emergency Response (HAZWOPER) Standard and 8-Hour Annual Refresher Courses
Department of Toxic Substances Control (DTSC) Hazardous Waste Generator, Modules I-V (No. 113)
Construction General Permit Qualified Storm Water Pollution Prevention Plan (SWPPP) Practitioner (QSP, No. 00423); Qualified SWPPP Developer (QSD, No. G07543)
8-Hour MSHA Mine Safety Training (*Expired*)

Professional Affiliations

Geological Society of America
Groundwater Resources Association of California
Marin County Bar Association
Sonoma County Bar Association
Sonoma County Alliance – Water & Waste Subcommittee Chair

Professional Experience

Mr. Wisniewski has experience with the preparation of construction plans and bid documents, project permitting, project scoping and management, construction management, litigation support, and regulatory compliance in sensitive environments. He has also conducted public meetings for various projects, including project planning meetings; has worked to encourage public participation; sought and received landowner support and obtained Right of Way/Right of Entry permissions; and elicited stakeholder feedback on a number of projects. He often helps clients, from project initiation through completion, with writing grants and obtaining project funding, as well as with investigations, design, permitting, construction, post-project monitoring, and long-term maintenance.

Storm Water Compliance and Litigation Support

SWPPPs and Storm Water Monitoring/Reporting for Industrial Facilities, Northern CA. Mr. Wisniewski has prepared and assisted with the preparation of over 50 SWPPP documents for a

variety of industrial facilities, including automobile dismantlers, scrap metal recycling facilities, electronics recyclers, transfer stations, lumber mills, rock quarries, asphalt batch plants, marinas, trucking maintenance yards, and heavy equipment maintenance and manufacturing facilities, to obtain coverage under California's General Industrial Storm Water Permit. SWPPP preparation and updates consisted of on-site evaluations of storm water flows, preparation of SWPPP maps, preparation of monitoring and sampling plans, preparation of facility-specific storm water and non-storm water observation and sampling forms, evaluations of potential pollutant sources, evaluations of the industrial processes at each facility, and descriptions of recommended, planned, and existing Best Management Practices (BMPs). SWPPPs are intended to evaluate activities at facilities that potentially impact storm water, and to implement BMPs that reduce or eliminate pollutants in storm water; as such, industrial SWPPP documents often require frequent updates. In addition to SWPPP preparation and updates, Mr. Wisniewski has conducted storm water observations and sampling, and prepared annual reports for numerous facilities.

Storm Water Monitoring and Reporting for Construction Activities, Santa Rosa, CA. Mr. Wisniewski reviewed Construction SWPPP documents for several Risk Level 2 construction projects to obtain coverage under California's 2009 General Permit for Storm Water Discharges Associated with Construction Activity. He provided Qualified SWPPP Practitioner (QSP) services that included storm water observations and sampling, preparation of Rain Event Action Plans (REAPs), SWPPP modifications, recommendations for BMP improvements based on field measurements and observations, Numeric Action Limit (NAL) reporting, and compliance with Storm Water Multi-Application Reporting and Tracking System (SMARTs) requirements. He assisted and provided contractor guidance to maintain project compliance with the Construction Storm Water General Permit.

Caltrans Clear Lake Nutrient TMDL Study, Clear Lake, CA. Mr. Wisniewski assisted with monitoring station site selection and installation, and the development of storm water sampling and analysis plans for collecting representative flow weighted composite samples for the Clear Lake Phosphorous Total Mass Daily Load (TMDL) study, which was conducted on behalf of Caltrans. Overall monitoring support was provided to achieve the program goals, which included updating the sampling and analysis plan according to the Caltrans Guidance Manual – Storm Water Monitoring Protocols; storm sampling; observing storm water runoff characteristics during storm events; producing Post-Storm Technical Memorandums (PSTMs); and managing the laboratory to verify adherence to the manual.

Litigation Support for Private Clientele, Northern CA. Mr. Wisniewski has provided technical support to legal teams to defend industrial, commercial, and agricultural clients from lawsuits arising from alleged violations of the Clean Water Act, Clean Harbors Act, Fish & Game Code, Health & Safety Code, and the Industrial General Permit. Litigation support efforts included the preparation of declarations based on reviews of annual storm water reports and SWPPP documents, field and aerial photograph-assisted mapping, storm water and soil sampling, and site reconnaissance. Surface water flow paths were mapped to determine termination points, diversion locations, areas of impoundment, and areas of storm water comingling with other surface water runoff. Field observations, measurements, mapping, and sampling were utilized in conjunction with in-depth reviews of available storm water documents to prepare declarations and to provide expert testimony in support of successful litigation and settlement agreement efforts. Litigation support efforts included collaborative strategic and expert analysis of

available data, expert witness testimony, and document preparation for depositions and court proceedings. Mr. Wisniewski has provided expert litigation support services on behalf of plaintiffs and defendants for 10 individual lawsuits, 3 of which reached settlement agreements; three are still pending; and four were successfully litigated.

Water Resources

Water Supply Well Evaluation and Testing, Charter Foundation, Santa Rosa, CA. SCS assisted Charter Foundation, a 501(c)(3) non-profit entity, to obtain a Conditional Use Permit (CUP) to construct a Waldorf-based elementary and middle school on a 20-acre Site in Sebastopol, CA, which is located on the outskirts of Santa Rosa. Charter Foundation contracted for the installation of water supply well to provide drinking water for the future students, faculty, and staff at the planned school. Initial testing indicated elevated levels of hexavalent chromium, well in excess of the 10 µg/L State drinking water standard. As part of our work, SCS reviewed historical well logs, analytical reports, and purge records. SCS purged, sampled, and reviewed laboratory analysis of groundwater from two water supply wells located at the Site, an old well and the newly installed well, both of which were found by third-party consultants to be impacted with hexavalent chromium. Samples were analyzed by a California Environmental Laboratory Accreditation Program (ELAP) certified laboratory for hexavalent chromium and a partial drinking water suite, including select metals. Future potential water usage was calculated at a rate of 20 to 30 gallons per minute, based on the projected number of occupants, and the number of sinks and bathrooms to be constructed. Using a flow rate for purging that was more consistent with projected future use, SCS was able to demonstrate that hexavalent chromium concentrations were actually below the drinking water standards. SCS demonstrated that a wellhead treatment system was not needed, resulting in a huge cost savings for Charter Foundation. It was believed that while the area experiences elevated background concentrations of hexavalent chromium, intense purging resulted in oxidization of trivalent chromium into a hexavalent state, which produced erroneously high values for hexavalent chromium in groundwater beneath the Site. Based in part on SCS's assessment, Charter Foundation was able to obtain the CUP permit and is in the process of developing the school site.

CEQA/Permitting

CEQA EIR Comment Letters, Ukiah, CA. Mr. Wisniewski prepared detailed response letters on behalf of Masonite Corporation to defend water rights and prevent the loss of land value due to a proposed near-stream gravel mine in the Russian River Valley. Letters included detailed evaluations of consultant-produced geomorphological, hydrogeological, and other reports concerning stream channel impacts from the proposed project and other geomorphic and groundwater impacts. Mr. Wisniewski presented technical information and arguments concerning a controversial EIR in a series of public hearings before the Mendocino County Planning Commission and Board of Supervisors.

In-Stream Gravel Mine Permit Assistance, Humboldt County, CA. Mr. Wisniewski drafted technical letters of review for over 30 gravel extraction permits and renewals at 6 Humboldt county locations for regional gravel mine operator. He reviewed and provided technical evaluations of consultant-prepared professional reports, and advised mine operators on obtaining and renewing the following permits: Humboldt County Use Permit (CUP), U.S. Army Corp of

Engineers Section 404 Permit, and the CA Department of Fish and Game Lake and Streambed Alteration Section 1600 permit. Mr. Wisniewski interacted with the County of Humboldt Extraction Review Team (CHERT) representatives to resolve permitting issues, and discussed current and future extraction volumes in the context of stream channel topographic surveys, reviews of aerial photographs, and various hydrologic and stream metric data collected and reported in annual pre- and post-gravel extraction reports.

