

**MONTEREY REGIONAL WASTE MANAGEMENT DISTRICT (REGEN)
BIDDING REQUIREMENTS AND CONTRACT DOCUMENTS
FOR THE PURCHASE OF
COVERED AERATED STATIC PILE FACILITY EQUIPMENT**



REGEN PROJECT LOCATION:

REGEN MONTEREY COMPOST FACILITY
PHYSICAL: 14201 DEL MONTE BLVD., MONTEREY COUNTY (SALINAS), CA 93908
MAILING: P.O. BOX 1670, MARINA, CA 93933

REGEN DIRECTOR OF ENGINEERING & COMPLIANCE:

DAVID RAMIREZ, P.E.
(831) 264-9840
dramirez@regenmonterey.org

PROJECT DESIGN CONSULTANT:

TETRA TECH
21700 COPLEY DR. SUITE 200
DIAMOND BAR, CA 91765

FEBRUARY 2025

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SECTION 00100
INSTRUCTIONS TO BIDDERS

1. DEFINED TERMS

- A. Terms used in these Instructions to Bidders and in other Bid Documents which are defined in the General Conditions and Supplementary Conditions have the meanings assigned to them therein.
- B. The "Project Manual" comprises the Contract Documents and the following: Invitation to Bid, Instructions to Bidders, Bid Form, Bid Schedule, Bid Bond, Bidder's Qualification Affidavit, Contractor's License Form, and any other forms designated to be attached to the Bid Form.

2. INFORMATION FOR BIDDERS

- A. Disclaimer:
 - 1. The information contained in the above-referenced documents is being made available to the Bidder solely for their information and convenience. The information and data contained in the above-referenced documents does not constitute a part of the Contract.
 - 2. The OWNER and the ENGINEER disclaim responsibility for any opinions, conclusions, interpretations, or deductions that may be expressed or implied in any of the information and data contained in the referenced documents, it being expressly understood that the making of deductions, interpretations, and conclusions is the Bidder's sole responsibility.

3. EXAMINATION OF PROJECT MANUAL, SITE, AND CONDITIONS OF WORK

- A. The Project Manual includes the most recent editions of the following documents and any other additional documents as issued by the OWNER and/or ENGINEER.
 - 1. Bound herein
 - a. Bidding Requirements
 - b. Contract Forms
 - c. Terms and Conditions
 - d. Specifications
- B. Before submitting a Bid, each Bidder shall (a) examine the Project Manual thoroughly; (b) visit the site to familiarize themselves with local conditions that may in any manner affect cost, progress or performance of the Work; (c) familiarize themselves with federal, state and local laws, ordinances, rules and regulations that may in any manner affect cost, progress or performance of the

Work; and (d) study and carefully correlate Bidder's observations with the Project Manual.

- C. Before submitting their Bid, each Bidder shall, at their own expense, make such additional investigations and tests as the Bidder may deem necessary to determine their Bid for performance of the Work in accordance with the time, scope or work, and other terms and conditions of the Project Manual. On request, OWNER will provide each Bidder access to the site to conduct such investigations and tests as each Bidder deems necessary for submission of their Bid.
- D. The submission of a Bid will constitute an incontrovertible representation by the Bidder that they have complied with every requirement of this Article 3 and that the Project Manual is sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the Work.
- E. Complete sets of Bidding Documents shall be used in preparing Bids; neither OWNER nor ENGINEER assume any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents
- F. OWNER and ENGINEER, in making copies of Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids on the Work and do not confer a license or grant for any other use.

4. QUALIFICATIONS OF BIDDERS

- A. Bidders are required to complete the "Bidder's Qualification Affidavit" and to submit them with their Bids as hereinafter specified. The OWNER may make such additional investigations as he deems necessary to determine the ability of any Bidders to perform the work, and the Bidders shall furnish to the OWNER such additional information and data for this purpose as the OWNER may request.
- B. Either the Bidder or their subcontractor shall be fully qualified. Such qualification shall include satisfactory experience in manufacture of in-kind, successful operating equipment. The Bidder's or subcontractor's experience in this field shall be fully documented in the "Bidder's Qualification Affidavit."
- C. The OWNER, by its sole determination, reserves the right to reject any Bid if the evidence submitted by, or investigation of, such Bidder fails to satisfy the OWNER that such Bidder is properly qualified to carry out the obligations of the Contract and to complete the work in accordance with the Project Manual. Conditional Bids will not be accepted.

5. INTERPRETATIONS OF THE PROJECT MANUAL

- A. Every request for an interpretation of the Project Manual shall be in writing and, to be considered, must be received by the ENGINEER at least 14 calendar days before the date set for the opening of Bids.

- B. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the Project Manual. All such written addenda shall become a part of the Project Manual.
- C. Addenda, if any, will be mailed to all planholders at the respective addresses furnished for such purposes. Failure of any Bidder to receive any such addendum shall not relieve such Bidder from any obligation under their Bid as submitted.
- D. The OWNER and ENGINEER assume no responsibility for clarifications or interpretations of the Project Manual arrived at in any other manner.
- E. Any discrepancies or omissions in the Project Manual discovered by the Bidder shall be called to the attention of the ENGINEER during the Bidding period.
- F. The right is reserved by the OWNER to revise or amend the Project Manual prior to the date set for opening of Bids. Such revisions and amendments, if any, will be announced by written addenda. Copies of such addenda will be furnished to all registered Bidders as specified above. If the revisions and amendments are of a nature which requires substantial changes in quantities and prices, or either of them, the date set for opening of Bids may be postponed by such a number of days as the OWNER will determine to be necessary to enable Bidders to revise their Bids. In such cases, addenda will include announcement of the new date for opening of Bids.

6. PREPARATION OF BID

- A. The Bid:
 - 1. The following documents shall comprise the Bid and shall be submitted:
 - a. Bid Form (Section 00300)
 - b. Bid Bond (Section 00410)
 - c. Bidder's Proposed Schedule (Section 00415)
 - d. Bidder's Qualification Affidavit (Section 00425)
 - 2. A copy of the foregoing documents is herein, and Bids shall be prepared on extra copies of these documents copied by the Bidder.
 - 3. Each of the documents comprising the Bid, as listed above, shall be filled in and completed in its entirety. Interlineations, alterations, or erasures shall be initialed. All blank spaces shall be filled in. Where any item or items in the documents are not applicable to the Work, then the words "none" or "not applicable" shall be filled in as appropriate.
 - 4. If any of the foregoing documents are not completed, the Bid may be considered unresponsive and rejected.
- B. Addenda: Receipt of all addenda issued shall be acknowledged. If no addenda were issued or received, "none" shall be written in.
- C. Bid Security:

1. Each Bid shall be accompanied by a certified check or cashier's check made payable to the OWNER, or a Bid Bond prepared on the Bid Bond form bound in with this Project Manual, duly executed by the Bidder as principal, and having as surety thereon a surety company licensed to do business in the State of California and approved by the OWNER, in an amount not less than 10 percent of the Bid.
2. Checks submitted as bid security will be returned to all Bidders, except the three lowest Bidders, within 10 calendar days after the opening of Bids, and the remaining checks will be returned promptly after the OWNER and the accepted Bidder have executed the Contract (Agreement). Bid bonds will be returned only upon request and only to bidders not in contention for award of the Contract.
3. The successful Bidder, upon failure or refusal to execute and deliver the Contract (Agreement) and the bond(s) required within 10 calendar days after received Notice of Award of the Contract, shall forfeit to the OWNER, as liquidated damages for such failure or refusal, the security deposited with the Bid.
4. The Bid Bond shall remain in effect for a minimum period of 60 calendar days from the date of the opening of the Bids.

D. List of Proposed Subcontractors:

1. Bidders shall list the various classes of work included in the Project and the names and business addresses of the subcontractors and material and equipment suppliers proposed to perform work, furnish materials or equipment, or render service on or about the Project in excess of 5 percent of the amount of the Bid Price. Work in excess of 5 percent of the Bid Price for which a subcontractor is not listed will be presumed to be performed by the Bidder.
2. Subcontractor chosen shall be listed in the form provided in Section 00430, List of Proposed Subcontractors.
3. Bidders shall fill in and complete the List of Proposed Subcontractors in the Form provided to fulfill the foregoing requirements. If space is not sufficient as provided in the Form, Bidder may add a separate sheet or sheets.
4. Substitution of subcontractors after bid opening will require approval of the OWNER.

E. Substitutions of Materials:

1. Bids shall be submitted on the basis of the Project Manual as prepared by the ENGINEER. Consideration of substitute "or equal" items of materials or equipment will be postponed until the apparent low Bidder has been identified.
2. All matters relating to substitute "or equal" items shall be concluded after the bid opening and prior to installation of any proposed equals in

accordance with the procedures described in Section 01630, Product Options and Substitutions.

3. Requests for substitutions will be handled as specified in Section 01630, Product Options and Substitutions.

F. Signing of the Bid Form:

1. Bidders shall properly date and sign the Bid. In the case of a corporation, a duly authorized officer of the corporation shall sign; in the case of a partnership, a partner shall sign; in the case of a joint venture, a duly authorized officer of the sponsoring member shall sign, and in the case of an individual, such individual shall sign. Satisfactory evidence of the authority of the signatory on behalf of the Bidder shall be furnished.
2. Under the signing provisions of the Bid Form, all spaces provided shall be filled in as applicable. Corporations shall affix their seal where shown.

- G. Bid Schedule: Bidders shall complete the Bid Schedule as provided. All blank spaces shall be filled in. The total of the Bid Schedule shall be entered in the Bid Form in the space provided therein.

7. FILING OF BID

- A. Each Bid shall be submitted in a sealed envelope bearing on the outside the name of the Bidder, their address, the name of the Project, the title of the Project Manual for which the Bid is being submitted, and the time and date of the Bid opening. If forwarded by mail, the sealed envelope containing the Bid shall be enclosed in another envelope addressed to the OWNER.
- B. It is intended that Bids received prior to the time set for the Bid opening will be securely kept, unopened; but the OWNER shall in no event be liable for the premature opening of any Bid.
- C. Written modifications of Bids already submitted will be considered if received prior to the Bid opening.
- D. Any Bid may be withdrawn prior to the scheduled time for the opening of Bids, or authorized postponement thereof, upon signed written or telegraphic request delivered to the OWNER. Any Bid received after the time and date of the Bid opening will not be considered. No Bidder shall withdraw their Bid after the scheduled date and time of opening thereof. Negligence on the part of the Bidder in preparing the Bid confers no right for withdrawal of the Bid after it has been opened.

8. EVALUATION OF BIDS AND AWARD OF CONTRACT

- A. OWNER reserves the right to reject any and all Bids, to waive any and all irregularities, to negotiate contract terms with successful Bidder, and the right to disregard all nonconforming, nonresponsive or conditional Bids. Discrepancies between words and figures will be resolved in favor of words. Discrepancies between the indicated sum of any column of figures and the correct sum thereof

will be resolved in favor of the correct sum. In case of discrepancy between unit prices and extended amounts, the unit prices shall prevail and, for bid evaluation purposes, the extended amounts will be adjusted accordingly.

- B. In evaluating Bids, OWNER will consider the qualifications of the Bidders, whether or not the Bids comply with the prescribed requirements, and alternatives and unit prices if requested in the Bid forms.
- C. OWNER may consider the qualifications and experience of subcontractors and other persons and organizations (including those who are to furnish the principal items of material or equipment) proposed for those portions of the Work as to which the identity of subcontractors and other persons and organizations must be submitted as provided in the Supplementary Conditions. Operating costs, maintenance considerations, performance data and guarantees of materials and equipment may also be considered by OWNER.
- D. OWNER may conduct such investigations as they deem necessary to assist in the evaluation of any Bid and to establish the responsibility, qualifications and financial ability of the Bidders, proposed subcontractors and other persons and organizations to do the Work in accordance with the Project Manual to OWNER'S satisfaction within the prescribed time.
- E. OWNER, by its sole determination, reserves the right to reject the Bid of any Bidder who does not pass any such evaluation to OWNER'S satisfaction.
- F. If the Contract is to be awarded, it will be awarded to the lowest responsive Bidder whose evaluation by OWNER indicates to OWNER that the award will be in the best interests of the Project.
- G. If the Contract is to be awarded, OWNER will give the successful Bidder a Notice of Award within 21 calendar days after the day of the Bid opening.
- H. The OWNER will issue a Notice of Award, which the successful Bidder will be required to sign and return within 10 calendar days. The Notice of Award will authorize the successful Bidder to proceed with obtaining the bond(s) and the various insurances and certificates which are required to be submitted with the signed Contract.
- I. The OWNER will issue the OWNER'S form of construction Contract (Agreement) concurrently with the Notice of Award. The Bidder will be required to execute and return the Contract within 10 calendar days after receipt of the Contract for signing. Upon receiving the Contract, signed and returned by the Bidder, along with the required bond(s) and certificates of insurance, the OWNER will sign and return one executed copy of the Contract to the Bidder within 10 calendar days.
- J. If the award is made to a corporation, the corporation will be required to furnish evidence of its corporate existence and of its right to do business in the State of California, and of the authority of the officers signing the Contract.

9. OWNER AND ENGINEER

- A. For the purposes of administration of the Contract, the OWNER is as follows:

Monterey Regional Waste Management District dba ReGen Monterey
(ReGen)
Physical: 14201 Del Monte Blvd, Monterey County (Salinas), California
93908
Mailing: P.O. Box 1670, Marina, CA 93933
Attention: David Ramirez, P.E.
Telephone: (831) 264-9840
Fax: (831) 384-3567

- B. For purposes of administration of the Contract, the ENGINEER is as follows:

Tetra Tech BAS, Inc.
21700 Copley Drive Suite 200
Diamond Bar, California 91765
Attention: Paul Stout, P.E.
Telephone: (925) 640-7266
Fax: (909) 396-1768

10. CORRESPONDENCE INSTRUCTIONS

- A. Correspondence relating to engineering and all correspondence prior to an award shall be sent in triplicate to the ENGINEER.
- B. Subsequent to notification of an award, the successful Bidder shall send all correspondence relating to price, terms, or schedules to the OWNER in triplicate, with a copy to the ENGINEER.
- C. The OWNER reserves the right to designate additional persons and locations to which copies of all correspondence relating to the work shall be sent by the Bidder.

END OF SECTION

SECTION 00300

BID FORM

To: David Ramirez, P.E.
Monterey ReGen Monterey Compost Facility
Physical: 14201 Del Monte Blvd, Monterey County (Salinas), CA 93908
Mailing: P.O. Box 1670, Marina, CA 93933

Project: CASP Compost Facility Equipment Purchase
Monterey Regional Waste Management District (ReGen)

Bid Due Date: March 3, 2025 at 4:00 p.m. PST

Bidder: _____

PART 1 OFFER

Having examined the place of the Work and all matters referred to in the Bid Documents for the named Project, we the undersigned hereby offer to enter into a Contract to perform the Work for the Bid Price of

Dollars (\$ _____)

Lump Sum Contract. If the Bid is for a single Lump Sum Contract, the Bid Price above is the Total Stipulated Price offered including Cash Allowances, if any.