Watershed Geology

Geomorphic Investigation of Feliz Creek, Hopland, CA. Mr. Wisniewski conducted a geomorphic investigation as a component of a fish passage improvement project that involved removal of a small concrete dam on Feliz Creek, a tributary to the Russian River. The investigation included a literature review, a review and analysis of historical aerial photographs, detailed geomorphic mapping and correlation of alluvial deposits, and a field survey of the stream channel, fluvial terraces, floodplain, and adjacent landslides and unstable slopes. Deliverables included a large-scale geomorphic map, cross-sections, topographic survey map, and technical report which were presented and discussed at a series of meetings attended by representatives of California Department of Fish and Game and Mendocino County Water Agency

Geomorphic Investigation of Rail Creek, Gazelle, CA. Mr. Wisniewski conducted a geomorphic investigation of an area surrounding a 10-meter-high earthen dam that impounds a 5-acre reservoir along Rail Creek, a tributary to the East Fork of the Scott River. The investigation was geared towards assessing existing geomorphic conditions as part of a fish passage improvement project. The investigation involved bulk sediment sampling within the channel and reservoir, pebble counts within the un-impacted channel, a channel survey and development of cross-sections, identification and characterization of a channel analog reach for use as a channel reconstruction tool, and an analysis of historical aerial photographs to determine pre-dam channel and valley bottom configurations. Results of the investigation were presented in a technical memorandum and geomorphic map. Recommendations for full and partial dam removal and stream realignment and reconstruction were made using geomorphic data collected and analyzed from the site.

Channel Evaluation of the Parks Creek Cross Canal, Weed, CA. Mr. Wisniewski utilized a GIS-based analysis of historical aerial photographs in combination with a field survey and mapping effort to evaluate the cause, rate, and risk associated with incision and headcutting of the Parks Creek Cross Canal. He determined the timeframe over which the effects of vertical channel incision and headcutting would impact Interstate Highway 5 abutments and associated Corrugated Metal Pipes that assist in the diversion of water from Parks Creek to Shasta River. Mr. Wisniewski demonstrated extremely low rates of incision over the last two decades, and provided other geomorphic evidence that essentially eliminated near-term concerns regarding potential future impacts to Highway 5.

Alluvial Storage and Mobilization Analysis, Mouth of Bear River, CA. Mr. Wisniewski utilized GIS to orthorectify, rubbersheet, and mosaic a decadal time series of historical aerial photographs in an effort to demonstrate trends in storage and mobilization of alluvium at the mouth of Bear River. A special focus on lateral channel migration and residence time of alluvial

sediment along specified reaches was provided, in part to evaluate the effects of historical land management activities that vastly magnified landslide frequency and delivery of sediment to Bear River during the 1950s and 1960s. Volumetric calculations were determined through direct field measurements in combination with GIS-aided analysis of historical aerial photographs. Findings were presented as a technical memorandum to client representatives, co-consultants, and representatives of the NCRWQCB and the California Department of Fish and Wildlife (DFW). Analysis demonstrated significant channel migration, loss of bank and terrace materials, and data that support the notion that the vast majority of the sediment delivered to Bear River from timber operations during the past 50+ years has been mobilized and delivered to the Pacific Ocean.

Watershed and Stream Channel Analysis, Upper Eel River and Bear River, CA. Mr. Wisniewski was the primary investigator for stream channel modules for two watershed analysis efforts. He conducted an analysis of stream channel networks within the Upper Eel River and Bear River watersheds geared towards an understanding of stream channel response to sediment input from hillslopes over decadal time scales. Analysis was conducted as part of Pacific Lumber Company's (PALCO) Habitat Conservation Plan requirement to conduct watershed analysis on a 5-year rotation for each watershed under active timber production. Mr. Wisniewski illustrated existing and historical channel conditions and trends through an analysis of historical aerial photographs, modern LIDAR imaging, bulk sediment data, large woody debris data, in-stream erosion and channel metrics, and other geologic and geomorphic data. He prepared and presented a Stream Channel Module technical memorandum to co-consultants, PALCO scientists, and representatives of the NCRWQCB and DFW. Results of the analysis were used to update the client's Habitat Conservation Plan and to improve adaptive management practices within the respective watersheds.

STEVEN P. COOPER, REGIONAL MANAGER

Professional Licenses

Manager of Landfill Operations, SWANA (No. 32614)

Specialty Certifications

40-Hour Training for Hazardous Waste Workers
8-Hour Trench Safety Training
American Red Cross Standard First Aid and CPR
John Zink Flare Certified
Competent Person Certified
Certified Landfill Inspector
Claims Prevention in Construction Contracts

Professional Experience

Mr. Cooper has over 33 years of experience involving environmental air quality monitoring compliance and reporting programs, environmental infrastructure construction project management related to landfill gas (LFG) recovery and distribution, liquids recovery and distribution systems, and associated construction project management.

Mr. Cooper has monitored and operated gas and liquids recovery collection systems and recovery process plants at numerous landfill and solid waste disposal sites throughout the West Coast, with the majority of his career knowledge and experience focused throughout the Southern California region. Responsibilities have included routine checks of field, plant, and system equipment to ensure optimum level of performance; recording field readings; and inspection and troubleshooting of field collection piping systems. He routinely evaluates data to confirm quality assurance standards, evaluates recovery process plant and collection system readings, and performs troubleshooting of plant and system processes and equipment. He has also performed routine preventative maintenance and lubrication services; maintained plant records, readings, reports, and inventories; participated in plant startup, shutdown, and maintenance (SSM) overhauls; and performed on-call repair services for plant failures.

Environmental compliance monitoring, landfill gas recovery and environmental construction projects currently managed by Mr. Cooper include multiple sites throughout the San Diego and Imperial counties, as well as numerous sites and programs in Arizona and Alaska.

In the late 1990s, Mr. Cooper served with the State of Alaska Department of Environmental Conservation as an Air Quality Specialist III, and was responsible for implementation and operation of the state's Southcentral Region Air Monitoring Network. This network consisted of PM 10, PM 2.5, carbon monoxide, ozone, and sulfur dioxide monitors and meteorological recording equipment. His efforts to coordinate the placement of this equipment at multiple privately owned sites and the demonstrated precision and accuracy of the instrumentation were recognized when he was presented the State of Alaska Outstanding Service Award.

From 2000 to 2007, he served with the Municipality of Anchorage Department of Solid Waste Services as an Environmental Specialist IV. He managed the department's special waste acceptance (such as contaminated soils and asbestos), tracking, and reporting, and leachate disposal monitoring and reporting programs. His responsibilities included program management of LFG and groundwater monitoring consultants, and management of various capital improvement projects, such as liquids conveyance systems, landfill cell expansions, and gas collection and control system (GCCS) installations.

Since re-joining SCS in 2007, Mr. Cooper has served as SCS's Project Manager, Project Director, and Regional Manager facilitating primary contact to clients for operation and maintenance (O&M) of GCCSs operating at multiple landfill and solid waste disposal sites throughout the San Diego and Southwestern states region. Responsibilities include management of surface emissions monitoring (SEM) programs; monthly GCCS and well casing emissions monitoring programs; wellfield monitoring, tuning, data validation and evaluation, and reporting; perimeter gas migration probe monitoring networks and programs; blower/flare O&M; reports and documentation; additional site-specific routine services; and non-routine services.

As Regional Manager, Mr. Cooper ensures day-to-day client communications, optimal staffing assignments and project team coordination, and provides oversight of ongoing project activities, quality control, and senior review of all project deliverables. Clients include both municipal and industrial solid waste site owners/operators and site developers.

Environmental compliance monitoring and LFG recovery projects currently managed by Mr. Cooper in the San Diego region include: Otay, Sycamore, Ramona, Imperial, Borrego, San Marcos, Bonsall, South Chollas, Bell Jr. High, Encinitas, Gillespie, Hillsborough, Jamacha, Palomar, Poway, and Valley Center Landfills.

Projects currently managed by Mr. Cooper in Arizona include Southwest Regional Landfill and Apache Junction Landfill. Additional environmental compliance monitoring projects currently managed by Mr. Cooper include Anchorage Regional Landfill, Eagle River, AK; Merrill Field Landfill, Anchorage, AK; Peters Creek Landfill, Chugiak, AK; and International Airport Road Landfill, Anchorage, AK.

MARK J. ERICKSON, EIT

Education

BS – Environmental Engineering, California Polytechnic University, San Luis Obispo

Professional Licenses

Engineer-in-Training (EIT), California Professional Engineering Exam (Scheduled for October 2017)

Specialty Certifications

Occupational Safety and Health Administration (OSHA) Hazardous Waste Emergency Response Act (HAZWOPER) 40-Hour Training and 8-Hour Refresher

Professional Affiliations

Solid Waste Association of North America (SWANA)

Professional Experience

Mr. Erickson has over 12 years of environmental project experience, with particular emphasis in engineering design of landfill gas (LFG) systems, construction quality assurance (CQA) monitoring, and landfill closure projects. His general civil design project experience includes design of regulatory-prescribed landfill covers and liner systems, and LFG system design and equipment selection for over 25 sites in California. As part of this work, Mr. Erickson has determined earthwork volume estimates, final grading and drainage configuration, and LFG system design, including blower/flare system (BFS) component sizing, well placement, and affiliated gas pipe sizing for projects in excess of $50 million.

In addition to design work, Mr. Erickson has provided CQA monitoring for final closure and LFG system projects throughout California and Mexico, and siting activities for new landfill construction in Brazil. His CQA monitoring experience has included documentation and inspection of construction activities; certification that work was performed per project drawings and specifications, and correspondence with clients and construction groups. Over the last several years, he has provided senior oversight of CQA staff for various projects. He has also conducted construction progress meetings and provided design modifications to final grading, drainage facilities, and LFG systems during project construction.

Additional civil experience includes providing project specifications, management, and oversight for composting projects, including design and layout of Aerated Static Pile (ASP) and water balances for composting operations. As part of this work, Mr. Erickson worked directly with the client to determine the most efficient process layout and use of existing covered canopies as part of the final design. He has also provided draft designs for composting facilities for various sites in California under direction from SCS's Senior Technical Engineers. The design review included, but was not limited to, providing modifications to improve existing designs and determining construction staging sequences for various projects.

Mr. Erickson has also provided storm water treatment designs for two sites in Northern California, one of which was related to storm water runoff from a composting facility to design a basin where captured water could be used for moisture requirements for compost operations. This design was aimed to capture and retain storm water prior to discharge and/or reuse, and included providing hydraulic modeling as well as technology research, and review of site-specific analytical information for runoff with compost constituents. The project also included CQA oversight, review of construction submittals, and coordination of the surveyor for the work.

Mr. Erickson has also performed duties as an Assistant Resident Engineer and provided task management for many types of construction projects (e.g., LFG well expansions, sedimentation basins, new landfill development) and landfill closures within California. He also has direct experience responding to clients' needs, and working with various regulators for landfill and other design projects. He has also provided construction management services, and has performed contractor submittal review and oversight of CQA monitoring activities for various projects in California.

His project experience is summarized below.

LFG Design, Various Sites, CA. Mr. Erickson worked on projects at various sites in California, including a partial closure design with added LFG collection system components to retrofit an existing LFG system and provide interim LFG extraction of the closure area, and a flare replacement design and associated retrofitting to allow concurrent operation of an existing flare at a site in Northern California. The latter designs included interconnectivity of the current system with new blowers, mechanical systems, control panels, and ancillary equipment. Presently, the flare replacement design has been constructed and a construction completion report is being provided to the client. Other details of Mr. Erickson's involvement include:

- Review of construction submittals, including configuration, modification to equipment, and electrical interconnectivity throughout the project.
- Client correspondence and response to contractor Requests for Information (RFIs).
- CQA inspections throughout the construction.
- Preliminary design for structural and electrical engineering components of the design performed under subcontractors for the work.

Project management activities also included directly responding to the City Project Manager's concerns, and requests throughout the project with oversight and direction of SCS Senior Technical Engineers.

A recent construction project involved design of LFG collection and control system (GCCS) improvements for a landfill in Northern California. As part of this work, Mr. Erickson provided review of the existing GCCS and final gas well configuration; design for the addition of 23 LFG wells and connection to the existing system; cross-over header design with existing well connections; and project management for design and CQA services.

City of Glendale, Irrigation and Final Grading and Drainage Improvement Design, Glendale, CA. This design work was completed for the City of Glendale. Mr. Erickson's involvement included, but was not limited to, providing construction design plans, estimates, and specifications, including modifications to the grading and drainage portions of the contract work, based on contractor field findings; review of construction submittals; response to RFIs for the grading and drainage portions of the contract work; final bid documentation for the entire project; client correspondence through construction; and CQA activities. Work was completed under the direction of SCS professional engineers.

County of San Luis Obispo, Storm Water Pump and Treat Design, San Luis Obispo, CA. The design was provided to a County of San Luis Obispo landfill, and was aimed at addressing migration of groundwater to provide hydraulic control of groundwater prior to entering state waters. Work completed for this design included selection of groundwater well pumps, design of wells, and piping configuration to the treatment compound; design of the treatment compound and selection of carbon treatment vessels, affiliated pumps, and specifying electrical requirements; and conceptual equipment layouts and locations per client considerations.

Mendocino County, Composting Operations and Storm Water Retention Design, Ukiah, CA. The design was provided for a private composting facility and included a redesign of an existing facility's compost operations system. The work required review of operations and design of an ASP layout based upon operational needs of the facility. As part of this work, Mr. Erickson also designed berms and subsurface drainage features to collect and convey storm water from the composting areas to an onsite retention basin for reuse in composting operations. This work also required CQA oversight for the construction of the retention basin. Project work also included client and regulatory interaction, and research and work with other compost system subcontractors to determine water needs for the compost facility.

Los Angeles County, Composting Operations Design and Biogas Facility, Lancaster, CA. As part of this design, Mr. Erickson provided conceptual designs of composting operational areas for a biogas project. Work included determining ASP areas, curing ASP zones, civil design of associated concrete pads, and sizing of screened material and transfer storage areas to be used for a new biogas facility. The work also included locating and sizing of a storm water basin and irrigation and fire protection storage tanks for the project. All work was performed under direction of a senior technical engineer and the project

County of Santa Barbara, Storm Water Best Management Practice (BMP) Design, Santa Barbara, CA. The design was performed for a site in Santa Barbara County to address storm water concerns of runoff from a recycling and transfer station facility. Work included, but was not limited to, review of analytical information and selection of treatment devices; design of an interceptor trench to address Total Suspended Solids (TSS); providing hydraulic modeling for the entire site; relocation of green waste areas; and, providing project management and direct client correspondence.

City of Burbank, Non-Water Release Estimates, Burbank, CA. This work was performed for the City of Burbank for a landfill that was updating its Joint Technical Document (JTD). Work included providing estimates of closure cover and LFG system components that could be damaged from a foreseeable non-water causal event; and, writing the deliverable and providing

labor and equipment surcharge costs associated with the identified work. Work was completed under the direction of an SCS Project Director.

LFG Design Changes and Construction Management, CA. Project work included providing design changes and construction management activities for an LFG migration control system and a new GCCS at a site in Northern California. Mr. Erickson completed scheduling, tracking of construction submittals, and review/approval of construction change orders. LFG system configuration and design changes were also handled by Mr. Erickson, with oversight from an SCS Senior Design Engineer.

LFG Design Expansion, CO. Work involved design of a significant LFG system expansion (approximately 100 wells, and affiliated header and lateral piping) for an active landfill anticipated to generate 6,000 cubic feet per minute of LFG. Work included sizing of headers and laterals, performing headloss calculations for both existing and expanded system configurations, and modification to the existing LFG system components to allow for expansion to occur during system operation. Work was conducted under oversight from a Senior SCS Technical Engineer.

LFG Design, Mexico and Brazil. Work involved design of entire LFG systems for closed landfills throughout Mexico. Mr. Erickson performed headloss and pipe sizing calculations as part of this work, along with component selection for every facet of the LFG GCCS. He also performed siting and design review for new landfills for disposal of paper and steel manufacturing byproducts for two sites in Brazil, and provided direction to Brazilian Staff Engineers, held pre-construction meetings, and produced client and staff correspondence in Portuguese. This international work was provided for a total of five sites.

CQA Monitoring for Landfill Capping, CA. Work included coordination of general contractors, documentation of construction activities, scheduling technicians, project management, conducting construction progress meetings, and reviewing soil testing results for materials used in prescribed and alternate landfill covers. Work also included review and writing of CQA plans and construction completion reports for several landfill sites.

Landfill Gas-to-Energy (LFGE) Design Assessment and LFG Well Expansion, CA. Work included performance of an in-depth assessment of LFG well data to select existing site wells that would be beneficial to a proposed separate LFGE facility for the site. Mr. Erickson designed a new expansion of LFG wells to supplement existing wells, new condensate sumps, header and lateral piping, and piping connection modifications to provide an independent gas collection system for the proposed LFGE facility.

LFGE Feasibility Study, CA. Work entailed providing a conceptual design for an active site to provide gas for a prospective LFGE facility. Design work included sizing of blowers, review of LFG generation modeling, and review of proformas to assess the potential for an LFGE facility at the site. Additional work performed for the site included providing engineering consulting services for the construction of an interim carbon abatement system to address LFG migration prior to installation of a comprehensive GCCS for the site.