Cash Allowances. All Cash Allowances described in the Bid Documents are included in the Bid Price.

Changes in Contract Price Due to Variations in Actual Quantities. The Contract Price is subject to change due to variation in the actual quantity of each unit in the completed Work in accordance with the Contract Documents.

Period for Bid Acceptance. This offer shall be open to acceptance and is irrevocable for 90 calendar days from the Bid due date. That period may be extended by mutual written agreement of the OWNER and the Bidder, or as needed to fulfill requirements for Agreement submittals. After the Bid Acceptance Period, the Bidder may withdraw without penalty if no mutual agreement can be reached.

PART 2 CONTRACT TIME

If this offer is accepted, we shall meet the following schedule:

- Notice to Proceed – _____

By: _____
(Signature of sole proprietor, partner, or authorized officer of corporation.)

Name: _____
(Please print or type name.) (Title)

Address: _____
(Business Address of Bidder, print or type.)

Telephone: _____
(Print or type telephone number.)

()

()

(Corporate)

(Seal)

()

()

Attest: _____
(Corporate Secretary)

**If the Bid is a joint venture, add additional Bid Form (Section 00300 - Bid Form) signature sheets for each member of the joint venture.*

END OF SECTION

SECTION 00405
SCHEDULE OF UNIT PRICES

Name of Bidder: _____

Date: _____

This Document 00405 constitutes an attachment to Document 00300 - Bid Form for CASP Compost Facility Equipment Purchase project, Monterey Regional Waste Management District (OWNER). When a Contract is awarded, this Document becomes an attachment to Document 00500 - Agreement Between Monterey Regional Waste Management District (OWNER) and Seller (SELLER).

ITEM NO.	ITEM DESCRIPTION	PROPOSED ALTERNATIVE	UNIT	EST. QTY.	UNIT PRICE	TOTAL AMOUNT
1	Blower Skid		Ea.	3		
2	Blower (3 mounted, 1 spare)		Ea.	4		
3	Control Room		Ea.	1		
4	Pressure Indicating Transmitter		Ea.	3		
5	Temperature Indicating Transmitter		Ea.	3		
6	Flow Meter		Ea.	48		
7	Dual Depth Temperature Probe		Ea.	135		
8	Control Panel/Controls (3 Skid Mounted, 1 Master, Control Program)		Ea.	4		
9	12-Inch Modulating Ball Valve		Ea.	45		
10	Oxygen Probe (Optional)		Ea.	1		
11	Startup, Training, and Troubleshooting Assistance		LS	1		
					TOTAL:	

END OF SECTION

SECTION 00410

BID BOND

This Section 00410 - Bid Bond constitutes an Attachment to Section 00300 - Bid Form.

KNOW ALL PERSONS BY THESE PRESENTS, that we _____

as Principal, hereinafter called the Principal, and _____

a corporation duly organized under the laws of the State of California as Surety, hereinafter called the Surety, are held and firmly bound unto:

ReGen Monterey Compost Facility
Physical: 14201 Del Monte Blvd, Monterey County (Salinas), CA 93908
Mailing: P.O. Box 1670, Marina, CA 93933

as Obligee, hereinafter called the Obligee, in the sum of _____ Dollars (\$ _____), or 10 percent of the total of the bid, for the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a Bid for all Work required to complete the Contract for CASP Compost Facility Equipment for the Monterey Regional Waste Management District, in accordance with the Project Manual prepared by Tetra Tech BAS, Inc., 21700 Copley Drive, Suite 200, Diamond Bar, California 91765.

NOW, THEREFORE, if the Obligee shall accept the Bid of the Principal and the Principal shall enter into a Contract with the Obligee in accordance with the terms of such Bid, and give such bond or bonds as may be specified in the Project Manual with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter into such Contract and give such bond or bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said Bid and such larger amount for which the Obligee may in good faith contract with another party to perform the Work covered by said Bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed this _____ day of _____, 20_____.

Witness: _____ Principal: _____

()
()
(Corporate)
(Seal)
()
()

By: _____

Title: _____

Legal Address: _____

Attest: _____
(Corporate Secretary)

Witness: _____ Surety: _____

()
()
(Corporate)
(Seal)
()
()

By: _____

Title: _____

Legal Address: _____

Attest: _____
(Corporate Secretary)

END OF SECTION

SECTION 00415
BIDDER'S PROPOSED SCHEDULE

1. This Section 00415 constitutes an Attachment to Section 00300 - Bid Form.
2. The information provided by the Bidder in this Document will be one component which OWNER may use to evaluate the Bid.
3. Bidder proposes the following schedule for the major items of the Work. A schedule outline in the format of Bidder's choice is attached:

Yes No

<u>ACTIVITY</u>	<u>START DATE</u>	<u>COMPLETION DATE</u>

END OF SECTION

SECTION 00425

BIDDER'S QUALIFICATION AFFIDAVIT

This Section 00425 - Bidder's Qualification Affidavit constitutes an Attachment to Section 00300 - Bid Form.

THE UNDERSIGNED CERTIFIES under oath the truth and correctness of all statements and of all answers to questions made hereinafter.

Submitted To: ReGen Monterey Compost Facility
Physical: 14201 Del Monte Blvd, Monterey County (Salinas), CA 93908
Mailing: P.O. Box 1670, Marina, CA 93933

Submitted By: _____

Bidder's Legal Name: _____

Address: _____

Main Office: _____

1. How many years has your organization been in business as a CASP compost facility equipment provider? _____
2. How many years has your organization been in business under its present business name? _____
3. If a corporation, answer the following:
 - a. Date of incorporation: _____
 - b. State of incorporation: _____
 - c. President's name: _____
 - d. Vice-president's name(s): _____

 - e. Secretary's name: _____

f. Treasurer's name: _____

4. If individual or partnership, answer the following:

a. Date of organization: _____

b. Name and address of all partners.

(State whether general or limited partnership):

5. If other than corporation or partnership, describe organization and name principals:

6. Have you ever failed to complete any work awarded to you? _____
If so, note when, where and why:

7. Has any officer or partner of your organization ever been an officer or partner of another organization that failed to complete a contract? _____. If so, state circumstances:

8. List name of project, owner, engineer, contract amount, percent complete, and scheduled completion of the major projects similar in type to the work described in this Project Manual, that your organization has in progress on this date:

9. List the name of the project, owner, engineer, size of project (e.g. scfm), and date of completion your organization has completed in the past ten years. State those projects which involved similar scope and magnitude to the Monterey Regional Waste Management District.

10. List the relevant experience of the principal individuals of your organization, indicating the alternative candidates whom you expect to make available for assignment as Project Manager.

11. List states and categories in which your organization is legally qualified to do business:

12. Industry references:

13. Bank references:

Dated at _____,

this _____ day of _____, 20 _____.

Legal Name of
Organization: _____

By: _____
(Signature)

Title: _____

()
()
(Corporate)
(Seal if a)
(Corporation)
()
()

M _____, being duly
sworn, deposes and says that he (she) is the _____
of _____ (Bidder's, Organization or Firm), and
that the answers to the foregoing questions and all statements therein contained are true and
correct.

Subscribed and sworn before me this _____ day of _____, 20 _____.

Notary Public: _____

My Commission Expires: _____

END OF SECTION

SECTION 00500
AGREEMENT FORM

THIS AGREEMENT is between Monterey Regional Waste Management District (“Buyer”) and _____ (“Seller”). Buyer and Seller, hereby agree as follows:

1. GOODS AND SPECIAL SERVICES

A. Seller shall furnish Goods and Special Services as specified or indicated in the Contract Documents.

2. THE PROJECT

A. The Project for which Goods and Special Services may be the whole or only a part of is generally described as CASP Compost Facility Equipment.

3. ENGINEER

A. The Contract Documents for the Goods and Special Services have been prepared by Tetra Tech BAS, Inc.

4. POINT OF DESTINATION

A. The Point of Destination is designated as ReGen Monterey Compost Facility located at 14201 Del Monte Blvd. in Monterey County, 2 miles north of the City of Marina.

5. CONTRACT TIMES.

A. Time of the Essence:

1. All time limits for Milestones, if any, including submittal of Shop Drawings and Samples, delivery of Goods, and furnishing of Special Services as stated in the Contract Documents are of essence in the Contract.

B. Milestones:

1. Date for Submittal of Shop Drawings and Samples: Seller shall submit Shop Drawings and Samples required by the Contract Documents to Buyer for Engineer’s review and approval within seven (7) days after date when Contract Times commence to run as provided in Paragraph 2.04 of the General Conditions. It is the intent of the parties that:

a. Engineer conduct such review and issue its approval, or a denial accompanied by substantive comments regarding information needed to gain approval, within 14 days of Seller’s submittal of such Shop Drawings and Samples; and

- b. Resubmittals be limited whenever possible. If more than one resubmittal is necessary for reasons not the fault and beyond the control of Seller, then Seller shall be entitled to seek appropriate relief under Paragraph 7.02.B of the General Conditions.
 2. Date for Delivery of Goods: Deliver Goods to the Point of Destination and ready for Buyer's receipt of delivery on (or within a period of 15 days prior to) the 230th day after the date when the Contract Times commence to run as provided in Paragraph 2.04 of the General Conditions.
 3. Days for Furnishing Special Services: The furnishing of Special Services to Buyer will commence within 14 days after Buyer's acknowledgement of receipt of delivery of Goods, and shall be completed after successful startup and commissioning.
 4. Notice of Discovery of Nonconforming Goods: If, after delivery, Buyer determines, in its sole discretion, that the Goods do not conform to Contract requirements, Buyer shall provide a written, signed and dated notice ("Notice of Discovery of Nonconforming Goods") to Seller that such Goods are nonconforming and the reason, if known, therefor.
- C. Buyer's Final Inspection:
 1. Buyer shall make its final inspection of the Goods pursuant to Paragraph 8.01.C of the General Conditions.
- D. Liquidated Damages for failure to timely deliver Goods: Buyer and Seller recognize that Buyer will suffer financial loss if Goods are not delivered at the Point of Destination and ready for receipt of delivery by Buyer, within times specified in Paragraph Date for Delivery of Goods, plus any extensions thereof allowed in accordance with Article 7 of the General Conditions. The parties also recognize timely performance of services by others involved in the Project are materially dependent upon Seller's specific compliance with requirements specified in Date for Delivery of Goods. Further, the parties recognize the delays, expense, and difficulties involved in proving actual loss suffered by Buyer if complete acceptable Goods are not delivered on time. Accordingly, Buyer and Seller agree that as liquidated damages for delay (but not as a penalty) for failure to timely deliver Goods Seller shall pay Buyer \$2,000 for each day of delay after the time specified in Paragraph Date for Delivery of Goods.
- E. Liquidated Damages for provision of nonconforming Goods: Buyer and Seller recognize that Buyer will suffer financial loss if Seller delivers nonconforming Goods. The parties also recognize timely performance of services by others involved in the Project are materially dependent upon Seller's specific compliance with Contract requirements. Further, the parties recognize the delays, expense, and difficulties involved in proving actual loss suffered by Buyer if nonconforming Goods are delivered. Accordingly, Buyer and Seller agree that as liquidated damages for delay (but not as penalty) for provision of nonconforming Goods, Seller shall pay Buyer \$6,000 for each day of delay after the time specified in the Notice of Discovery of Nonconforming Goods.

5. CONTRACT PRICE.

- A. Buyer shall pay Seller for furnishing Goods and Special Services in accordance with the Contract Documents in current funds the amount bid in the Bid Form (\$_____) as adjusted in accordance with this Contract, or as otherwise herein provided, and to make such payments in the manner and at the times provided herein.

6. PAYMENT PROCEDURES.

- A. Submission and Processing of Payments: Seller shall submit Applications for Payment in accordance with Article 10 of the General Conditions. Applications for Payment will be processed by Buyer in accordance with the General Conditions.
- B. Progress Payments: Buyer shall make progress payments on account of Contract Price on the basis of Seller's Application for Payment as follows:
 - 1. Upon receipt of the first Application for Payment submitted in accordance with Paragraph 10.01.A.1 of the General Conditions, an amount equal to twenty-five percent (25%) of the Contract Price, less such amounts in accordance with Paragraph 10.02.A.3 of the General Conditions.
 - 2. Upon receipt of the second Application for Payment in accordance with Paragraph 10.01.A.2 of the General Conditions, an amount equal to twenty-five percent (25%) of the Contract Price, less such amounts in accordance with Paragraph 10.02.A.3 of the General Conditions.
 - 3. Upon receipt of the third Application of Payment in accordance with Paragraph 10.01.A.3 of the General Conditions, an amount equal to forty percent (40%) of the Contract Price, less such amounts in accordance with Paragraph 10.02.A.3 of the General Conditions.
- C. Final Payment: Upon receipt of the final Application for Payment, Buyer shall pay Seller the amount due less any sum Buyer is entitled to set off or recoup, including but not limited to liquidated damages. Provided the conditions set forth in Supplementary Conditions Paragraph 10.06.A are satisfied, Final Acceptance by Owner shall occur not more than 12 months after Seller's delivery of conforming Goods, unless the parties agree otherwise in writing.

7. INTEREST.

8. SELLER'S REPRESENTATIONS.

- A. In order to induce Buyer to enter into this Agreement, Seller makes the following representations:
1. Seller has examined and carefully studied the Contract Documents and other related data identified in Bidding Documents, as applicable to Seller's obligations to furnish Goods and Special Services.
 2. If required by Bidding Documents to visit Point of Destination and site where the Goods are to be installed or Special Services will be provided, or if in Seller's judgment, any local condition may affect cost, progress or furnishing of Goods and Special Services, Seller has visited the Point of Destination and site where the Goods are to be installed or Special Services will be provided and become familiar with and is satisfied as to observable local conditions that may affect cost, progress, or furnishing of Goods and Special Services.
 3. Seller is familiar with and is satisfied as to Laws and Regulations that may affect cost, progress, and furnishing of Goods and Special Services.
 4. Seller has carefully studied, considered, and correlated information known to Seller; information commonly known to sellers of similar goods doing business in the locality of the Point of Destination and the site where the Goods will be installed or where Special Services will be provided; information and observations obtained from Seller's visits, if any, to the Point of Destination and site where the Goods are to be installed or Services will be provided; and any reports and drawings identified in the Bidding Documents regarding the Point of Destination and the site where the Goods will be installed or where Special Services will be provided, with respect to the effect of such information, observations, and documents on the cost, progress, and performance of Seller's obligations under the Contract Documents.
 5. Seller has given Buyer written notice of all conflicts, errors, ambiguities, or discrepancies that Seller has discovered in the Contract Documents, and written resolution thereof by Buyer is acceptable to Seller.
 6. The Contract Documents are sufficient to indicate and convey understanding of all terms and conditions for furnishing Goods and Special Services.