CQA Monitoring and Assistance to County Engineer for an LFG System, CA. Work included providing LFG system modifications to a new BFS for a site in Central California under the

direction of the County Engineer. Specifically, connection of gas conveyance piping was reconfigured to adequately connect blower piping to a new flare, and required modifying a stainless steel pipe between control system components. Work also required design and connection of the existing LFG well network and piping to the new extraction system, including connecting to an interim abatement system to allow for unimpeded operation of the new GCCS. Interim system abatement was accomplished via use of granular activated carbon. Other assistance provided included determination and scheduling for high-priority items and direct correspondence with the County's Resident Engineer.

Landfill Cover Designs, Richmond, Merced, and Sacramento, CA. The most recent project required closure of a burn ash facility in Southern California that was located within the base of a river. Design aspects included research and generating profiles of the river section for a 100-year flow, as well as design of the landfill closure cover and associated drainage facilities. Grading determinations for this design were based on providing a closure cover that would be 5 feet above the 100-year flood level. General grading determinations for all sites were based on slope stability analysis. Landfill closure design work also included calculation of surface drainage volume to determine sizing of drainage structures (e.g., v-ditches and down drains). Mr. Erickson also provided technical specifications and designed soil toe-buttresses to provide adequate slope stability for landfill closure cover designs. Experience also included design of a roadway for tractor trailers for a landfill capping project in Richmond, and realignments of bench and service roads for a landfill closure project in Merced. In another closure design, sedimentation basins and force mains were sized and designed with the final cover for a site closure in Sacramento. Projects included a total of 10 sites.

Final Closure and Post-Closure Maintenance Plans, CA. Work on these projects included providing costs associated with these plans for various projects at three sites in Northern and Central California.

Conceptual Designs, CA. Work included conceptual designs for landfill expansion projects, LFG well expansions, condensate traps, and BFS locations prior to completing construction drawings. One landfill expansion conceptual design included expansion to an existing liner system within a canyon, and required appropriate set-backs from adjacent state waterways and faults, and the addition of a proposed Materials Recovery Facility (MRF). Other conceptual designs were performed for sites requiring treatment and/or handling of storm water.

Design Review of Landfill Liner Systems, CA. This work included extensive plan review, providing engineering alternatives, as applicable, and writing CQA Plans for landfill construction monitoring activities at four sites in Northern California.

GCCS Plans, CA. Work included writing GCCS plans and providing associated design and drafting for the sites. The plans required review of site reports and determination of flare and blower equipment used for each project for over 15 sites.

Air Compliance Assistance, CA. Mr. Erickson assisted SCS' permitting specialists on all required tasks, including California Environmental Quality Act (CEQA)-associated work, Startup, Shutdown and Malfunction (SSM) plans, Title V permit renewals, and other compliance reporting at approximately 10 sites in California.

Design of Storm Water Treatment Facilities, CA. Work required sizing drainage facilities, drop-inlets, and various basins for three sites in Northern California. Review of site operations, storm water BMPs, and surveying, and input to a Report of Waste Discharge were also performed with the design work. One site included a reduction of storm water outfalls and an infiltration basin to rectify industrial storm water-related issues. The second site design features for the facility included the use of a small sand filter over a drain inlet, and a small-scale infiltration swale in another site area. Another site required a large-scale sand filtration basin to treat industrial storm water generated from an MRF that was sized to handle approximately 6 cubic feet per second (cfs) of runoff that was impacted with metals and had high Biological Oxygen Demand (BOD), Chemical Oxygen Demand (COD), and TSS. The design included primary treatment (settling tank with overflow capability) and retrofitting to an existing oil/water separator prior to discharge to the sand filter basin. Work included providing technical specifications, CQA oversight, contractor selection, review and approval of construction submittals, and coordination with a surveyor and geotechnical firm.

Design of Groundwater Treatment System, Modesto, CA. Work involved replacement of an existing air stripping system and groundwater recovery wells. The design was completed for the state and involved a 450-gallon-per-minute (gpm) air stripping tower, affiliated controls, and two recovery wells, and was aimed at removal of residual volatile organic compounds (VOCs) and providing hydraulic control of extracted groundwater prior to migrating off site. Mr. Erickson provided all aspects of the design, including initial field visits to providing conceptual and final system design with oversight from an SCS Senior Technical Engineer. The system was further designed to allow the existing treatment system to be operational while the new system is being constructed, including retrofitting aspects and complete automated controls to allow for easier long-term site operation.

Storm Water Pollution Prevention Plans (SWPPPs), CA. Work was provided for both general construction and industrial permits, and included writing of plans and designing erosion control features to be implemented at various sites. SWPPP work performed by Mr. Erickson was completed to meet the 2015 Industrial General Permit (IGP) for landfill facilities that required updated SWPPPs to meet new permit requirements. Specifically, the plans included design of pre- and post-construction BMPs under direction of and approval from the Qualified Storm Water Director (QSD). Construction SWPPP duties included working directly with clients and contractors to plan and implement BMPs (e.g., diversion berms, velocity dissipation devices, etc.) for excavation and construction performed for multiple-acre sites. BMPs were also established for construction staging areas to address soil stockpile and other materials issues to ensure that receiving waters are not impacted by construction activities. As part of the work (construction and industrial SWPPPs), Mr. Erickson provided data entry for clients so that a Notice of Intent (NOI) was initiated via use of the State Water Resource Control Board's SMARTS® system. Once work was completed under construction activities, duties included closing the site's use of the general permit to receive a Notice of Termination (NOT). Work was performed for various sites in the San Francisco Bay Area, Central Valley, and Southern California.

ARTHUR T. VIOLENTA

Education

BS – Civil Engineering, Feati University, 1981
Silicon Valley College, Architectural Drafter Design, 1976

Professional Licenses

Registered Professional Engineer – Manila, Philippines
Registered Master Plumber – Manila, Philippines

Specialty Certifications

OSHA 40-Hour Health and Safety Training
AutoCAD 3D Civil

Affiliations

American Society of Civil Engineering (ASCE)

Professional Experience

Mr. Violenta has over 35 years of professional engineering design and construction experience. He specializes in planning, surveying, design, and structural detailing of landfills; the preparation of road improvement plans; and road construction. He has prepared deigns for a number of composting facilities in California and Colorado. He is skilled in the use of graphics and design programs, such as AutoCAD 3D Civil, gINT, ArcGIS, Photoshop, Canvas, Corel Draw, and various Microsoft software programs.

Composting

County of Sonoma, Compost Facility Design, Sonoma County, CA. Mr. Violenta prepared a compost deck base grade plan, including engineering design layout, as well as engineering plans for first flush capture for the Sonoma Central Disposal Site in Sonoma County, CA.

Oroville Landfill Properties, Compost Facility Design, Oroville, CA. Mr. Violenta prepared compost facility layout and processing plans, storm water Best Management Practices (BMPs), and CQA during construction for a 20-ton-per-day (tpd) open windrow composting facility in Oroville, CA.

Johnson Controls, Inc. Compost Facility Design, Fort Carson, CO. Mr. Violenta prepared design plans for a 10-tpd compost/materials recovery facility (MRF) in Fort Carson, CO.

West Power, Inc., Compost/Energy Facility Design, Palo Alto, CA. Mr. Violenta prepared design plans for a compost/energy facility in Palo Alto, CA.

Shafter Wasco Sanitary Landfill Compost Facility Design, Kern County, CA. Mr. Violenta prepared design plans for Compost/materials recovery facility (MRF) in Kern County, CA.

Napa Recycle & Waste service Compost Facility Design, Napa County, CA. Mr. Violenta prepared design plans for Compost/materials recovery facility (MRF) and CASP Leachate Sumps Layout in American Canyon, CA.

Landfill

Potrero Hills Landfill GCCS Improvement 2017 LFG Well Installation Design, Suisun City CA. . Mr. Violenta prepared the final design for construction and installation of the gas wells and replacement of 18" diameter pipe to 30" diameter pipe.

City of Sacramento, Engineering Services, Sacramento, CA. Mr. Violenta was involved in preparation of the design and development of a work plan to detect landfill gas (LFG) in subsurface soils surrounding the landfill, in accordance with California Code of Regulations (CCR) Title 27. He performed oversight of LFG extraction wells and replacement of gas probes, implementation of test methodology, and development of installation details and a health and safety (H&S) plan for field activities. He also oversaw installation of piezometers and monitoring wells.

Prepare GCCS design for 2017 of West Side of the Landfill and also Dellar Property.

L&D Landfill, Partial Final Closure and Post-Closure Maintenance Plan Design, Sacramento, CA. Mr. Violenta was involved in preparation of the partial final closure and post-closure maintenance plan. Design of the final liner and cover system included geosynthetic and soil layers, final grading, and surface water drainage control ditches. He provided oversight of the installation of groundwater well extensions and performed groundwater well development in existing wells.