9. CONTRACT DOCUMENTS.

A. Contents: The Contract Documents consist of the following:

1. This Agreement (pages 1 to _____, inclusive);
 2. Performance Bond (pages 1 to _____, inclusive);
 3. General Conditions (pages _____ to _____, inclusive);
 4. Supplementary Conditions (pages _____ to _____, inclusive);
 5. Specifications as listed in Table of Contents dated _____;
 6. Addenda (Numbers _____ to _____, inclusive);
 7. Exhibits to this Agreement (enumerated as follows):
 - a. Seller's Bid solely as to prices set forth therein (pages _____ to _____, inclusive);
 - b. Documentation submitted by Seller prior to Notice of Award (pages _____ to _____, inclusive);
 8. The following which may be delivered or issued on or after the Effective Date of the Agreement and are not attached hereto:
 - a. Notice to Proceed (pages _____ to _____, inclusive);
 - b. Change Order(s);
 - c. Work Change Directive(s);
- B. The documents listed in above are attached to this Agreement and incorporated herein by this reference (except as expressly noted otherwise above).
- C. There are no Contract Documents other than those listed above in this Article.
- D. The Contract Documents may only be amended, or supplemented as provided in Paragraph 3.04 of the General Conditions.

10. MISCELLANEOUS.

- A. Defined Terms: Terms used in this Agreement will have the meanings indicated in the General Conditions and the Supplementary Conditions.
- B. Successors and Assigns: Buyer and Seller each binds itself, its partners, successors, assigns, and legal representatives to the other party hereto, its partners, successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.
- C. Severability: Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Buyer and Seller. The Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.
- D. Seller's Certifications: Seller certifies that it has not engaged in corrupt,

fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this paragraph:

1. “corrupt practice” means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process or in the Contract execution;
 - a. “fraudulent practice” means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Buyer, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Buyer of the benefits of free and open competition;
 - b. “collusive practice” means a scheme or arrangement between two or more Bidders, with or without the knowledge of Buyer, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and
 - c. “coercive practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

[Signatures on following page]

IN WITNESS WHEREOF, Buyer and Seller have signed this Agreement. Counterparts have been delivered to Buyer and Seller. All portions of the Contract Documents have been signed or identified by Buyer and Seller or on their behalf.

This Agreement will be effective on _____ Seller: _____

Buyer: Monterey Regional Waste Management District dba ReGen Monterey

By: _____

(Corporate Seal)

By: _____
(Corporate Seal)

Attest: _____

Attest: _____

Address for giving notice:

Address for giving notice:

Buyer: MRWMD Attn: David Ramirez, P.E.
Physical: 14201 Del Monte Blvd, Monterey
County (Salinas), CA, 93908
Mailing: P.O. Box 1670, Marina, CA 93933

(If Buyer is a corporation, attach evidence of authority to sign. If Buyer is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of Buyer-Seller Agreement.)

Agent for service of process:

Designated Representative:

(If Seller is a corporation, attach evidence of authority to sign.)

Name: _____

Designated Representative:

Title: _____

Name: _____

Address: _____

Title: _____

Phone: _____

Address: _____

Facsimile: _____

Phone: _____

Facsimile: _____

END OF SECTION

SECTION 00610
PERFORMANCE BOND

THE STATE OF CALIFORNIA KNOW ALL PEOPLE BY THESE PRESENTS:

THE COUNTY OF MONTEREY §

THAT WE, _____, as
Principal, hereinafter called "SELLER", and the other subscriber hereto as Surety, do hereby
acknowledge ourselves to be held and firmly bound to OWNER in the sum of _____
_____ Dollars (\$ _____)
for the payment of which sum, well and truly to be made to the OWNER and its successors, the
said SELLER and Surety do bind themselves, their heirs, executors, administrators, successors,
and assigns, jointly and severally.

THE CONDITIONS OF THIS OBLIGATION ARE SUCH THAT:

WHEREAS, the SELLER has on or about this day executed a Contract in writing with the
OWNER for

Monterey Regional Waste Management District – CASP Compost Facility Equipment Purchase

all of such work to be done as set out in full in said Project Manual therein referred to and
adopted by the OWNER all of which are made a part of this instrument as fully and completely
as if set out in full herein.

NOW THEREFORE, if the said SELLER shall faithfully and strictly perform Contract in all its
terms, provisions, and stipulations in accordance with its true meaning and effect, and in
accordance with the Project Manual referred to therein and shall comply strictly with each and
every provision of Contract and with this bond, then this obligation shall become null and void
and shall have no further force and effect; otherwise the same is to remain in full force and
effect.

It is further understood and agreed that the Surety does hereby relieve the OWNER or its
representatives from the exercise of any diligence whatever in securing compliance on the part
of the SELLER with the terms of the Contract, and the Surety hereby waives any notice to it of
any default, or delay by the SELLER in the performance of their Contract and agrees that it, the
Surety, shall be bound to take notice of and shall be held to have knowledge of all acts or
omissions of the SELLER in all matters pertaining to the contract. The Surety understands and
agrees that the provision in the Contract that the OWNER shall retain certain amounts due the
SELLER until the expiration of thirty calendar days from the acceptance of the Work is intended
for the OWNER'S benefit, and the OWNER shall have the right to pay or withhold such
retained amounts or any other amount owing under the Contract without changing or affecting
the liability of the Surety hereon in any degree.

It is further expressly agreed by Surety that the OWNER or its representatives are at liberty at any time, without notice to the Surety, to make any change in the Project Manual and in the Work to be done thereunder, as provided in the Contract, and in the terms and conditions thereof, or to make any change in, addition to, or deduction from the work to be done thereunder; and that such changes, if made, shall not in any way vitiate the obligation in this bond and undertaking or release the Surety therefrom.

It is further expressly agreed and understood that the SELLER and Surety will fully indemnify and save harmless the OWNER from any liability, loss, cost, expense, or damage arising out of or in connection with the work done by the SELLER under the Contract. In the event that the OWNER shall bring any suit or other proceeding at law on the Contract or this bond or both, the SELLER and Surety agree to pay to the OWNER the sum of 10 percent of whatever amount may be recovered by the OWNER in suit or legal proceeding, which sum of 10 percent is agreed by all parties to be indemnity to the OWNER for the expense of or time consumed by its Attorney, their assistants, and office force, and other cost and damage occasioned to the OWNER. This amount of 10 percent is fixed and liquidated by the parties, it being agreed by them that the exact damage to the OWNER would be difficult to ascertain.

This bond and all obligations created hereunder shall be performable in Monterey County, in the State of California. When this bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted here from and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

IN WITNESS THEREOF, the Said Principal and Surety have signed and sealed this instrument on the respective dates written below their signature.

SELLER AS PRINCIPAL

SURETY

Company Name

Surety Name

By _____
Name:
Title:
Date:

By _____
Name:
Title:
Date:

Attest/Witness or Corporate Seal

Attest/Witness or Corporate Seal

By _____
Name:
Title:
Date:

By _____
Name:
Title:
Date:

THE FOREGOING BOND IS ACCEPTED ON
BEHALF OF MONTEREY REGIONAL WASTE MANAGEMENT DISTRICT dba REGEN
MONTEREY

Name: David Ramirez, P.E.
Title: Director of Engineering & Compliance
Date:

END OF SECTION

SECTION 00620
PAYMENT BOND

KNOW ALL PEOPLE BY THESE PRESENTS: that _____

as PRINCIPAL, and, _____

as Surety, hereinafter called Surety, are held and firmly bound unto:

ReGen Monterey Compost Facility
Physical: 14201 Del Monte Boulevard , Monterey County (Salinas), CA 93908
Mailing: P.O. Box 1670 , Marina, CA 93933

As Obligee, hereinafter called OWNER, for the use and benefit of claimants as herein below defined, in the penal sum of _____ Dollars (\$ _____), lawful money of the United States, for the payment whereof well and truly to be made, PRINCIPAL and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS,

PRINCIPAL has by written agreement dated _____, 20____, entered into a contract with the District for all required to complete the Contract for CASP Compost Facility Equipment Purchase, which contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if PRINCIPAL shall promptly make payment to all claimants as hereinafter defined, for all labor and material used or reasonably required for use in the performance of the Contract, and any and all duly authorized modifications of said Contract that may hereafter be made, notice of which modifications to the Surety being hereby waived, then this obligation shall be void; otherwise it shall remain in full force and effect, subject to the following conditions:

- 1) A claimant is defined as one having furnished labor, material, or both, used or reasonably required for use in the performance of the Contract, labor and material being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service, or rental of equipment directly applicable to the Contract.
- 2) The above named PRINCIPAL and Surety hereby jointly and severally agree with the OWNER that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety calendar days after the date on which the last of such claimant's work or labor was done or performed, or materials were furnished by such claimant, may sue on this Bond for the use of

such claimant, prosecute the suit to final judgment for such sum or sums as may be justly due claimant, including attorney fees and interest, and have execution thereon. The OWNER shall not be liable for the payment of any costs or expenses of any such suit.

- 3) No suit or action shall be commenced hereunder by any claimant:
 - a) Unless claimant, other than one having a direct contract with the PRINCIPAL, shall have given written notice to any two of the following: the PRINCIPAL, the OWNER, or the Surety above named, within ninety calendar days after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the PRINCIPAL, OWNER, or Surety, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the aforesaid project is located, save that such service need not be made by a public officer.
 - b) After the expiration of one year following the date on which PRINCIPAL ceased Work on said Contract, it being understood, however, that if any limitation embodied in this Bond is prohibited by any law controlling the construction hereof, such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.
 - c) Other than in a state court of competent jurisdiction in and for the county or other political subdivision of the state in which the Project, or any part thereof, is situated, or in the United States District Court for the district in which the Project, or any part thereof, is situated, and not elsewhere.
- 4) The amount of this bond shall be reduced by and to the extent of any payments promptly made by Surety in good faith hereunder, inclusive of the payment by Surety of mechanics' liens which may be filed of record against said improvement, whether or not claim for the amount of such lien be presented under and against this bond.
- 5) The terms and conditions of this bond shall be deemed to be amended so as to comply with any statutory requirements for labor and material payment bonds, in the event the law controlling the construction of this bond shall prohibit such terms and conditions or shall prescribe different or additional terms and conditions.

Signed this _____ day of _____, 20____.

Witness: _____ Principal: _____

()
()
(Corporate)
(Seal)
()
()

By: _____

Title: _____

Legal Address: _____

Attest: _____

(Corporate Secretary)

Witness: _____ Surety: _____

()
()
(Corporate)
(Seal)
()
()

By: _____

Title: _____

Legal Address: _____

Attest: _____

(Corporate Secretary)

END OF SECTION

SECTION 00640
NOTICE OF AWARD

To: _____

PROJECT DESCRIPTION: Manufacturing and provision of the CASP Compost Facility equipment for the Monterey Regional Waste Management District, located approximately two miles north of the City of Marina in unincorporated Monterey County, California, in accordance with Contract Specifications and Contract Documents.

The OWNER has considered the proposal submitted by you for the above-described work.

You are hereby notified that your proposal has been accepted for items in the amount of \$_____.

The agreement must be executed and the Payment Bond and certificates of insurance must be furnished within ten (10) calendar days from the date of this notice.

If you fail to execute said agreement and to furnish said bonds within ten (10) days from the date of this notice, the OWNER will be entitled to consider all your rights arising out of the OWNER'S acceptance of your proposal as abandoned and as a forfeiture of your Bid Bond. The OWNER will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this Notice of Award to the OWNER.

Dated this _____ day of _____, 2025.

David Ramirez, P.E., Director of Engineering & Compliance

Monterey Regional Waste Management District
dba ReGen Monterey (ReGen)

ACCEPTANCE OF NOTICE

Receipt of the above Notice of Award is hereby acknowledged by

this the _____ day of _____, 20_____.

END OF SECTION

SECTION 00650
NOTICE TO PROCEED

Date: _____
To: _____
Address: _____

Project Title: CASP Compost Facility Equipment

Site Name: ReGen Monterey Compost Facility

Location: Physical: 14201 Del Monte Blvd, Monterey County (Salinas), CA, 93908

Mailing: P.O. Box 1670, Marina, CA 93933

You are hereby notified that the Date of Commencement of the Work is _____ . On that date you are to start performing your obligations under the Agreement. In accordance with the Agreement, the date on which penalties for delay shall commence is established in Part 5B, Milestones, of the Agreement.

MONTEREY REGIONAL WASTE MANAGEMENT DISTRICT

BY: _____

David Ramirez, P.E., Director of Engineering & Compliance

cc: _____

END OF SECTION

SECTION 00725
SUPPLEMENTARY CONDITIONS

These Supplementary Conditions amend or supplement the Standard General Conditions for Procurement Contracts and other provisions of the Contract Documents as indicated below. All provisions that are not so amended or supplemented remain in full force and effect.

The terms used in these Supplementary Conditions will have the meanings indicated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings indicated below, which are applicable to both the singular and plural thereof.

SC-1.01. Add the following language to the Paragraph 1.01 "Defined Terms"

37. *Engineer* – The Project has been designed by Tetra Tech BAS, Inc. ("Design Consultant"). Design Consultant shall not mean the Engineer. The Engineer shall be the person(s) so designated by the Owner. The Engineer is referred to in the Contract Documents as Engineer. Engineer, and any duly authorized agents, are to act as Owner's representative and assume all duties and responsibilities and have the rights and authority assigned to Engineer in the General Conditions and these Supplementary Conditions.
38. *Final Acceptance* – Acceptance of the Goods and Special Services, which is effective once all of the following conditions are satisfied: after (1) final inspection is conducted; (2) Notice of Acceptance has been issued in writing and signed by Buyer; and (3) final payment has been made.
39. *Owner* – Means "Buyer."
40. *Design Consultant* – The Engineers of the firm Tetra Tech BAS, Inc., who prepared the Specifications.
41. *Promptly* – Not longer than 10 days unless otherwise specifically set forth in the Contract Documents.
42. *Timely* – Means "promptly."
43. *Construction Contractor* – The individual, partnership, corporation or combination thereof including joint ventures that enter into a Contract with the Owner for the construction of the project and installation of the CASP Compost Facility furnished by Seller.
44. *Contractor* – Means Construction Contractor.
45. *Equipment manufacturer* – Means "Seller."

SC-2.03. Amend the first sentence of Paragraph 2.03.A. to read as follows:

Buyer will furnish Seller one electronic copy of the Contract Documents.

SC-2.04. Delete the last sentence of Paragraph 2.04.A. as follows:

In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is later.

SC-2.06. Amend the first sentence of Paragraph 2.06.A to read as follows:

Within 7 days after the Contract Times begin to run, Seller shall submit to Buyer and Engineer an acceptable progress schedule of activities, including at a minimum, Shop Drawing and Sample submittals, tests, and deliveries as required by the Contract Documents.

SC-2.06.A Replace in the last sentence of Paragraph 2.06.A, the phrase “approved by” for the words “submitted to.”

SC-3.03.A.3 Delete Paragraph 3.03.A.3 in its entirety.

SC-3.04.A. Add the following sentence at the end of the paragraph, “Any such amendment must be expressed in writing and executed by the Buyer and Seller.” SC-4.01.A and 4.01.B. Delete Paragraphs 4.01.A and 4.01.B in their entirety, and add the following:

4.01.A. Seller shall furnish to Buyer a performance bond, in an amount at least equal to the Contract Price. The bond shall be delivered in accordance with Paragraph 2.01 and shall remain in effect at least 1 year after the Final Acceptance of the Goods or for such longer period of time as may be prescribed by Laws or Regulations or by the terms of any specific provisions of the Contract Documents. Seller shall also furnish such other bonds as are required by the Contract Documents.

4.01.B. The bonds shall be issued in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations and shall be executed by a surety named in the current list of “Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies” as published in Circular 570 by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. Bond signed by an agent must be accompanied by a certified copy of such agent’s authority to act.

SC-4.01.B. Add the following language at the end of Paragraph 4.01.B:

Surety and insurance companies from which the bonds and insurance for this Project are purchased shall have a Best’s rating of no less than A:VII, in addition to the other requirements specified herein.

SC-4.02. Add the following new paragraphs immediately after Paragraph 4.02.E:

4.02.F. The policies of insurance required by this Paragraph 4.02 to be purchased and maintained shall:

4.02.F.1. with respect to insurance required by Paragraphs SC-4.02.F.3 through SC-4.02.F.8 inclusive, include as additional insured (subject to any customary exclusion in respect of professional liability):

4.02.F.1.a. Monterey Regional Waste Management District, County of Monterey, California.

all of whom shall be listed as additional insured, and include coverage for the respective officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;

- 4.02.F.2. include at least the specific coverages and be written for not less than limits of liability provided below in Paragraph 4.02.G or required by Laws or Regulations, whichever is greater;
- 4.02.F.3. include completed operations insurance;
- 4.02.F.4. include contractual liability insurance covering Seller's indemnity obligations under Paragraphs 5.09 and 12.02;
- 4.02.F.5. remain in effect at least until Final Acceptance of the Goods and at all times thereafter when Seller may be correcting, removing, or replacing nonconforming Goods in accordance with Paragraph 8.03;
- 4.02.F.6. with respect to completed operations insurance, and any insurance coverage written on a claims-made basis, remain in effect for at least 5 years after Final Acceptance (and Seller shall furnish Buyer and each other additional insured identified in these Supplementary Conditions, to whom a certificate of insurance has been issued, evidence satisfactory to Buyer and any such additional insured of continuation of such insurance at Final Acceptance and yearly thereafter for the entirety of the 5 year period); and
- 4.02.F.7. with respect to any delegation of professional design services to Seller pursuant to Paragraph 5.10 of the General Conditions, include professional liability coverage by endorsement or otherwise.

4.02.G. The limits of liability for the insurance required by Paragraph SC-4.02.F shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations:

4.02.G.1. Seller's General Liability under Paragraphs SC-4.02.F.3 through SC-4.02.F.6 which shall include completed operations and product liability coverages and eliminate the exclusion with respect to property under the care, custody, and control of Seller:

4.02.G.1.a. General Aggregate: \$2,000,000

4.02.G.1.b. Products (Completed Operations Aggregate): \$2,000,000

4.02.H. Seller shall deliver to Buyer, with copies to each additional insured identified in these Supplementary Conditions, certificates of insurance (and other evidence requested by Buyer or any other additional insured) which Seller is required to purchase and maintain.

4.02.I. If Buyer has any objection to the coverage afforded by or other provisions of the insurance required to be purchased and maintained by Seller, Buyer shall notify Seller in writing within 10 days after receipt of the certificates or other evidence required by Paragraph SC-4.02.H Seller shall provide such additional information in respect to insurance as Buyer shall reasonably request.

SC-5.06. Add the following new paragraphs immediately after Paragraph 5.06.E:

SC-5.06.F. Seller shall furnish required submittals with sufficient information and accuracy in order to obtain required approval of an item with no more than two submittals. Engineer will record Engineer's time for reviewing subsequent submittals of

Shop Drawings, samples, or other items requiring approval and Seller shall reimburse Buyer for Engineer's charges for such time.

SC-5.06.G. In the event that Seller requests a change of a previously approved item, Seller shall reimburse Buyer for Engineer's charges for its review time unless the need for such change is beyond the control of Seller.

SC-5.08.B. Replace Paragraph 5.08.B with the following:

Seller warrants and guarantees to Buyer that all Goods and Special Services will conform with the Contract Documents, and with the standards established by any Samples approved by Engineer, and the Goods will be of merchantable quality and fit for the particular purpose the Goods and/or Special Services are being purchased for.

Buyer and Engineer shall be entitled to rely on Seller's warranty and guarantee. If the Contract Documents do not otherwise specify the characteristics or the quality of the Goods, the Goods shall comply with the requirements of Paragraph 5.02.B.

SC-5.08.C. Delete Paragraph 5.08.C. in its entirety.

SC-5.09.A. Delete the following language from Paragraph 5.09.A.:

but only to the extent cause by any negligent act or omission of Seller, or any individual or entity directly or indirectly employed by Seller or anyone for whose acts Seller may be liable.

SC-7.02.B. Delete Paragraph 5.02.B. in its entirety and replace with the following:

7.02.B. Any Claim by Seller for an adjustment in the Contract Price or Contract Times shall be based on written notice submitted by the Seller to the Buyer in accordance with the provisions of Paragraph 9.06.

SC-8.01.B.2. Delete Paragraph 8.01.B.2 in its entirety.

SC-8.01.B.3. Replace Paragraph 8.01.B.3 with the following:

If on the basis of the visual inspection specified in Paragraph 8.01.B.1, the Goods appear to be conforming, Buyer will provide Seller with written receipt of the Goods, but only for purposes of a progress payment. The parties understand and agree that such written receipt will not be construed as final, and that Buyer will only be able to determine if the Goods and Special Services are conforming at a later date and in accordance with Paragraph 8.01.C of the General Conditions.

SC-8.02.A. Add the following language after the last sentence in Paragraph 8.02.A:

Buyer may also assess liquidated damages against Seller for provision of non-conforming Goods and Special Services, as is set forth in Paragraph 4.4 of the Agreement.

SC-8.02.C. Replace the word "non-comformance" with "non-conformance."

SC-8.02.F. Replace Paragraph 8.02.F. with the following:

If Buyer asserts that the Goods and Special Services are non-conforming and such Goods and

Special Services are determined to be conforming, or if Buyer rejects as non-conforming Goods and Special Services that are later determined to be conforming, then Seller shall be entitled to pursue any right or remedy the Seller may have either under this Contract or at law.

SC-8.03.A. Replace Paragraph 8.03.A., “*Correction Period*” with the following:

Seller’s responsibility for correcting all non-conformities in the Goods and Special Services will extend for a period of one (1) year after the Final Acceptance of the Goods, or for such longer period of time as may be prescribed by Laws or Regulations or by the terms of any specific provisions of the Contract Documents.

SC-9.02.A. Replace Paragraph 9.02.A with the following:

9.02.A. Engineer will issue with reasonable promptness such written clarifications or interpretations of the Contract Documents as Engineer may determine necessary, which shall be consistent with or reasonable inferable from the overall intent of the Contract Documents. Such written clarifications and interpretations will be binding on Buyer and Seller. If Seller believes that a written clarification or interpretation justifies an adjustment in the Contract Price of Contract Times, Seller may make a Claim therefore in accordance with Paragraph 9.06.

SC-9.05.B. Delete Paragraph 9.05.B. in its entirety and replace it with the following:

9.05.B. The rendering of a decision by the Engineer pursuant to this Paragraph 9.05 with respect to any such Claim, dispute, or other matter (except any which have been waived in the manner as provided herein) will be a condition precedent to any exercise by Seller of such rights or remedies as Seller may otherwise have under the Contract Documents or by Law or Regulations in respect of any such Claim, dispute, or other matter.

SC-9.06 Delete Paragraph 9.06 in its entirety and replace with the following:

9.06 *Claims and Disputes*

- A. *Determination by Engineer:* Seller shall refer questions regarding meaning and intent of the Contract Documents in writing to the Engineer for its decision. The Engineer shall respond to the Seller in writing with its decision. If the Seller disagrees with the Engineer’s decision or considers that the decision requires extra work, Seller may appeal the decision to the Owner. Any related work performed by the Seller prior to the Engineer’s decision is done at Seller’s risk unless authorized by the Engineer.
- B. *Appeals to Owner:* In the event the Seller disagrees with any such decision of the Engineer, the Seller may within ten (10) days of the date of such decision appeal the decision to the Owner for review. The appeal must be in writing and must set forth the question referred to the Engineer, the Engineer’s decision and the Seller’s basis for disagreement. Seller shall deliver a copy of the appeal to the Engineer at the time it is filed with the Owner. The Owner shall make all reasonable efforts to review the appeal and deliver its decision in writing to the Seller within 30 days from the date of receipt of the appeal. Failure of the Seller to appeal the decision of the Engineer within said 10-day period constitutes a waiver of the Seller’s right to thereafter assert any claim resulting from such decision. This procedure is not meant to preclude or discourage informal resolution of disagreements between the Engineer and the

Seller. In the event the Owner elects to do so, the Owner may establish a "Claims Review Board" either to assist in reviewing appeals hereunder or to consider Seller appeals directly. Once established, this Review Board will hear all future appeals of claims for the Contract Documents. During the pendency of any appeal any related work performed by the Seller shall be done at the Seller's risk unless authorized by the Engineer.

- C. *Dispute Settlement*: Except as otherwise provided in the Contract Documents, any controversy, claim, or dispute arising out of or relating to the Contract Documents, or the breach thereof, must be resolved by arbitration in accordance with Construction Industry Arbitration Rules of American Arbitration Association. Except that in the event either party to such arbitration proceedings desires to join an additional party that is not bound to proceed by arbitration, the party to arbitration may transfer the arbitration proceeding to a court of competent jurisdiction as defined below so that the third party may be made a party to the proceeding.

The Seller shall not delay the Work because arbitration or other legal proceedings are pending, unless they have written permission from the Project Manager to do so. Such delay is limited to the time required by the arbitrators or court to determine whether the Work will continue or be suspended pending decision on the dispute by the arbitrators or court. Any request for arbitration must be in writing and must be delivered to the Owner and Project Manager and any adverse party either by personal delivery or by registered mail addressed to the last known address of the parties in dispute.

In the event Owner or Seller initiates arbitration or other legal action against the other for damages, the prevailing party in such arbitration or other legal action is entitled to recover its reasonable attorney's fees therein and in any appeal there from.

SC-10. Delete Article 10 in its entirety and replace with the following:

ARTICLE 10 - PAYMENT

10.01 Applications For Progress Payments

- A. Seller shall submit to Buyer for review Applications for Payment filled out and signed by Seller and accompanied by such supporting documentation as is required by the Contract Documents and also as Buyer may reasonably require. The timing and amounts of progress payments shall be as stipulated in the Agreement.
1. The first Application for Payment will be submitted after Seller's receipt of the Notice to Proceed.
 2. The second Application for Payment will be submitted after review and approval by Engineer of all Shop Drawings and of all Samples required by the Contract Documents.
 3. The third Application for Payment will be submitted after receipt of the Goods has been acknowledged in accordance with Paragraph 8.01.C and will be accompanied by a bill of sale, invoice, or other documentation reasonably

satisfactory to Buyer warranting that Buyer has rightfully received good title to the Goods from Seller and that, upon payment, the Goods will be free and clear of all liens. Such documentation will include releases and waivers from all parties with viable lien rights. In the case of multiple deliveries of Goods, additional Applications for Payment accompanied by the required documentation will be submitted as Buyer acknowledges receipt of additional items of the Goods.

10.02 Review of Applications for Progress Payments

- A. Buyer will, within fourteen (14) days after receipt of each Application for Payment, either indicate in writing a disposition of payment or return the Application to Seller indicating in writing reasons for refusing payment. In the latter case, Seller may make the necessary corrections and resubmit the Application.
1. Payment requested in the first Application for Payment will constitute a review of the Application for Payment and the accompanying data, that the Shop Drawings and Samples have been reviewed and approved as required by the Contract Documents.
 2. Buyer will review payment requested by Seller in the Application for Payment submitted upon Buyer's acknowledgment of receipt of the Goods and accompanying data. Such review will not constitute a representation that Engineer or Buyer has made a final inspection of the Goods, that the Goods are free from non-conformities, acceptable or in conformance with the Contract Documents, that Buyer has made any investigation as to Buyer's title to the Goods, that exhaustive or continuous inspections have been made to check the quality or the quantity of the Goods or that there may not be other matters or issues between the parties that might entitle Seller to additional payments by Buyer or Buyer to withhold payment to Seller.
 3. Buyer may refuse all or any part of a progress payment be made, or may nullify all or any part of any previous payment if, in Buyer's opinion, the basis of such progress payment is incorrect or if on the basis of subsequently discovered evidence or subsequent inspections or tests refusal or nullification is necessary to protect Buyer from loss because the Contract Price has been reduced, Goods are found to be non-conforming, or Seller has failed to furnish acceptable Special Services.

10.03 Amount and Timing of Progress Payments

- A. Subject to Paragraph 10.02.A., the amounts of the progress payments will be as provided in the Agreement. Buyer shall within 30 days after receipt of each Application for Payment pay Seller; but, in the case of the Application for Payment upon Buyer's acknowledgment of receipt of the Goods, said 30-day period may be extended for so long as is necessary (but in no event more than 60 days) for Buyer to examine the bill of sale and other documentation submitted therewith. Buyer shall notify Seller promptly of any deficiency in the documentation and shall not unreasonably withhold payment.

10.04 Suspension of or Reduction in Payment

- A. Buyer may suspend or reduce the amount of progress payments, under the following circumstances:
 - 1. Buyer has reasonable grounds to conclude that Seller will not furnish the Goods or the Special Services in accordance with the Contract Documents, and
 - 2. Buyer has requested in writing assurances from Seller that the Goods and Special Services will be delivered or furnished in accordance with the Contract Documents, and Seller has failed to provide adequate assurances within ten days of Buyer's written request.
- B. If Buyer refuses to make payment of the full amount, Buyer will provide Seller immediate written notice stating the reason for such action and will pay Seller any amount remaining after deduction of the amount withheld. Buyer shall pay Seller the amount withheld when Seller corrects the reason for such action to Buyer's satisfaction.