Otay Landfill, Chula Vista, CA. Mr. Violenta was involved in preparation of the fill sequences and volume calculation of the site. He performed as Quality Assurance in the preparation of the well schedules to verify the locations and elevation based on the survey points.

Sycamore Landfill, Santee, CA. Mr. Violenta was performed as Quality Assurance in the preparation of the well schedules to verify the locations and elevation based on the survey points. He is involved to double check the well depth and the liner.

West Sacramento Area Flood Control Agency (WSAFCA), Phase I and Phase II Environmental Site Assessments (ESAs), West Sacramento, CA. As a project team member, Mr. Violenta was involved in the remediation Phase I and Phase II ESAs, including confirmation soil sampling, groundwater sampling, and well development.

County of Butte, Work Plan Design, Oroville, CA. Mr. Violenta prepared the work plan for installing a replacement lysimeter, and provided construction quality assurance (CQA) oversight during installation. He collected samples of leachate as well as septage supernatant pond and MD-4D parameter readings.

Design and Final Plans for Industry Business Center (IBC) Eastside Mass Grading, Riverside, CA. Mr. Violenta was involved in preparation of the design and final plans for IBC-East mass grading. He designed the waste placement plan and remedial surface for waste excavation cross sections and details.

Final Design of Hawthorne Army Depot Landfill Liner, Hawthorne, NV. Mr. Violenta was involved in preparation of the design, final plans, and specifications for the final liner and cover system, which included geosynthetic and soil layers to meet Subtitle D requirements. The work also included grading for surface water drainage control ditches and other control features.

Final Design of Teichert Perkins Concrete Process Water Containment. Mr. Violenta was involved in preparation of the design, final plans, and specifications. The final liner and cover system included geosynthetic and soil layers. He also designed a lined overflow containment pond to handle liquids during construction.

Final Design of US Pipe Storm Water Detention Plan. Mr. Violenta was involved in preparation of the design, final plans, and specifications for the final liner and cover system, which included geosynthetic and soil layers. He also designed the detention pond and final grading for the site.

LFG Well Installation Design for Various Sites, CA. The sites included Eastlake, Neal Road, Avenal, Fairmead, Ostrom Road, and Pacheco Pass Landfills. Mr. Violenta prepared the final design for construction and installation of the gas wells.

Western Regional Sanitary Landfill and Air Monitoring Project. Mr. Violenta collected air samples and performed data entry and equipment maintenance for an active Class II and Class III landfill.

LFG in Vadose Zone for Fairmead, Clovis, Potrero Hills, Geer Road, and Highway 59 Landfills, CA. Mr. Violenta was involved in addressing LFG in the vadose zone near these landfills, which required design, installation, and reporting for vadose zone extraction wells to remove the LFG from subsurface soils and volatile organic compounds (VOCs) from groundwater.

LFG Well Installation, Various Sites, CA. Mr. Violenta managed LFG well installation for sites including Potrero Hills, Carpenter Road, Avenal, Geer Road, Fink Road, Forward, Clovis, YSDI Marysville, Buena Vista, and Cortina Landfills. He observed and documented LFG well installation.

Partial Final Closure Mono-Cover Construction for Highway 59 Landfill, Merced, CA. Mr. Violenta prepared plans, specifications, and estimates for a 30-acre partial final closure for a Class III landfill Phase V at Highway 59 Landfill. He prepared a partial final closure and post-closure maintenance plan for the portion of the landfill undergoing closure.

Final Design for Cortina Landfill, Williams, CA. Mr. Violenta was involved in preparation of the cell design, final plans, and specifications for the liner and final cover system, which included geosynthetic and soil layers to meet Subtitle D requirements. He also managed grading for surface water drainage control ditches and other control features.

Construction Oversight for Knight's Landing Burn Dump Site, CA. As Project Manager, Mr. Violenta managed a burn dump closure. The project included preparation of the final closure plan, plans and specifications, engineer's estimate, and CQA observation and testing during construction.

Final Closure Mono-Cover Construction for Highway 59 Landfill, Merced, CA. Mr. Violenta was involved in preparation of the final closure plan, and plans and specifications for Phases I to IV. The final cover system included consolidation of waste within a reduced footprint and a high-density polyethylene (HDPE) barrier placed over smooth graded waste and soil. He also managed grading for surface water drainage control ditches and other control features.

Drainage Design for Oroville Landfill Properties, Oroville, CA. Mr. Violenta assisted in developing engineering design drawings and preparing calculations of HydroCAD analysis on the drainage design.

Building Sensors Monitoring for Cozzitorto Auto Body Shop and Skyking, Sacramento, CA. Mr. Violenta performed monitoring of building sensors and downloaded data from Hyperlogger every month. He prepared reports for the Lead Enforcement Agency (LEA) on a monthly and quarterly basis.

Inspection and LFG Well Installation for L&D Landfill, Sacramento, CA. Mr. Violenta performed inspections for the site flare station pad and provided oversight of sample collection/analysis of the core samples. He observed the pile foundation installation and collected concrete samples. He also provided oversight of LFG well installation and abandonment of existing wells.

LFG Reporting for 14th Avenue, Sacramento, CA. Mr. Violenta was responsible for regular LFG reporting submitted to the LEA. He conducted statistical analysis of the LFG analytical data to comply with regulatory requirements.

Engineering Drawings for Magnolia Terrace, Chesapeake, River Heights, and Monte Cristo Subdivisions. Mr. Violenta assisted in the preparation of engineering drawings related to the site plan, improvement plans, tentative map, and final maps. He designed the final grading, sewer, water, and erosion control features; provided calculations for lot closure; and prepared final documents.

Designs, signage, structural detailing and calculations, footings, and columns have been conducted and/or provided for the following clients:

- IKEA Signage.
- Oakland Airport, Interior and Exterior Signage.
- Sacramento Airport Signage.
- Sunset & Vine Signage (Hollywood, CA).
- Staples Arena (Los Angeles, CA).
- Off the Page, Disneyland (Los Angeles, CA).

KYLE T. KRANZ

Specialty Certifications

8-Hour Hazardous Site Supervisor Training, OSHA 29 CFR 1910.120
40-Hour Health and Safety Training, OSHA 29 CFR 1910.120
20-Hour Confined Space Training, OSHA 29 CFR 1910.146
Certified Polyethylene Fabrication Specialist
Certified Competent Person Awareness for Trench/Excavation Safety, OSHA CFR 1926
John Zink Flare School

Professional Experience

Mr. Kranz has 36 years of experience in the environmental/pollution control field, with specific emphasis on landfill gas (LFG) migration control and recovery. His experience on LFG projects includes construction; routine operation, monitoring, and maintenance; non-routine repair and emergency call-out response; operation and maintenance of recovery facilities; surface sampling for VOC emissions; and groundwater and soil sample collection/monitoring.

Mr. Kranz is responsible for all phases of project work, including development, management, and technical oversight of field operations; preparation and review of reports; budgeting; and client contact and quality control. He also oversees installation of extraction wells, monitoring wells, condensate collection/containment facilities, leachate control/disposal facilities, blower/flare stations, and energy recovery plants. He has experience in operating heavy equipment such as excavators, loaders, backhoes, bulldozers, man lifts, cranes, water trucks, and dump trucks. He is experienced in surveying, establishment of grades, preparation of as-built documentation, and compilation of field notes.

Mr. Kranz' experience with LFG recovery systems includes maintenance and adjustment of well fields, compressors, boilers and flares, and distribution pipelines. He also works on remediation projects. These include underground storage tank (UST) excavation and removal projects; chemical and petroleum contaminated soil excavation, transportation, and disposal; and construction of soil vapor extraction systems (VES).

As the western regional construction manager, Mr. Kranz has determined methods of construction and estimating strategies for numerous landfill projects. His project management responsibilities include scheduling, field staff supervision, cost control, and contract administration.

Landfill Gas Collection and Control Systems Construction, Various San Bernardino County Landfills, CA, for San Bernardino County Dept. of Public Works, Solid Waste Management Division. In support of the active SCS' Field Services' Operations, Monitoring and Maintenance contract, Mr. Kranz has directed the construction installation and repair work at the various San Bernardino County landfills. His tasks include construction cost estimating, coordination of materials, design engineers, labor crews, equipment (construction and health and safety), subcontractors (drilling, electrical and other), and CQA (construction quality assurance) personnel with the site's operations personnel and their contractors. His participation in the

preparation of construction-level designs provides smooth integration from conceptual to final design and project construction.