10.05 Final Application for Payment

- A. After Seller has corrected all non-conformities to the reasonable satisfaction of Buyer and Engineer, furnished all Special Services, and delivered all documents required by the Contract Documents, Buyer will issue to the Seller a Notice of Acceptance. Seller may then make application for final payment following the procedure for progress payments. The final Application for Payment will be accompanied by all documentation called for in the Contract Documents, a list of all unsettled Claims, and such other data and information as Buyer or Engineer may reasonably require.

10.06 Final Payment

- A. If, on the basis of final inspection and the review of the final Application for Payment and accompanying documentation, Buyer is reasonably satisfied that Seller has furnished the Goods and Special Services in accordance with the Contract Documents, and that Seller has fulfilled all other obligations under the Contract Documents, then Buyer will, within fourteen (14) days after receipt of the final Application for Payment, notify seller in writing of the final payment subject to the provisions of Paragraph 10.07. Otherwise, Buyer will return the Application to Seller, indicating the reasons for refusing final payment, in which case Seller shall make the necessary corrections and resubmit the Application for payment. If the Application and accompanying documentation are appropriate as to form and substance, Buyer shall, within 30 days after receipt thereof, pay Seller, less any sum Buyer is entitled to deduct, including but not limited to liquidated damages to which Buyer is entitled.

10.07 Waiver of Claims

- 1. Seller's acceptance of final payment releases Buyer, the Project Manager, and the Design Consultant, as agent of the Owner, from all claims and all liability to the Seller for all things done or furnished in connection with the Work, and every act of the Owner and others relating to or arising out of the Work. No payment, however, final or otherwise, operates to release the Seller or its Sureties from obligations under this Contract, and any bonds and warranties, as herein

provided.

SC-11.01.A.2. Delete Paragraph 11.01.A.2. in its entirety.

SC.-11.02.A. Replace Paragraph 11.02.A. with the following:

Buyer has the right to suspend performance of the Contract for such period of time as Buyer may determine to be appropriate for the convenience of Buyer. If the performance of all or any part of the Work is suspended, delayed, or interrupted for an unreasonable period of time by an act of the Buyer in administration of this Contract, or by the Buyer's failure to act within a reasonable time, the Buyer shall make an adjustment for any increase in the cost of performance of this Contract (excluding profit or loss of other work) necessarily caused by such unreasonable suspension, delay, or interruption and modify the Contract in writing. However, no adjustment is authorized for any suspension, delay, or interruption to the extent: (1) that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of Seller; or (2) for which an equitable adjustment (to Contract Price or Time) is provided for or excluded under any other provision of the Contract.

SC-11.03 Delete Paragraph 11.03 in its entirety.

SC-12.02.D. Add the following sentence to the end of paragraph 12.02.D.

Seller shall also be responsible for damages suffered by Buyer due to any delay caused by the requirement to replace the Goods and provide the related design and construction services.

SC-13.01. Replace Paragraph 13.01 with the following:

All disputes between Buyer and Seller will be resolved as set forth in Paragraphs 9.05 and 9.06 of these Supplemental Conditions.

END OF SECTION

SECTION 01 11 00
SUMMARY OF WORK

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Project Description.
- B. Work Covered by Contract Documents.
- C. Related Work Performed by Owner or Under Separate Contract.

1.2 PROJECT DESCRIPTION

- A. The work generally consists of the provision of covered aerated static pile (CASP) compost facility equipment for future installment at the Monterey Regional Waste Management District (MRWMD) owned property.
- B. The proposed CASP facility has a throughput capacity of up to 500 tons per day (tpd) and will be competitively sourced and built by licensed contractors experienced in CASP construction. Major equipment includes enclosed blower skids, temperature probes, flow meters, actuated valves, front-end loader (procured separately by Owner), and electrical equipment housed in a proposed control room. A description of each is below and further detailed in Section 41 00 00:
 - A. The enclosed, global blower skids will receive all inputs from the temperature probes and flows meters required to monitor performance of the active piles. Through a network of piping, the blower skid will positively aerate each pile as required to meet the California Code of Regulations, any related permit conditions, and facilitate proper aerobic composting of the processed feedstock.
 - B. The flow meters and temperature probes will monitor air flow to the piles. These inputs will be relayed back to the blower skid allowing for the automation of the facility and compliance with California Code of Regulations.
 - C. The actuated valves will be located on the network of piping on each pile's sparger manifold and controlled by the blower skids to automatically allow more or less air flow to each respective pile, based on the pile's performance and need.
 - D. Programmable logic Controller (PLC) based local control panel will acquire and store the instrumentation signals (air flow, temperature, and oxygen as applicable) for each pile, and report to a master PLC based control panel located at a facility to allow access for all piles from a single interface.
 - E. Temperature transmitters will be installed along each pile to obtain temperature measurements for all piles and record in the master control

panel. Temperature measurements from the static pile temperature measurement system will be transmitted and stored in a centralized location for reporting.

- F. Oxygen probes are optional and if furnished, will be installed along each pile to obtain Oxygen content measurements for all piles and record in the master control panel. Oxygen measurements from the static pile oxygen measurement system will be transmitted and stored in a centralized location for reporting.
- G. Electrical equipment will be required to bring power to the site for operation of the facility. This will also aid in the site's ability to purchase electrically powered equipment rather than diesel powered options.
- H. A control room will be utilized to house and connect the electrical system equipment to access electrical service.
- I. An additional CAT 950 or similar model front-end loader (procured separately by owner and not included in this equipment procurement) will be utilized with the existing front-end loaders onsite for material movement and transportation to and from the receiving, preprocessing, active, and curing areas.
- J. Any equipment moved from an area that processes raw feedstock to an area processing finished compost is washed and sanitized prior to handling any material. All relevant equipment is properly registered and permitted with Monterey Bay Air Resources District where applicable. Existing equipment at the site includes:
 - I. Caterpillar 938H Wheel Loader, used to process raw feedstock;
 - II. Caterpillar 950 Wheel Loader, used to process raw feedstock;
 - III. Kobelco SK200-9 Excavator, used to feed grinders and screens;
 - IV. Cat 321 excavator, used to feed grinders and screens;
 - V. Doppstadt SM 726 E Profi Trommel Screen, electrically powered with a capacity to process up to 125 cubic yards per hour (cyph), used to process raw feedstock;
 - VI. Diamond Z 6000TKT Grinder, capable of processing up to 750 cyph, used to process raw feedstock;
 - VII. Vermeer HG6000 Grinder capable of processing up to 100 tph, used to process raw feedstock;
 - VIII. Liebherr L566 Wheel Loader (2), one used in processing and one for finished compost;
 - IX. Komptech Topturn X67 Compost Turner, capable of turning 6,450 cyph;
 - X. Phoenix 3300 Trommel Screen, capable of processing up to 300 tph, used to process finished material;
 - XI. Edge TRT622 Trommel Screen, capable of processing up to 100 tph, used to process finished material;

- XII. Liebherr L566 Wheel Loader (2), one used in processing and one for finished compost;
- XIII. Kawasaki 80Z7 Wheel Loader, used to handle finished compost; and
- XIV. Peterbilt Water Truck.

1.3 WORK COVERED BY CONTRACT DOCUMENTS

- A. Summary of Goods: proposed CASP equipment including the following major elements:
 - a. Blower Skid
 - b. Electrical Equipment
 - c. Control Room
 - d. Pressure Indicating Transmitters
 - e. Flow Meters
 - f. Dual Depth Temperature Probes
 - g. Control Panel/Controls
 - h. Actuating Valves
 - i. Oxygen Probes (Optional)
- B. Summary of Special Services: Installation assistance, commissioning assistance, manufacturer's representative, manufacturer's certificate of proper installation, certificate of substantial project completion.

1.4 RELATED WORK PERFORMED BY OWNER OR UNDER SEPARATE CONTRACT

- A. Owner will contract with others for installation of provided equipment at a future date.

PART 2 PRODUCTS

Not Used

PART 3 INSTALLATION

Not Used

PART 4 PAYMENT

4.1. GENERAL

- A. Full compensation for the work specified herein shall be considered as included in the applicable lump sum or unit price items stated in the Bidder's proposal and no additional compensation will be allowed therefor.

END OF SECTION

SECTION 01 20 10
PRICE AND PAYMENT PROCEDURES

PART 1 GENERAL

1.1 DEFINITIONS

- A. Person-Day: One person for eight hours within regular working hours.

1.2 PAYMENT PROCEDURES

- A. Payment procedures are described in the General Conditions and Agreement.
- B. The applicable Sales Tax Rate for unincorporated Monterey County where the project is located is 7.75%.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

END OF SECTION

SECTION 01 30 00
ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Project Coordination.
- B. Contract Progress Reporting.
- C. Submittal Procedures.
- D. Operation and Maintenance Data.
- E. Supplements.

1.2 PROJECT COORDINATION

- A. Onsite Coordination:
 - a. Buyer will coordinate the activities at the Point of Destination related to the Goods furnished under this Contract.
 - b. Seller shall fully coordinate its activities with Buyer and Construction Contractor. This includes promptly bringing to Buyer's attention any conflict or coordination problem.

1.3 CONTRACT PROGRESS REPORTING

- A. Progress Schedule
 - a. Provide a graphic representation of the schedule demonstrating Seller's plan for fulfilling Contract requirements.
 - b. Information shall be comprehensive and shall represent all activities, including submittals and procurement necessary to complete Contract.
 - c. Typical minimum detail on the schedule shall include, but not be limited to, the following:
 - 1. Delivery date(s) of Shop Drawings and Sample submittals.
 - 2. Delivery date(s) of Operation and Maintenance Data.
 - 3. Date of starting assembly of specified Goods.
 - 4. Date of finishing assembly of specified Goods.
 - 5. Date of testing at plant as applicable.
 - 6. Date of shipment from Seller.
 - 7. Date of arrival at Point of Destination.

- d. Assist Buyer in determining the most current schedule information on the Contract items, including whether Seller is on schedule or delayed. These requirements apply fully to telephone inquiries, personal visits, letters, or other communication.
- e. Schedule Reporting: Submit Notice of Schedule Impact at any time that a Progress Schedule activity is delayed by five or more days.
 - 1. Complete and submit to parties named on the form attached.
 - 2. Transmit completed form either in facsimile, e-mail, or mail via registered overnight mail service.

1.4 SUBMITTAL PROCEDURES

- A. Transmit all electronic submittals to MRWMD's Project Manager via email.
- B. Transmittal of Submittal:
 - a. Review each submittal and check for compliance with Contract Documents.
 - b. Stamp each submittal with uniform approval stamp before submitting; stamp to include Project name, submittal number, Specification number, Seller's reviewer name, date of Seller's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with Contract Documents. Engineer will not review submittals that do not bear Seller's certification as required by the General Conditions and will return them without action.
 - c. Complete, sign, and transmit with each submittal package, one Transmittal of Seller's Submittal form attached at end of this section.
 - d. Identify each submittal with the following:
 - 1. Numbering and Tracking System:
 - i. Sequentially number each submittal.
 - ii. Resubmission of submittal shall have original number with sequential alphabetic suffix.
 - 2. Specification section and paragraph to which submittal applies.
 - 3. Project title and Engineer's project number.
 - 4. Date of transmittal.
 - 5. Names of Seller, Subcontractor or Supplier, and manufacturer as appropriate.
 - e. Identify and describe each deviation or variation from Contract Documents.
- C. Format:
 - a. Do not base Shop Drawings on reproductions of Contract Documents.
 - b. Present in a clear and thorough manner and in sufficient detail to show kind,

size, arrangement, and function of components, materials, and devices, and compliance with Contract Documents.

- c. Index with labeled tab dividers in orderly manner.
- D. Timeliness of Submittal: Schedule and submit in accordance with the Seller's Progress Schedule, and requirements of individual Specification sections.
- E. Processing Time:
 - a. Time for review shall commence on Engineer's receipt of submittal.
 - b. Engineer will act upon Seller's submittal and MRWMD Project Manager will transmit response to Seller not later than 14 days after receipt, unless otherwise specified.
 - c. Resubmittals will be subject to same review time.
 - d. No adjustment of Contract Times or Price will be allowed due to delays in providing Goods or Special Services caused by rejection and subsequent resubmittals.
- F. Resubmittals: Clearly identify each correction or change made.
- G. Incomplete Submittals:
 - a. MRWMD Project Manager will return entire submittal for Seller's revision if preliminary review deems it incomplete.
 - b. When any of the following are missing, submittal will be deemed incomplete:
 - 1. Seller's certification as required by the General Conditions.
 - 2. Transmittal of Seller's Submittal, completed and signed.
- H. Submittals not required by Contract Documents: Will not be reviewed and will be returned stamped "Not Subject to Review."
- I. Action Submittals:
 - a. Prepare and submit as required by individual Specification sections.
 - b. Shop Drawings:
 - 1. Copies: One electronic copy Sent Electronically to MRWMD's Project Manager who may forward it to the Engineer. Identify and Indicate:
 - i. Applicable Contract Drawing and Detail number, products, units and assemblies, and system or equipment identification or tag numbers.
 - ii. Goods and Component Title: Identical to title shown on Drawings.
 - iii. Critical field dimensions and relationships to other critical features. Note dimensions established by field measurement.
 - iv. Project-specific information drawn accurately to scale.

2. Manufacturer's standard schematic drawings and diagrams as follows:
 - i. Modify to delete information that is not applicable.
 - ii. Supplement standard information to provide information specifically applicable.
 3. Product Data: Provide as specified in individual Specifications.
 4. Foreign Manufacturers: When proposed, include following additional information:
 - i. Names and addresses of at least two companies that maintain technical service representatives close to Project.
 - ii. Complete list of spare parts and accessories for each piece of equipment.
- J. Provide "Certificate of Unit Responsibility" completed forms (see Section 01640 and related requirements.).
- K. Action Submittal Dispositions: Engineer will review, mark, and stamp as appropriate, and distribute marked-up copies as noted:
- a. Approved:
 1. Seller may provide Goods or Special Services covered by submittal.
 - i. Distribution: One electronic copy by email distributed to MRWMD's Project Manager.
 - b. Approved as Noted:
 1. Seller may provide Goods or Special Services covered by submittal, in accordance with Engineer's notations.
 - i. Distribution: One electronic via email distributed to MRWMD's Project Manager.
 - c. Partial Approval, Resubmit as Noted:
 1. Make corrections or obtain missing portions and resubmit.
 2. Except for portions indicated, Seller may begin to provide Goods or Special Services covered by submittal, in accordance with Engineer's notations.
 3. Distribution: One electronic copy visa email distributed to MRWMD's Project Manager.
 - d. Revise and Resubmit:
 1. Seller may not provide Goods or Special Services covered by submittal.
 2. Distribution: One electronic copy via email distributed to Project Manager.

- L. Informational Submittals:
 - a. Copies: One electronic copy via email distributed to MRWMD's Project Manager.
 - b. Refer to individual Specification sections for specific submittal requirements.
 - c. Engineer will review each submittal. If submittal meets conditions of the Contract, Engineer will forward submittal to MRWMD's Project Manager. If MRWMD's Project Manager determines submittal does not meet conditions of the Contract and is therefore considered unacceptable, MRWMD's Project Manager will return with review comments to Seller and require that submittal be corrected and resubmitted.

1.5 OPERATION AND MAINTENANCE (O&M) DATA

- A. Format and Scheduling:
 - a. Preliminary Data:
 - 1. Format: Instructional Manual.
 - 2. Submit subsequent to MRWMD's Project Manager approval of Shop Drawings, but prior to shipment date.
 - 3. Submit two copies for MRWMD's Project Manager review.
 - i. If data meets conditions of the Contract:
 - a) Approved copies will be returned electronically
 - ii. If data does not meet conditions of the Contract:
 - a) It will be returned to Seller with Engineer's comments (on separate document) for revision.
 - b) Resubmit electronically revised in accordance with Engineer's comments.
 - b. Final Data:
 - 1. Submit at the time of shipment of Goods.
 - 2. Format: Instructional Manual and Electronic Media.
 - 3. Data: Submit three copies.
- B. Instructional Manual Format:
 - a. Binder: Commercial quality, permanent, three-ring or three-post binders with durable plastic cover.
 - b. Size: 8-1/2 inches by 11 inches, minimum.
 - c. Cover: Identify manual with typed or printed title "OPERATION AND MAINTENANCE DATA" and list:
 - 1. Project title.

2. Designate applicable system, equipment, material, or finish.
 3. Identity of separate structure as applicable.
 4. Identity of general subject matter covered in manual.
- d. Title Page:
1. Seller's name, address, and telephone number.
 2. Supplier name, address, and telephone number, as appropriate.
 - i. Identify area of responsibility of each.
 - ii. Provide name and telephone number of local source of supply for parts and replacement.
- e. Table of Contents:
1. Neatly typewritten and arranged in systematic order with consecutive page numbers.
 2. Identify each product by product name and other identifying numbers or symbols as set forth in Contract Documents.
- f. Paper: 20-pound minimum, white for typed pages.
- g. Text: Manufacturer's printed data, or neatly typewritten.
- h. Three-hole punch data for binding and composition; arrange printing so that punched holes do not obliterate data.
- i. Material shall be suitable for reproduction, with quality equal to original. Photocopying of material will be acceptable, except for material containing photographs.
- C. Electronic Media Format:
- a. Portable Document Format (PDF):
1. After all preliminary data has been found to be acceptable to MRWMD's Project Manager, submit Operation and Maintenance data in PDF format on USB.
 2. Files to be exact duplicates of MRWMD-accepted preliminary data. Arrange by specification number and name.
 3. Files to be fully functional and viewable in most recent version of Adobe Acrobat.
- D. Data Content:
- a. Product Data:
1. Include only those sheets that are pertinent to specific product.
 2. Clearly annotate each sheet to:
 - i. Identify specific product or part installed.
 - ii. Identify data applicable to installation.

- iii. Delete references to inapplicable information.
 - 3. Function, normal operating characteristics, and limiting conditions.
 - 4. Performance curves, engineering data, nameplate data, and tests.
 - 5. Complete nomenclature and commercial number of replaceable parts.
 - 6. Original manufacturer's parts list, illustrations, detailed assembly drawings showing each part with part numbers and sequentially numbered parts list, and diagrams required for maintenance.
 - 7. Spare parts ordering instructions.
 - 8. Where applicable, identify installed spares and other provisions for future work (for example, reserved panel space, unused components, wiring, terminals).
- b. Color-coded piping diagrams.
- c. Charts of valve tag numbers, with the location and function of each valve.
- d. Drawings: Supplement product data with Drawings as necessary to clearly illustrate:
 - 1. Format:
 - i. Provide reinforced, punched, binder tab; bind in with text.
 - ii. Reduced to 8-1/2 inches by 11 inches, or 11 inches by 17 inches folded to 8-1/2 inches by 11 inches.
 - iii. Where reduction is impractical, fold and place in 8-1/2-inch by 11-inch envelopes bound in text.
 - iv. Identify Specification section and product on Drawings and envelopes.
 - 2. Relations of component parts of equipment and systems.
 - 3. Control and flow diagrams.
 - 4. Coordinate drawings with Project record documents to assure correct illustration of completed installation.
- e. Instructions and Procedures: Within text, as required to supplement product data.
 - 1. Format:
 - i. Organize in consistent format under separate heading for each different procedure.
 - ii. Provide logical sequence of instructions for each procedure.
 - iii. Provide information sheet for Buyer's personnel, including:
 - a) Proper procedures in event of failure.
 - b) Instances that might affect validity of guarantee or Bond.

2. Installation Instructions: Including alignment, adjusting, calibrating, and checking.
 3. Operating Procedures:
 - i. Startup, break-in, routine, and normal operating instructions.
 - ii. Test procedures and results of factory tests where required.
 - iii. Regulation, control, stopping, and emergency instructions.
 - iv. Description of operation sequence by control manufacturer.
 - v. Shutdown instructions for both short and extended duration.
 - vi. Summer and winter operating instructions, as applicable.
 - vii. Safety precautions.
 - viii. Special operating instructions.
 4. Maintenance and Overhaul Procedures:
 - i. Routine maintenance.
 - ii. Guide to troubleshooting.
 - iii. Disassembly, removal, repair, reinstallation, and re-assembly.
- E. Content for Each Item or System:
- a. Description of Unit and Component Parts:
 1. Function, normal operating characteristics, and limiting conditions.
 2. Performance curves, engineering data, nameplate data, and tests.
 3. Complete nomenclature and commercial number of replaceable parts.
 4. Interconnection wiring diagrams, including control and lighting systems.
 - b. Circuit Directories of Panelboards:
 1. Electrical service.
 2. Controls.
 3. Communications.
 - c. List of electrical relay settings and control and alarm contact settings.
 - d. Electrical interconnection wiring diagram, including control and lighting systems.
 - e. Operating Procedures:
 1. Routine and normal operating instructions.
 2. Sequences required.
 3. Safety precautions.
 4. Special operating instructions.

- f. Maintenance Procedures:
 - 1. Routine maintenance.
 - 2. Guide to troubleshooting.
 - 3. Adjustment and checking.
 - 4. List of relay settings, control and alarm contact settings.
 - g. Manufacturer's printed operating and maintenance instructions.
 - h. List of original manufacturer's spare parts, manufacturer's current prices, and recommended quantities to be maintained in storage.
 - i. Copy of Manufactures Warranty.
- F. Maintenance Summary:
- a. Compile individual Maintenance Summary for each applicable item, respective unit or system, and for components or sub-units.
 - b. Format:
 - 1. Use Maintenance Summary Form bound with this section or electronic facsimile of such.
 - 2. Each Maintenance Summary may take as many pages as required.
 - 3. Use only 8-1/2-inch by 11-inch size paper.
 - 4. Complete using typewriter or electronic printing.
 - c. Include detailed lubrication instructions and diagrams showing points to be greased or oiled; recommend type, grade, and temperature range of lubricants and frequency of lubrication.
 - d. Recommended Spare Parts:
 - 1. Data to be consistent with manufacturer's Bill of Materials/Parts List furnished in O&M manuals.
 - 2. "Unit" is the unit of measure for ordering the part.
 - 3. "Quantity" is the number of units recommended.
 - 4. "Unit Cost" is the current purchase price.

1.6 SUPPLEMENTS

- A. The Supplements listed below, following "End of Section", are part of this Specification:
 - a. Notice of Schedule Impact.
 - b. Transmittal of Seller's Submittal Form.
 - c. Maintenance Summary Form.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

END OF SECTION 01 30 00

NOTICE OF SCHEDULE IMPACT

(Send this form as addressed if delay is over 5 days. Send either via fax, e-mail, or registered, overnight mail.)

To: ReGen's Project Manager and Construction Contractor

Attention: _____

Address: _____

Fax No.: _____

E-mail: _____

RE: Contract No.: _____

Name of Contract: _____

Type of Goods: _____

Nature of Delay: _____

New Estimated Date for Final Shop Drawings: _____

New Estimated Date for Start of Manufacture: _____

New Estimated Date for Finish of Manufacture: _____

New Estimated Date for Shipment: _____

New Estimated Date for Arrival at Point of Destination: _____

SELLER:

Name: _____

Address: _____

City: _____ State: _____ Zip: _____ Telephone: _____

E-mail: _____

By (Name/Title): _____ Date: _____

TRANSMITTAL OF SELLER'S SUBMITTAL

(ATTACH TO EACH SUBMITTAL)

Date: _____

TO: ReGen c/o David Ramirez,
P.E.

Physical: 14201 Del Monte Blvd,
Monterey County (Salinas), CA
93908

Mailing: P.O. Box 1670, Marina, CA
93933

dramirez@regenmonterey.org

FROM:

Seller

Submittal No.: _____

New Submittal

Resubmittal

Project: _____

Project No.: _____

Specification Section No.: _____
(Cover only one section with each transmittal)

Schedule Date of Transmittal: _____

SUBMITTAL TYPE:

Shop Drawing

Sample

Informational

The following items are hereby submitted:

Number of Copies	Description of Item Submitted (Type, Size, Model Number, Etc.)	Spec. and Para. No.	Drawing or Brochure Number	Contains Variation to Contract	
				No	Yes

SELLER hereby certifies that (i) SELLER has complied with the requirements of Contract Documents in preparation, review, and submission of designated Submittal and (ii) the Submittal is complete and in accordance with the Contract Documents and requirements of laws and regulations and governing agencies.

By: _____

SELLER (Authorized Signature)

MAINTENANCE SUMMARY FORM

PROJECT: _____ CONTRACT NO.: _____

1. ITEM _____
2. MANUFACTURER _____
3. TAG NUMBER(S) _____
4. WEIGHT OF INDIVIDUAL COMPONENTS (OVER 100 POUNDS) _____
5. NAMEPLATE DATA (hp, voltage, speed, etc.) _____
6. SELLER'S LOCAL REPRESENTATIVE _____
 - a. Name _____ Telephone No. _____
 - b. Address _____
7. MAINTENANCE REQUIREMENTS

Maintenance Operation Comments	Frequency	Lubricant (If Applicable)
List briefly each maintenance operation required and refer to specific information in manufacturer's standard maintenance manual, if applicable. (Reference to manufacturer's catalog or sales literature is not acceptable.)	List required frequency of each maintenance operation.	Refer by symbol to lubricant required.

SECTION 01 60 00
PRODUCT REQUIREMENTS

PART 1 GENERAL

1.1 DEFINITIONS

- A. Construction Contractor: The entity, under separate contract with the Buyer, whose responsibilities include the installation of the Goods provided under this Contract.

1.2 PRODUCTS

- A. Where specified, factory test results shall be reviewed and accepted by Buyer or Engineer before Goods are shipped.
- B. When practical, Goods shall be factory assembled. When impractical:
 - a. Furnish assembly instructions.
 - b. Mark or tag the separate parts and assemblies for field assembly.
 - c. Cover machined and unpainted parts that may be damaged by elements with a strippable protective coating.
- C. Package or crate Goods to provide protection from damage during shipping, handling, and storage.
- D. Marking: Mark or tag outside of each package or crate to indicate its purchase order number, bill of lading number, contents by name, name of project and Seller, equipment number, and approximate weight.
- E. Spare Parts and Special Tools:
 - a. Deliver at same time as Goods delivery.
 - b. Mark to identify associated products by name, equipment, and part number.
 - c. Package parts for protection against damage from elements during shipping, handling, and storage.
 - d. Ship in boxes or containers marked to indicate contents and as stated above.
- F. Accessories:
 - a. Deliver at same time as Goods delivery.
 - b. Furnish accessories required to place each item of equipment in full operation.
 - c. Accessories include, but are not limited to, adequate oil and grease as required for first lubrication of equipment (after field testing), light bulbs, fuses, special tools, and other items as required for initial operation.

1.3 PRODUCT DELIVERY REQUIREMENTS

- A. Notify Buyer, on Seller’s Notice of Shipment of Goods form attached to this Section, 15 days prior to shipment of Goods in accordance with Article 6 of General Conditions. Provide all applicable information requested on form.
- B. In accordance with Article 6 of the General Conditions, provide 24-hour telephone notice prior to expected delivery time at the Point of Destination. Notice shall include approximate hour of delivery.
- C. Delivery of Goods shall be made during regular daytime working hours, Monday through Friday, unless other arrangements have been made previously with the Buyer.
- D. Inspection on Delivery:
 - a. Construction Contractor and/or MRWMD will record receipt of Goods at the Point of Destination.
 - b. Upon receipt of Goods at the Point of Destination, Construction Contractor and/or MRWMD will inspect for completeness and evidence of damage during shipment.
 - c. Seller may be present for inspection.
 - d. Should there appear to be damage, Construction Contractor and/or MRWMD will immediately inform the transportation carrier.
 - e. Damaged or incomplete Goods to be returned to Seller for replacement will not be unloaded, except as necessary to expedite return shipment.
 - f. Seller shall expedite replacement of damaged, incomplete, or lost items.

1.4 UNLOADING OF GOODS

- A. After acceptance by inspecting party, Goods will be unloaded by Construction Contractor and/or OWNER in accordance with manufacturer’s instructions, or as specified.
- B. Products Specified by Naming One or More Manufacturers with Provision for Substitutions: Submit Request for Substitution for any manufacturer not named, according to Section 012500 - Substitution Procedures.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

END OF SECTION 01 60 00

SECTION 01 64 00
MANUFACTURERS' SERVICES

PART 1 GENERAL

1.1 DEFINITIONS

- A. Person-Day: One person for eight hours within regular Contractor working hours.

1.2 SUBMITTALS

- A. Informational Submittals:
 - a. Training Schedule: Submit not less than 21 days prior to start of equipment installation and revise as necessary for acceptance.
 - b. Lesson Plan: Submit proposed lesson plan not less than 21 days prior to scheduled training and revise as necessary for acceptance.
 - c. Training Session Tapes: Furnish Owner with two complete sets of tapes fully indexed and cataloged with printed label stating session and date taped.
 - d. Manufacturer's Certificate of Compliance: Submit within 14 days of equipment delivery.
 - e. Manufacturer's Certificate of Proper Installation: Submit within 14 days of equipment installation.
 - f. Certificate of Unit Responsibility: Submit with the construction submittal package for required equipment/systems. No other submittal material will be reviewed until the certificate has been received and found to be in conformance with these requirements.
- B. Action Submittals:
 - a. Equipment Functional Test Report Form: Submit proposed form not less than 45 days prior to start of equipment installation and revise as necessary for acceptance.
 - b. Equipment Performance Test Report Form: Submit proposed form not less than 45 days prior to start of equipment installation and revise as necessary for acceptance.