Landfill Gas Collection and Control Systems Construction, Various Orange County Landfills, CA, for Orange County Waste and Recycling Department (OCWR). In support of the active SCS' Field Services' Construction Services contracts, Mr. Kranz has directed the construction installation and repair work at the various northern Orange County landfills. His tasks include construction cost estimating, coordination of materials, design engineers, labor crews, equipment (construction and health and safety), subcontractors (drilling, electrical and other), and CQA (construction quality assurance) personnel with the site's operations personnel and their contractors. His participation in the preparation of construction-level designs provides smooth integration from conceptual to final design and project construction.

Landfill Gas Collection and Control Systems Construction, Various Waste Management Landfills, CA and AZ, for Waste Management Inc. (WMI). In support of the active SCS' Field Services' Operations, Monitoring and Maintenance contracts, Mr. Kranz has directed the construction installation and repair work at the various WMI owned landfills in California and Arizona. His tasks include construction cost estimating, coordination of materials, design engineers, labor crews, equipment (construction and health and safety), subcontractors (drilling, electrical and other), and CQA (construction quality assurance) personnel with the site's operations personnel and their contractors. His participation in the preparation of construction-level designs provides smooth integration from conceptual to final design and project construction.

Landfill Gas Collection and Control Systems Construction, Chiquita Canyon Landfill, Castaic, CA, for Waste Connections Inc. (WCI). In support of the active SCS' Field Services' Operations, Monitoring and Maintenance contracts, Mr. Kranz has directed the construction installation and repair work at the Chiquita Canyon landfill. His tasks include construction cost estimating, coordination of materials, design engineers, labor crews, equipment (construction and health and safety), subcontractors (drilling, electrical and other), and CQA (construction quality assurance) personnel with the site's operations personnel, their on-site electrical power generation associate and their contractors. His participation in the preparation of construction-level designs provides smooth integration from conceptual to final design and project construction.

Chris Marino

Project Engineer

IO Environmental & Infrastructure Inc.

EXPERIENCE WITH OTHER FIRMS

- 2016-IO Environmental & Infrastructure, Inc.
- 2006-2016 CME Associated, Inc.

EDUCATION

- BS – Geology, Rutgers, The State University of New Jersey

CERTIFICATIONS

- 40-HOUR HAZWOPER, 2006
- ANNUAL REFRESHER TRAINING 2016
- OSHA 30-HOUR
- EM 385-1-1

POSITION QUALIFICATIONS

- Soil and groundwater investigations
- Drilling, well installation
- Groundwater, soil and soil gas sampling
- Landfill sampling
- Remediation system O&M
- Exceptional communication skills
- Mini Rae PID and VRae
- Handheld XRF
- Horiba U-52 and YSI 6920 Water Quality Meters
- Low flow QED Bladder Pump, Peristaltic and Grundfos Groundwater Sampling Equipment
- In-Situ Piezometers and WinSitu Software
- Dräger Accuro Hand Pump Air Monitoring Equipment
- Surfer Groundwater Contour Modeling

EXPERIENCE AND QUALIFICATIONS

- 10 years of professional environmental experience with projects including Superfund sites, landfills, vapor intrusion projects, and compliance sites. hydrogeology and geology conducting, managing, and supervising staff both in the office and in the field
- Performed in all stages of site investigations and remediation. Conducted air permit compliance and post-closure monitoring at several sanitary landfills.
- Extensive experience performing soil and groundwater sampling.

RELEVANT PROJECTS

- **Remedial Investigation-** Provided field and office support for Project Managers and Licensed Site Remediation Professionals. Investigated over fifty municipal, industrial, and private properties throughout New Jersey. Performed and managed subsurface investigations including environmental soil borings, groundwater monitoring well installations, collection of soil, soil gas, and groundwater samples. Managed soil remediation activities including clean soil capping, excavation, and blending at sites impacted by underground storage tanks, industrial, and agricultural operations. Prepared reports and tables for Soil Investigation and Remedial Investigation/Action Reports.

- **Sanitary Landfill Monitoring -** Managed Sanitary Landfill monitoring activities. Operation and maintenance of gas extraction system flare and monitoring the landfill gas wells. Performed periodic methane gas surveys on the landfill surface and subsurface perimeter of the landfill. Collected leachate and groundwater samples in compliance with discharge permits. Collected landfill gas samples. Prepared Annual Compliance, Semi-Annual Deviation, and Biennial reports for the Title V operating permit.

- **Field/Construction -** Managed field operations for delivery of processed dredged material and soil from several sources for site remediation and wetlands restoration, managed site stockpiling, performed QA/QC sampling on site and at dredging facility. Coordinated with lab for daily 24hr turnaround time results and with contractor. Performed construction inspection for wetlands mitigation site for including excavation and plantings on several acres of a tidal mitigation site. Performed construction inspection for sport field improvements projects. Coordinated construction details, communicating and problem solving between contractors and clients.

- **Laboratory Manager -** Maintained the New Jersey laboratory permit for groundwater sampling 'analyze immediately' parameters including: pH, conductivity, turbidity, dissolved oxygen, and temperature. Prepared Standard Operating Procedures for equipment calibration. Performed annual proficiency testing reported to the NJDEP. Managed laboratory files for each project. Instructed employees on equipment calibration

Daniel R. Parker

Project Manager

IO Environmental & Infrastructure Inc.

EXPERIENCE WITH OTHER FIRMS

- 2013-Present
  IO Environmental & Infrastructure, Inc.
- 2008-2013
  Land Care Solutions, Inc.
  CEO
- 2005-2008
  Natures Image, Inc.
  Regional Manager
- 2002-2005
  TruGreen LandCare
  Project Manager

EDUCATION

- Studies in Systemic Biology, Business Management
  Cal Poly University 2001-2002
  Cuyamaca College 2004-Current

ACTIVE REGISTRATIONS

- CPM
- OSHA HAZWOPER-40 hr.

POSITION QUALIFICATIONS

- Habitat Restoration expertise
- 8 years on environmental projects with increasing responsibility
- 12 years managing multiple projects at multiple locations
- QA and project review expertise
- Familiar with contracting mechanisms and task order procedures
- Strong fiscal management capabilities
- Effective team leader and organization manager
- Exceptional communication skills

EXPERIENCE AND QUALIFICATIONS

- 20 years professional experience in the landscape and habitat restoration industry including plant installation, pesticides, irrigation, turf, heavy equipment operations and personnel management.
- Results-driven environmental manager with experience in diverse settings involving a wide range of concurrent environmental issues at multiple sites.
- Proven ability to manage large projects, foster a team atmosphere, and focus all resources to achieve the objectives within the targeted time and cost.
- Experience leading multi-discipline teams in large scale environmental investigation, remediation, and construction management projects.
- Broad administration management skills including estimating and negotiating project contract modifications, financial/budget and vendor accountability, payroll reporting, scheduling, and implementation of personnel safety programs.

RELEVANT PROJECTS

- **Senior Project Manager/ CEO (LCS) Chino Hills State Park Restoration Project**, California Department of Parks and Recreation Restore and Creation of 1.5 acres of wetland/ southern williow scrub/ripiarian/ sycamore woodland and 1.0 acres of sage scrub vegetation.
- **Regional Manager (Natures Image Inc.) 2006- 2008 –** Managed, coordinated, and provided technical support to create and maintain over 500 acres of sensitive habitat in San Diego, San Bernardino, and Imperial counties. Supervised the removal, treatment, maintenance, inspection and evaluation of invasive plant species, such as tamarix, conium, and arundo donax, in a wide range of critical/ sensitive environments. Supported the ongoing monitoring of wildlife studies, surveys, and activities to ensure program quality, effectiveness, technical adequacy. Evaluated information and data on damage hazards caused by various wildlife species to sensitive habitats.
- **Project Manager, Branch Safety Coordinator (TruGreen Landcare) 2005-2006 –** Managed a 1.4 million dollar contracts portfolio including Barona Ranch and Resort, MCAS Miramar, and the San Diego Jewish Academy.
- **Project Manager, Branch Safety Coordinator (Miranda's Landscape) 1994-2005** – Managed various military service contracts that include McConnell AFB, Wichita, KS, Feb. 2005 to Apr. 2006, S.W. Division Naval Complex, San Diego, CA, Feb.2001 to Feb. 2005, Davis-Monthan AFB, Tucson, AZ, Mar.2000 to Feb. 2001, Terminal Island C.G. Complex, Long Beach, CA, Apr.1998 to Feb.2000.
- Active Duty United States Air Force 1991 -1994-Assignments include California, Iceland, Saudi Arabia (Desert Storm), North Dakota, and Texas.

Appendix C

Gore Cover Technical Data Sheet

TECHNICAL DATA SHEET

For the GORE® Cover Laminate – for application in the biological waste treatment

1. LAMINATE DESCRIPTION:

FACE FABRIC:	Material:	100% PES
	Weave. Plain	
FUNCTIONAL LAYER:	GORE® Cover ePTFE Membrane	
BACK FABRIC:	Material:	100% PES
	Weave. Plain	

2. LAMINATE FUNCTION:

A. Mass per unit area[1] [g/m²]: 470 ± 20

(acc. to EN 12127:1997 (identical with ISO 3801)

B. Air permeability [m³/m²h] 2,0 – 6,0

(acc. to EN ISO 9237:1995, test pressure 200 Pa)

C. Resistance against Water Vapour Transmission:

[m²Pa/W]: ≤ 19,5

(acc. to EN 31092 :1993 (ISO 11092 :1993))

Simple, but very fast measurement of textiles or membrane laminate covers to determine the water vapour permeability under laboratory conditions (isothermal measurement at 23°C, humidity gradient 80%).

Please note: These laboratory conditions are not equivalent to field conditions!
R_{et} Cup value is the calculated resistance of the Laminate against the diffusive permeation of water vapour through the Laminate.
Long term field-use of the laminate revealed no process relevant change.

[1] This specification relates to the weight of a new textile cover per square meter (dry condition). In wet condition the weight can increase due to the capillary water in the textile (face and back fabric).

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D. Burst Resistance

Initial burst resistance [N]: (acc. to ISO 3303:1990 Method A)	≥ 5.000
After 4 years in use the GORE® Cover shows burst resistance of: (acc. to ISO 3303:1990 Method A)	≥ 1.500

E. Water Penetration Resistance [Pa] (or Water Column [m]) > 50.000 (or > 5,0 m)

(acc. to EN 20811:1992 (ISO 811))

(Increase of pressure: 6000 Pa/min)

F. Durability

Tightness against Permeation by Chemical Substances acc. DIN 32763 (funnel method):

NaOH solution 40 %	passed
Nitric Acid 65 %	passed
Hydrochloric Acid 32 %	passed
Sulphuric Acid 24 %	passed

The laminate offers tightness and durability against nearly all chemical solvents. This results from the remarkable chemical durability of the GORE® Cover ePTFE (Polytetrafluoroethylen) Membrane.

Due to the long term stability of PTFE the membrane will not be degraded by microbiological processes. Therefore no anti microbial finishing is necessary!

Note:

The technical data of this document are Gore internal lab-data and measured under new conditions. These results are not allowed to be taken over into a specification without prior consultation with W.L. Gore & Associates.

Appendix D

General Plan for Testing and Start Up

General Plan for Functional Testing and Start-Up

Start-up will generally follow the Gore®/SG operating manuals, which is described below.

Phase I

1. SG Mobile™ control box in position and power connected:

    a. Attach Y-tube to control box.
    b. Attach flex-tube to Y-tube.

2. Mark rectangular windrow shape and on-floor pipe layout with cones or spray paint:

    a. Length: 100 feet.
    b. Width: 26 feet.
    c. Double pipe: 2 straight lines starting at flex pipe to end of heap rectangle 4 feet apart.

3. Place a 2- to 6-inch base layer of shredded green waste or wood chips or over-screen material on the ground for the pipe placement.

4. Place the on floor aeration pipes and make connection to the flex pipe.

5. Mix Material according to Mix Recipe recommendations:

    a. To be discussed during installation and training.
    b. Mix Recipe subject to change during the year due to seasonal fluctuations.

6. Turn the blower to “ON” position on SG Mobile™ control box.

7. Build a triangular windrow on the Aeration Pipes starting at the end closest to the SG Mobile™ control box.

    a. Length: 100 feet (30m).
    b. Width: 26 feet (8m).
    c. Height: 10 to 12 feet (3 to 3.5m).
    d. Build the heap “as tall as possible” creating a uniform trapezoidal shaped heap.

8. Cover the heap with the GORE® Cover.

9. Place the perimeter weighting system (fire hose/sand bags/weighted pipe) on the yellow rim material of the cover and secure it with the black Velcro loops.

10. Place the oxygen and temperature sensor in the probe port inlets on top of the GORE® Cover.

    a. O_2 Probe: Place on 45° angle with the probe head ~6 to 12 inches above the cover so that the vent hole is unobstructed. Secure with lanyard.

b. Temp Probe: Place vertical into heap with probe head directly push down to cover surface. Secure with lanyard.

c. Secure probe cables to cover using Velcro probe straps.

11. Turn the bower to "AUTO" position on control box.

a. Open the Control Software and Start Control system on Oxygen Control as discussed during installation and training.

b. Optional control to Interval Control.

12. Let the heap operate for 21 to 28 days.

13. Monitor daily the Control data.

14. Check daily probes for correct positioning, and re-position if required.

After Phase 1:

1. Stop Control software. Do not turn off the power to the SG Mobile™ control unit.

2. Take out the probes from the heap. Do not unplug or disconnect the probes. Place on probe holders on SG Mobile™ control box.

3. Take off the perimeter rim weight.

4. Turn the blower to "ON: position on SG Mobile™ control box.

5. Uncover the windrow.

6. Disconnect the aeration pipes; pull them out form the heap.

7. Turn the heap with the front end loader, re-cover the heap with the GORE® Cover, place the rim weight and set in the sensors.

Samples analysis recommended:

- Input material – individual feed stocks.
- Mixed material.
- Phase 1 material.

Phase II

1. Place a 2- to 6-inch base layer of shredded green waste or wood chips or over screen material on the ground for the pipe placement.

2. Place the on floor aeration pipes and make connection to the flex pipe.

3. Turn the blower in “ON” position on control box

4. Build a triangular windrow on the aeration pipes:

   a. Length: 100 feet (30m).
   b. Width: 26 feet (8m).
   c. Height: 10 to 12 feet (3 to 3.5m).

5. Cover the heap with the GORE® Cover.

6. Place the weighting system (fire hose/sand bags/weighted pipe) on the yellow rim material of the cover and secure it with the black Velcro loops.

7. Place the oxygen and temperature sensor in the probe inlets on top of the GORE® Cover.

   a. *Attention*: Leave the vent hole of the O_2 sensor above the inlet 6 to 12 inches.

8. Turn the bower to “AUTO” position on control box.

9. Open the Control Software and –Re-Start Control system on Oxygen Control.

10. Optional control to Interval Control.

11. Let the heap operate for 14 days.

12. Monitor daily the Control data.

After Phase 2:

1. Stop Control software. Do not turnoff the power to the SG Mobile™ control unit.

2. Take out the probes from the heap. Do not unplug or disconnect the probes. Place on probe holders on SG Mobile™ control box.

3. Take off the rim weight.

4. Uncover the windrow.

5. Disconnect the aeration pipes; pull them out form the heap.

6. Turn the heap with the front end loader, re-cover the heap with the GORE® Cover, place the rim weight, and set in the sensors.

Samples analysis recommended:

- Phase 2 material.

Phase III

1. Place a 2- to 6-inch base layer of shredded green waste or wood chips or over screen material on the ground for the pipe placement.

2. Place the on floor aeration pipes and make connection to the flex pipe.

3. Turn the blower in "ON" position on control box.

4. Build a triangular windrow on the aeration pipes:

    a. Length: 100 feet (30m).
    b. Width: 26 feet (8m).
    c. Height: 10 to 12 feet (3 to 3.5m).

5. Cover the heap with the GORE® Cover.

6. Place the weighting system (fire hose/sand bags/weighted pipe) on the yellow rim material of the cover and secure it with the black Velcro loops.

7. Place the oxygen and temperature sensor in the probe inlets on top of the GORE® Cover.

    a. *Attention*: Leave the vent hole of the O_2 sensor above the inlet 6 to 12 inches.

8. Turn the bower to "AUTO" position on control box.

9. Open the Control Software and Re-Start Control system on Oxygen Control.

10. Optional control to Interval Control.

11. Let the heap operate for 14 days.

12. Monitor daily the Control data.

After Phase 3:

Stop Control software. Do not turn off the power to the SG Mobile™ control unit.

1. Take out the probes from the heap. Do not unplug or disconnect the probes. Place on probe holders on SG Mobile™ control box.

2. Take off the rim weight.

3. Uncover the windrow.

4. Disconnect the aeration pipes; pull them out form the heap.

5. Turn the heap with the front end loader, re-cover the heap with the GORE® Cover, place the rim weight, and set in the sensors.

Samples analysis recommended:

- Phase 3 material.

Screening

1. Screen size depends on end product quality requirements.

Samples analysis recommended:

- Screened material.

Storage

1. To be defined locally by end user to meet specified finished product quality.

Samples analysis recommended:

- Storage material prior to sale.