1.3 QUALIFICATION OF MANUFACTURER'S REPRESENTATIVE

- A. Authorized representative of the manufacturer, factory trained, and experienced in the technical applications, installation, operation, and maintenance of respective equipment, subsystem, or system, with full authority by the equipment manufacturer to issue the certifications required of the manufacturer. Additional qualifications may be specified elsewhere.

- B. Representative subject to acceptance by Owner and Project Manager. No substitute representatives will be allowed unless prior written approval by such has been given.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.1 FULFILLMENT OF SPECIFIED MINIMUM SERVICES

- A. Furnish manufacturers' services when required by an individual specification section, to meet the requirements of this Section.
- B. Where time is necessary in excess of that stated in the Specifications for manufacturers' services, or when a minimum time is not specified, the time required to perform the specified services shall be considered incidental.
- C. Schedule manufacturer' services to avoid conflict with other onsite testing or other manufacturers' onsite services.
- D. Determine, before scheduling services, that all conditions necessary to allow successful testing has been met.
- E. Only those days of service approved by Project Manager will be credited to fulfill the specified minimum services.
- F. When specified in individual specification sections, manufacturer's onsite services shall include:
 - a. Assistance during product (system, subsystem, or component) installation to include observation, guidance, instruction of Contractor's assembly, erection, installation or application procedures.
 - b. Inspection, checking, and adjustment as required for product (system, subsystem, or component) to function as warranted by manufacturer and necessary to furnish Manufacturer's Certificate of Proper Installation.
 - c. Providing, on a daily basis, copies of all manufacturers' representatives' field notes and data to Project Manager.
 - d. Revisiting the Site as required to correct problems and until installation and operation are acceptable to Project Manager.
 - e. Resolution of assembly or installation problems attributable to or associated with, respective manufacturer's products and systems.
 - f. Assistance during functional and performance testing, and facility startup and evaluation.
 - g. Training of Owner's personnel in the operation and maintenance of respective product as required.
 - h. Additional requirements may be specified elsewhere.
 - i. Assistance during the warranty period for inspection, checking, and

adjustment as required for product (system, subsystem, or component) to function per the Contract Document.

3.2 MANUFACTURER'S CERTIFICATE OF COMPLIANCE

- A. When specified in individual Specification section, submit prior to shipment of product or material.
- B. Project Manager may permit use of certain materials or assemblies prior to sampling and testing if accompanied by accepted certification of compliance.
- C. Signed by product manufacturer certifying that product or material specified conforms to or exceeds specified performance criteria. Attach supporting reference data, affidavits, and certifications as appropriate.
- D. May reflect recent or previous test results on material or product, if acceptable to Project Manager.

3.3 MANUFACTURER'S CERTIFICATE OF PROPER INSTALLATION

- A. A Manufacturer's Certificate of Proper Installation form, a copy of which is attached to this section, shall be completed and signed by the equipment manufacturer's representative.
- B. Such form shall certify that the signing party is a duly authorized representative of the manufacturer, is empowered by the manufacturer to inspect, approve, and operate their equipment and is authorized to make recommendations required to assure that the equipment is complete and operational.

3.4 TRAINING

- A. General:
 - a. Furnish manufacturers' representatives for detailed classroom and hands-on training to Owner's personnel on operation and maintenance of specified product (system, subsystem, and component) and as required in applicable Specifications.
 - b. Furnish trained, articulate personnel to coordinate and expedite training, to be present during training coordination meetings with the Owner's Representatives, and familiar with operation and maintenance manual information specified in Section 11 00 10.
 - c. Manufacturer's representative shall be familiar with facility operation and maintenance requirements as well as with specified equipment.
 - d. At least seven-days prior to the on-site training program provide the completed and approved training materials, to include operation and maintenance information that will be retained by each trainee.
 - e. A minimum of one training session shall be provided for each piece of equipment:
 - 1. Comprehensive training, where detailed operation and maintenance

information and procedures are presented as described herein.

- B. Training Schedule:
 - a. List specified equipment and systems that require training services and show:
 - 1. Respective manufacturer.
 - 2. Estimated dates for installation completion.
 - 3. Estimated training dates.
 - b. Allow for multiple sessions when several shifts are involved.
 - c. Adjust schedule to ensure training of appropriate personnel as deemed necessary by Owner, and to allow full participation by manufacturers' representatives. Adjust schedule for interruptions in operability of equipment.
 - d. Coordinate with Section 41 00 00.
- C. Lesson Plan: When manufacturer or vendor training of Owner personnel is specified, prepare for each required course, containing the following minimum information:
 - a. Title and objectives.
 - b. Recommended types of attendees (e.g., managers, Project Managers, operators, maintenance).
 - c. Course description and outline of course content.
 - d. Format (e.g., lecture, self-study, demonstration, hands-on).
 - e. Instruction materials and equipment requirements.
 - f. Resumes of instructors providing the training.
- D. Pre-startup Training:
 - a. Coordinate training sessions with Owner's operating personnel and manufacturers' representatives.
 - b. Complete at least 14 days prior to beginning of facility startup.
- E. Comprehensive Training:
 - a. Coordinate training sessions with Owner's operating personnel and manufacturer's representatives.
 - b. Complete at least 14 days prior to beginning of facility startup.
 - c. Post-startup Training: If required in Specifications, furnish and coordinate training of Owner's operating personnel by respective manufacturer's representatives.
- F. Taping of Training Sessions:
 - a. Furnish audio and color video taping of post-startup instruction sessions, including manufacturers' representatives' hands-on equipment instruction and classroom sessions.

- b. Video training tapes shall be produced by a qualified, professional video production company.
- c. Use flash drive format, suitable for playback on standard equipment available commercially in the United States.
- d. Include only one training session on each flash drive.

3.5 MANUFACTURER'S CERTIFICATE OF UNIT RESPONSIBILITY

- A. A Manufacturer's Certificate of Unit Responsibility form, a copy of which is attached to this section, shall be completed and signed by the manufacturer's representative.
- B. Such form shall certify that the signing party is a duly authorized representative of the manufacturer, is empowered by the manufacturer to assume unit responsibility for all systems materials, equipment, components, instrumentation, electrical system, and control system supplied with their equipment.

3.6 EQUIPMENT FUNCTIONAL TESTING

- A. The Manufacturer shall conduct functional testing on each piece of equipment after it is installed.
 - a. Prerequisites: An approved Equipment Functional Equipment Test Report Form.
 - b. Devise functional test, meeting all requirements (if any) specified in individual equipment Specification sections as well as manufacturer's recommended test criteria.
 - c. Prepare and submit an Equipment Functional Test Report Form for review and approval by Project Manager.
 - d. Equipment Functional Test Report Form shall include the minimum information:
 - 1. Owner/Project Name.
 - 2. Equipment or item tested.
 - 3. Date and time of test.
 - 4. Test method.
 - 5. Test conditions.
 - 6. Test results.
 - 7. Signature spaces for Contractor and Project Manager as witness.
 - e. Perform Equipment Functional Testing on each piece of equipment as specified in individual Specification sections.

3.7 EQUIPMENT PERFORMANCE TESTING

- A. The Manufacturer shall conduct performance testing on each piece of equipment after the functional testing has been successfully completed, and after the Contractor has completed the Operational Readiness Testing (ORT-1 and ORT-2).
 - a. Prerequisites: A witnessed Equipment Functional Test Report completed and signed ORT-1 and ORT-2 forms, and an approved Equipment Performance Test Report Form.
 - b. Devise performance test, meeting all requirements (if any) specified in individual equipment Specification sections as well as manufacturer's recommended test criteria.
 - c. Prepare and submit an Equipment Performance Test Report Form for review and approval by Project Manager.
 - d. Equipment Performance Test Report Form shall include the minimum information:
 - 1. Owner/Project Name.
 - 2. Equipment or item tested.
 - 3. Date and time of test.
 - 4. Test method.
 - 5. Test conditions.
 - 6. Test results.
 - 7. Signature spaces for Contractor and Project Manager as witness.
 - e. Perform Equipment Performance Testing on each piece of equipment as specified in individual Specification sections.

3.8 SUPPLEMENT

- A. The supplement listed below, following "End of Section," is a part of this Specification.
 - a. Manufacturer's Certificate of Proper Installation Form.
 - b. Certificate of Unit Responsibility Form.
 - c. Certificate of Compliance Form.

END OF SECTION

MANUFACTURER'S CERTIFICATE OF PROPER INSTALLATION

OWNER: _____ EQPT SERIAL NO: _____

EQPT TAG NO: _____ EQPT/SYSTEM: _____

PROJECT NO: _____ SPEC. SECTION: _____

I hereby certify that the above-referenced equipment/system has been: (Check Applicable)

- Installed in accordance with Manufacturer's recommendations. Inspected, checked, and adjusted.
- Serviced with proper initial lubricants.
- Electrical and mechanical connections meet quality and safety standards. All applicable safety equipment has been properly installed.
- Functional tests.
- System has been performance tested and meets or exceeds specified performance requirements. (When complete system of one manufacturer)

Note: Attach any performance test documentation from manufacturer.

Comments: _____

I, the undersigned Manufacturer's Representative, hereby certify that I am (i) a duly authorized representative of the manufacturer, (ii) empowered by the manufacturer to inspect, approve, and operate their equipment and (iii) authorized to make recommendations required to assure that the equipment furnished by the manufacturer is complete and operational, except as may be otherwise indicated herein. I further certify that all information contained herein is true and accurate.

Date: _____, 20__

Manufacturer: _____ By

Manufacturer's Authorized Representative: _____

(Authorized Signature)

MONTEREY REGIONAL WASTE MANAGEMENT DISTRICT

CASP COMPOST FACILITY EQUIPMENT

PROJECT NO.

CERTIFICATE OF UNIT RESPONSIBILITY

In accordance with the contract documents, the undersigned manufacturer accepts unit responsibility for all components of equipment furnished under all specification sections. We hereby certify that these components are compatible and comprise a functional unit suitable for the specified performance and design requirements.

Notary Public

Name of Corporation

Commission Expiration Date

Address

Seal:

By:

Duly Authorized Official

Legal Title of Official

Date

**MONTEREY REGIONAL WASTE MANAGEMENT DISTRICT
CASP COMPOST FACILITY EQUIPMENT**

CERTIFICATE OF COMPLIANCE

In accordance with the contract documents, the undersigned manufacturer certifies all components of equipment furnished are in compliance under all specifications.

We hereby certify that these components are compatible and comprise a functional unit for the specified performance and design requirements.

Notary Public

Name of Corporation

Commission Expiration Date

Address

Seal:

By:

Duly Authorized Official

Date

SECTION 11 00 10
GENERAL EQUIPMENT AND MECHANICAL REQUIREMENTS

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes: The general requirements for all of the Equipment and Mechanical work in the scope of the Project, included in Divisions 11 and 41, and elsewhere wherever specifically mentioned in these Specifications.
- B. Direct the attention of all subcontractors and suppliers of equipment and related appurtenances for the work to the applicable provisions in the Contract Documents wherever they may occur.

1.2 REFERENCES

This section contains references to the following documents. They are a part of this section as specified and modified. Where a referenced document contains references to other standards, those documents are included as references under this section as if referenced directly. In the event of conflict between the requirements of this section and those of the listed documents, the requirements of this section shall prevail.

Unless otherwise specified, references to documents shall mean the documents in effect at the time of Advertisement for Bids or Invitation to Bid (or on the effective date of the Agreement if there were no Bids). If referenced documents have been discontinued by the issuing organization, references to those documents shall mean the replacement documents issued or otherwise identified by that organization or, if there are no replacement documents, the last version of the document before it was discontinued.

Where document dates are given in the following listing, references to those documents shall mean the specific document version associated with that date, regardless of whether the document has been superseded by a version with a later date, discontinued or replaced.

- A. American Gear Manufacturers Association (AGMA).
- B. American Institute of Steel Construction (AISC).
- C. California Code of Regulations, Title 8 Industrial Relations (CAL/OSHA).
- D. National Electrical Manufacturers Association (NEMA).
- E. Occupational Safety and Health Act (OSHA)

1.3 STANDARDS FOR THE WORK

- A. Complete Systems: Provide pipe, fittings, wiring and supports to produce complete, operable systems with all elements properly interconnected. If a specific dimensioned location is not shown for interconnections or smaller system elements, select appropriate locations and show them on Shop Drawing submittals for review.
- B. Provide equipment and material new and without imperfections. Erect in a neat and workmanlike manner; aligned, leveled, cleaned and adjusted for satisfactory operation; installed in accordance with the recommendations of the manufacturers and the best standard practices for this type of work so that connecting and disconnecting of piping and accessories can be readily made and so that all parts are easily accessible for inspection, operation, maintenance and repair. Locate oil and lubrication fittings clear of and away from guards, base, and equipment and within reach from the operating floor.
- C. The recommendations and instructions of the manufacturers of products used in the work are hereby made part of these Specifications, except as they may be superseded by other requirements of these Specifications.

1.4 SUBMITTALS

- A. The following information shall be submitted in accordance with Section 01301:
 - a. A copy of this specification section, with addendum updates included, and all referenced and applicable sections, with addendum updates included, with each paragraph check-marked to indicate specification compliance or marked to indicate requested deviations from specification requirements. Check marks (☐) shall denote full compliance with a paragraph as a whole.

If deviations from the specifications are indicated, and therefore requested by the Contractor, each deviation shall be underlined and denoted by a number in the margin to the right of the identified paragraph, referenced to a detailed written explanation of the reasons for requesting the deviation. The Engineer shall be the final authority for determining acceptability of requested deviations. The remaining portions of the paragraph not underlined will signify compliance on the part of the Contractor with the specifications. Failure to include a copy of the marked-up specification sections, along with justification(s) for any requested deviations to the specification requirements, with the submittal shall be sufficient cause for rejection of the entire submittal with no further consideration.
 - b. Where applicable, a copy of the contract document control diagrams and process and instrumentation diagrams relating to the submitted equipment, with addendum updates that apply to the equipment in this section, marked to show specific changes necessary for the equipment proposed in the submittal. If no changes are required, the drawing or drawings shall be marked "*no changes required*". Failure to include copies of the relevant drawings with the submittal shall be cause for rejection of the entire

submittal with no further review.