Appendix E

Alternate Mobile Winding Machine

Appendix E

Alternate Mobile Winding Machine

Power Winding Machine: "PWM-E"

The Power Winding Machine (PWM) is a self-propelled machine driven by an operator and used to deploy the cover during heap construction and deconstruction. The PWM is designed and built specially for the Gore® Cover system for heaps 26 feet (8m) in width and up to 12 feet (3.5m) in height. Heaps or Bunker must have minimum 6 feet (2m) driving space for the PWM. Upon delivery SG will send technicians to construct the PWM at the compost site and conduct training on operations and maintenance. An Operating Manual will also be provided along with a troubleshooting guide. The PWM meets all California emission control standards and is capable to operate in extreme hot or cold climates. For the purpose of calculating power consumption, it has been Gore experience that the PWM can deploy a cover for heap construction and deconstruction within a 10 minute or less time period. Maintenance can be accomplished locally.

For this project, SG is supplying the "PWM-E" electric-powered mobile winding machine:

- For use with Gore® Cover Standard Heap or Bunker Design.
- One Mobile Winder which is able to handle the width of the Gore® Cover selected.
- Self-Propelled unit able to deploy or remove Gore® Cover in under 10 minutes.
- Power by electric motor.
- Includes charging station.

The PWM 10E is using a battery with following key data:

- 48 V 5 PzV 400, 400 Ah.

Charger demand:

- 375-480V/3,9KvA/160A.

Power Winding Machines for handling Gore® Cover

Appendix F

Additional Details of the Composting System

Appendix F

Additional Details of the Composting System

Typical operating schedule:

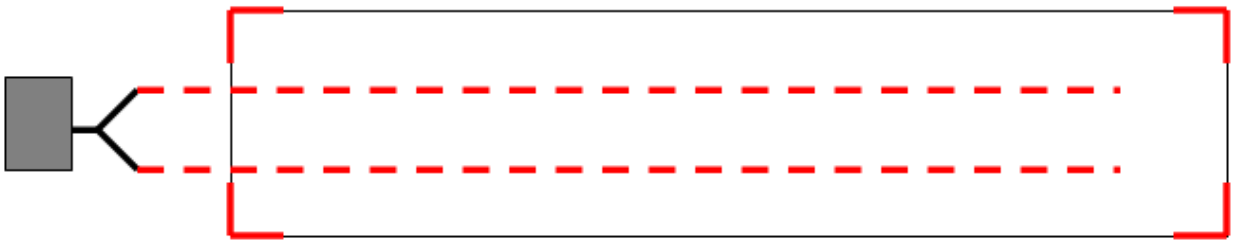
Phase I

1. SG Mobile™ control box in position and power connected:

   a. Attach Y-tube to control box.
   b. Attach flex-tube to Y-tube.

2. Mark rectangular windrow shape and on-floor pipe layout with cones or spray paint:

   a. Length: 100 feet.
   b. Width: 26 feet.
   c. Double pipe: 2 straight lines starting at flex pipe to end of heap rectangle 4 feet apart.



3. Place a 2- to 6-inch base layer of shredded green waste or wood chips or over-screen material on the ground for the pipe placement.

4. Place the on floor aeration pipes and make connection to the flex pipe.

5. Mix material according to mix recipe recommendations:

   a. To be discussed during installation and training.
   b. Mix recipe subject to change during the year due to seasonal fluctuations.

6. Turn the blower to “ON” position on SG Mobile™ control box.

7. Build a triangular windrow on the aeration pipes, starting at the end closest to the SG Mobile™ control box.

   a. Length: 100 feet (30m).
   b. Width: 26 feet (8m).
   c. Height: 10 to 12 feet (3 to 3.5m).
   d. Build the heap “as tall as possible,” creating a uniform trapezoidal shaped heap.

8. Cover the heap with the Gore® Cover.

9. Place the perimeter weighting system (fire hose/sand bags/weighted pipe) on the yellow rim material of the cover and secure it with the black velcro loops.

10. Place the oxygen and temperature sensor in the probe port inlets on top of the Gore® Cover.

    a. O_2 Probe: Place on 45° angle with the probe head ~6 to 12 inches above the cover so that the vent hole is unobstructed. Secure with lanyard.

    b. Temp Probe: Place vertical into heap with probe head directly push down to cover surface. Secure with lanyard.

    c. Secure probe cables to cover using Velcro probe straps.

11. Turn the bower to "AUTO" position on control box:

    a. Open the Control Software and Start Control system on Oxygen Control, as discussed during installation and training.

    b. Optional control to Interval Control.

12. Let the heap operate for 21 to 28 days.

13. Monitor daily the Control data.

14. Check daily probes for correct positioning, and re-position if required.

After Phase 1:

1. Stop Control software. Do not turnoff the power to the SG Mobile™ control unit.

2. Take out the probes from the heap. Do not unplug or disconnect the probes. Place on probe holders on SG Mobile™ control box.

3. Take off the perimeter rim weight.

4. Turn the blower to "ON" position on SG Mobile™ control box.

5. Uncover the windrow.

6. Disconnect the aeration pipes; pull them out form the heap.

7. Turn the heap with the front end loader, re-cover the heap with the Gore® Cover, place the rim weight, and set in the sensors.

Samples analysis recommended:

- Input material – individual feed stocks.
- Mixed material.
- Phase 1 material.

Phase II

1. Place a 2- to 6-inch base layer of shredded green waste or wood chips or over screen material on the ground for the pipe placement.

2. Place the on floor aeration pipes and make connection to the flex pipe.

3. Turn the blower in "ON" position on control box.

4. Build a triangular windrow on the aeration pipes:

   a. Length: 100 feet (30m).
   b. Width: 26 feet (8m).
   c. Height: 10 to 12 feet (3 to 3.5m).

5. Cover the heap with the Gore® Cover.

6. Place the weighting system (fire hose/sand bags/weighted pipe) on the yellow rim material of the cover and secure it with the black Velcro loops.

7. Place the oxygen and temperature sensor in the probe inlets on top of the Gore® Cover.

   a. *Attention*: Leave the vent hole of the O_2 sensor above the inlet 6 to 12 inches.

8. Turn the bower to "AUTO" position on control box.

9. Open the Control Software and Re-Start Control system on Oxygen Control.

10. Optional control to Interval Control.

11. Let the heap operate for 14 days.

12. Monitor daily the Control data.

After Phase 2:

1. Stop Control software. Do not turnoff the power to the SG Mobile™ control unit.

2. Take out the probes from the heap. Do not unplug or disconnect the probes. Place on probe holders on SG Mobile™ control box.

3. Take off the rim weight.

4. Uncover the windrow.

5. Disconnect the aeration pipes; pull them out form the heap.

6. Turn the heap with the front end loader, re-cover the heap with the Gore® Cover, place the rim weight, and set in the sensors.

Samples analysis recommended:

- Phase 2 material.

Phase III

1. Place a 2- to 6-inch base layer of shredded green waste or wood chips or over screen material on the ground for the pipe placement.

2. Place the on-floor aeration pipes and make connection to the flex pipe.

3. Turn the blower in "ON" position on control box.

4. Build a triangular windrow on the aeration pipes:

   a. Length: 100 feet (30m).
   b. Width: 26 feet (8m).
   c. Height: 10 to 12 feet (3 to 3.5m).

5. Cover the heap with the Gore® Cover.

6. Place the weighting system (fire hose/sand bags/weighted pipe) on the yellow rim material of the cover and secure it with the black Velcro loops.

7. Place the oxygen and temperature sensor in the probe inlets on top of the Gore® Cover.

   a. *Attention*: Leave the vent hole of the O_2 sensor above the inlet 6 to 12 inches.

8. Turn the bower to "AUTO" position on control box.

9. Open the Control Software and Re-Start Control system on Oxygen Control.

10. Optional control to Interval Control.

11. Let the heap operate for 14 days.

12. Monitor daily the Control data.

After Phase 3:

1. Stop Control software. Do not turnoff the power to the SG Mobile™ control unit.

2. Take out the probes from the heap. Do not unplug or disconnect the probes. Place on probe holders on SG Mobile™ control box.

3. Take off the rim weight.

4. Uncover the windrow.

5. Disconnect the aeration pipes; pull them out form the heap.

6. Turn the heap with the front end loader, re-cover the heap with the Gore® Cover, and place the rim weight and set in the sensors.

Samples analysis recommended:

- Phase 3 material.

Screening

1. Screen size depends on end product quality requirements.

Samples analysis recommended:

- Screened material.

Storage

1. To be defined locally by end user to meet specified finished product quality.

Samples analysis recommended:

- Storage material prior to sale.