- B. Shop Drawings: Submit Shop Drawings to the Engineer and receive favorable review prior to fabrication, construction or delivery to the project site in accordance with Section 01301 of these Specifications. Show sizes and arrangement of equipment, foundations and anchor bolts required, performance characteristics, fan curves and pump curves, control diagrams, control panel layout, wiring diagrams, motor data sheets, Bill of Materials, methods of assembly, pipe hanging details, ductwork layouts and connections to other work. Date and sign drawings as certified for use in construction of this project. The arrangement of mechanical equipment and appurtenant piping shown on the Drawings may be varied as necessary to fit the favorably reviewed certified manufacturer's installation drawings. However, manufacturers' drawings shall not deviate in substance from the Contract Drawings and Specifications as to location, size, type and design of equipment.

The following minimum requirements shall accompany all equipment submissions:

- a. Overall dimensions.
 - b. Mounting arrangement and dimensions.
 - c. Description of materials.
 - d. Connection sizes and orientation.
 - e. Capacity and location of lifting eyes.
 - f. Motor arrangement showing location of electrical connections.
 - g. Rating data - Mechanical and Electrical as applicable.
 - h. Detail electrical wiring diagrams, showing component designation and rating.
 - i. Seismic design certifications and anchorage descriptions as specified within Section 41 00 00.
 - j. Motor data as specified in Section 11002.
 - k. List of special tools and/or spare parts to be furnished, if any.
- C. Each piece of equipment, for which certified witnessed or non-witnessed performance tests are required, shall be accompanied by a completed form containing at least the following information:
- a. Owner's name and location of project.
 - b. Contractor's name and subcontractor if applicable.
 - c. Name of item being submitted.
 - d. Specification reference by section, paragraph and page.
 - e. Data on item (manufacturer, general descriptive data, dimensions, size of connections, speeds, performance curves, serial number). A specific list of the test results plus a list, which shows the values that differ from Specifications.

- f. Motor data, inverter rating if required, type, voltage, frequency, phase, full load amperes, starting method, frame size, enclosure insulation type (NEMA Code letter), dimensions, service factor, serial number, and listing of accessories including but not limited to thermal switches and heaters
 - g. Date and signature of person certifying the performance.
- D. Instruction Manuals: Prepare and submit instruction manuals covering installation, operation and maintenance of all equipment and machinery specified in Divisions 11, 23, and 41. Refer to Section 01301.
 - E. Manufacturers' Affidavits: Where called for in the Specifications, each equipment manufacturer, or their authorized representative, shall submit an affidavit conforming to the requirements of Section 01640.

1.5 RESPONSIBILITY AND CARE OF EQUIPMENT

- A. The Contractor shall be responsible for the equipment included in this Contract until it has been finally inspected, tested and accepted in accordance with the requirements of these Specifications.
- B. The Contractor shall make their own provisions for properly storing and protecting all material and equipment against theft, injury or damage from any and all causes. Damaged material and equipment shall not be used in the work.

PART 2 PRODUCTS

2.1 DESIGN

- A. General: Design all equipment for the service intended, of rugged construction, of ample strength for all stresses which may occur during fabrication, transportation, erection and during continuous or intermittent operation. Adequately stay, brace and anchor, and install equipment in a neat and workmanlike manner. Give consideration to the coastal climatic conditions, appearance and safety, as well as utility, in the design of details. Use cathodically compatible materials of construction and finishes that protect the equipment from corrosion or deterioration by the coastal climatic conditions.
- B. Controls: Unless noted otherwise, the design of the electric and pneumatic control of any equipment system and/or equipment package shall be the responsibility of the manufacturer of the equipment system and/or equipment package. The elementary control diagrams as shown on the Contract Documents are illustrative of control and monitoring requirements pertaining to various equipment of this project. The manufacturers shall design their own functional electric control devices and circuitry, in consultation with the specific elementary control diagrams and other project specifications, to meet the equipment control requirements, as well as their own pneumatic piping systems. All such systems and package controls shall be furnished by the equipment manufacturer as specified in Section 41 00 00 of these specifications.

2.2 MATERIALS AND STANDARD SPECIFICATIONS

- A. Materials: Design, fabricate and assemble equipment and systems with new materials and in accordance with acceptable modern engineering and shop practices. Manufacture individual parts to standard sizes and gauges so repair parts can be installed in the field.
- B. Uniformity: Unless otherwise specified, equipment or material of the same type or classification used for the same purpose shall be the product of the same manufacturer and shall be the same model.

2.3 LUBRICATION

- A. Provide lubricants of types recommended by equipment manufacturers for the coastal climatic conditions of the site, in quantities sufficient for consumption prior to completion, testing and final acceptance.

2.4 STRUCTURAL METAL FRAMING

Not used.

2.5 EQUIPMENT BASES AND BEDPLATES

- A. Mount equipment assemblies on a single heavy cast iron or welded steel bedplate unless otherwise shown or specified. Provide bases and bedplates with machined support pads, tapered dowels for alignment or mating of adjacent items, adequate openings to facilitate grouting, and openings for electrical conduits. Round or chamfer and grind smooth all corners. Continuously weld seams and contact edges between steel plates and shapes, and grind welds smooth. Do not support machinery or piping on bedplates other than that which is factory installed. Provide jacking screws in equipment bases and bedplates to aid in leveling prior to grouting. Mount all equipment bases and baseplates on reinforced concrete pads at least 3 inches high.

2.6 SAFETY GUARDS

- A. Cover belt or chain drives, fan blades, couplings, nip points, exposed shafts and other moving or rotating parts on all sides with safety guards conforming to all Federal, State, and local codes and regulations pertaining; conform to the most restrictive requirement. Design guards for easy installation and removal, complete with necessary supports, accessories, and fasteners, all hot-dip galvanized. Design guards in outdoor locations to prevent entrance of rain and dripping water. Provide tachometer test opening in line with ends of shafts. Typically, guards shall be expanded metal on a structural steel frame except that outdoor guards may be of solid material. Provide hinged doors with latch for service and lubrication access.
- B. Cover all pipes, manifolds, heaters, and other surfaces which have a surface temperature sufficient to burn human tissue with a thermal insulating material

or otherwise guard against contact.

- C. Guards to comply with OR/OSHA.

2.7 LIFTING EYES

- A. Supply all equipment weighing over 50 pounds with lifting eyes. Parts of equipment assemblies which are normally serviced separately, such as motors, to have lifting eyes of their own.

2.8 DRIVES

- A. General: Provide all drive units with an AGMA rating and service factor suitable for 24 hours per day operation under the operating load.
- B. Electric Motors: Conform to the requirements of Section 11002.
- C. V-Belt Drives: Equip each V-belt drive with suitable tension adjustment. Provide drives having a service factor of at least 1.6 with arc length correction at maximum torque using nameplate rating of driving motor.

2.10 NAMEPLATES

- A. Manufacturer's Nameplate: Furnish each piece of equipment and its driver with a corrosion-resistant metal nameplate fastened to the item in a readily readable position. This nameplate to contain the manufacturer's name, equipment rating, capacity, size, model, serial number and speed. All information written or printed to be in English.
- B. Direction of Rotation: Furnish each piece of rotating equipment with a direction of rotation arrow.

2.11 PROTECTION AGAINST ELECTROLYSIS

- A. Where dissimilar metals are used in conjunction with each other, provide suitable insulation between adjacent surfaces so as to eliminate direct contact and any resultant electrolysis. Connections of dissimilar piping materials shall utilize dielectric unions, flanges, couplings or bushings.

2.12 SPECIAL TOOLS

- A. For each type of equipment to be furnished, provide a complete set of all special tools (including grease guns or other lubricating devices) which may be necessary for the adjustment, operation and maintenance of such equipment.

2.13 FINISHES

- A. Factory Painting: On pumps, motors, drives, starters, control panels and other similar self-contained or enclosed components, apply a factory protective paint system that is resistant to the coastal climatic conditions present at the site unless

otherwise noted. Paint or otherwise protect surfaces that are inaccessible after assembly by a method which provides protection for the life of the equipment.

- B. Shop Priming: Except where field sandblasting is required, apply one or more shop coats of metal primer on surfaces to be finish painted at the site, of sufficient thickness to protect surfaces until finished. Primer shall be compatible with finish coat and resistant to the coastal climatic conditions present at the site.
- C. Rust Preventive: Coat machined, polished, other ferrous surfaces, and non-ferrous surfaces which are not to be painted with rust preventive compound.

2.14 NOISE AND VIBRATION

- A. Mechanical and electrical equipment, as installed in this project, shall not create sound levels that are in excess of that permitted by OSHA for 8 hours per day worker exposure unless otherwise noted for the specific piece of equipment involved. If the required sound level cannot be achieved by bare equipment in its designated environment, provide sound attenuating enclosures. Sound attenuating enclosures shall have necessary ventilation to prevent equipment overheating and shall be constructed for easy removal to permit maintenance. Devices necessary for day-to- day operation shall pierce the enclosure or otherwise be accessible without need to remove the enclosure.
- B. Equipment which when operating has obvious excessive vibrations shall be repaired or replaced as directed by the Engineer. Baseline vibration measurements shall be made where specified.

2.15 FACTORY TESTS

- A. Perform factory tests for each piece of equipment where specifically called for in the section specifying that equipment. Note that factory tests are inherent in many reference standards. The requirement for a factory test in a referenced standard is hereby made a part of these Specifications. Conduct factory tests at the same speeds and other conditions at which the equipment will operate in the field, except as noted.
- B. Where specifically noted, performance tests may be witnessed by the Engineer or their representative. Inform the Engineer in sufficient time to allow arrangements to be made for witness of such tests. When non-witnessed tests are performed, supply certified results.
- C. Tests of other equipment shall conform to the requirements set forth in these Specifications.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Inspect each item of equipment for damage, defects, completeness, and correct operation before installing.

3.2 PREPARATION

- A. Prior to installing equipment, ensure that the areas are clean. Maintain the areas in a broom-clean condition during installation operations. Clean, condition, and service equipment in accordance with the approved Instruction manuals and specific recommendations of the equipment manufacturer.

3.3 EQUIPMENT STARTUP AND ADJUSTMENT

- A. Arrange for an authorized factory-trained representative of the company or companies supplying the various items of equipment to check the installation and adjust and test the equipment furnished before the acceptance of the work by the Owner. Said representative shall be experienced and knowledgeable of the equipment being tested. Furthermore, he shall assist and instruct the operating staff in adjusting and operating the equipment during the initial plant operation period.
 - a. Provide initial lubrication for all equipment.
 - b. Test and demonstrate to the Engineer that all equipment operates properly, and specified performance has been attained. Furnish any test equipment or measuring devices required which are not part of the permanent installation.
 - c. In addition, demonstrate that the entire facility is in full operating condition prior to the acceptance of the work. Should any equipment or part thereof fail to operate as intended, immediately remove and replace it, all at the Contractor's expense. Pay for all tests involved in this Section.
 - d. Pressure test equipment and connections thereto as required by these Specifications.

3.4 PERFORMANCE TESTS

- A. Upon completion of the work, and after all systems are set and balanced, conduct performance tests in accordance with Division 1 and other applicable sections of these Specifications. Submit test conditions, test data and results to the Engineer for review.

3.5 SOUND LEVEL TESTING

- A. Measure the sound level developed by all mechanical and electrical equipment provided. Perform testing in all rooms and spaces containing such equipment during the final operation test program with all equipment operating. Use OSHA approved instrument and record the highest sound level developed when measured according to OSHA standards in each room and space. Deliver a copy of records to the Owner.

3.6 TOOLS, LOOSE PARTS, AND LUBRICANTS

- A. Tools and Loose Parts Supplied: Provide an inventory of tools and loose parts

required to be supplied under the project. Turn over inventory and parts to the Owner. The Owner's written acknowledgment of receipt is required for project completion. Loose parts are defined as items such as special tools, keys, safety equipment, and portable equipment. Refer to Section 01601 and relevant technical sections of these Specifications for additional instructions.

- B. Recommended Spare Parts: Furnish a complete list of recommended spare parts and supplies for each equipment furnished with current prices and a source of supply.
- C. Provide a list of all recommended lubricants not listed in the O&M Manuals. Lubricants shall be resistant to the coastal climatic conditions of the site.

END OF SECTION

SECTION 13 34 19
CONTROL ROOM

PART 1 - GENERAL

1.1 WORK INCLUDED

- A. This section sets forth the requirements for the prefabricated metal office for use as the control room to house electrical equipment and master control panel for the CASP facility and protect from the environment as indicated on the Construction Drawings.
- B. The project drawings and specifications describe the general requirements and minimum acceptable standards for the control room. They are intended to provide the minimum dimensions and requirements for bidding purposes.
- C. The prefabricated control room shall be provided with electrical, doors, lights, windows, doors, shelving, cabinets, HVAC, and finishes.

1.2 SUBMITTALS REQUIRED

- A. The Contractor shall thoroughly review the Specifications and identify all required project submittals. The submittals listed below are intended as a general summary of the submittal items contained in this Section. This submittal list does not release the Contractor from the responsibility of identifying and providing all information requested.
 - 1. Shop drawings the metal structure for the control room.
 - 2. Building layout.
 - 3. Manufacturer's product data sheets for air conditioning, heating, and electrical.
 - 4. Manufacturer's installation instructions, operation and maintenance manuals for heating and air conditioning system and electrical panel.
 - 5. Interior finishes.
 - 6. Cut sheets with all models and dimensions identified, including locations of:
 - a. Windows
 - b. Doors
 - c. Lights

PART 2 - PRODUCTS

2.1 PREFABRICATED CONTROL ROOM

- A. Specifications for one control room as manufactured by Aztec Container or approved equal. The Unit will be a converted metal storage container and will be used to house the master control panel and other related electrical equipment for the

CASP facility. The Unit shall be sized so that it adequately houses the master control panel and other electrical equipment as well as the spare blower skid. The Unit doors and openings shall be sized and specified appropriately for the transfer of the spare blower skid if needed onsite.

- B. The Unit shall be constructed with gauge steel. The container structure shall be new and painted.
- C. The unit shall be prewired with a 110/220 volt, 100 amp service panel.
- D. The unit shall be furnished with:
 - 1. Framing, (r13) insulation, dry wall finished with white paint.
 - 2. 1-inch (1") thick wood flooring or an approved alternative material that is durable and suitable for installation and use within the container at the facility.
 - 3. Two (2) hinged doors on the front face.
 - 4. HVAC system 18,000 btu cooling and 12,000 btu heating 230-volt.
 - 5. Lighting / electrical package with interior and exterior LED recessed lights, switches, 110volt outlets, a 230volt for HVAC unit and breaker box.
 - 6. Flange trough collar around all sides of door opening.
 - 7. Seams continuously welded and ground smooth.
 - 8. Pour in place oil & water resistant gasket.
 - 9. Concealed hinges.
 - 10. Hole plugs provided to seal holes in the bottom of the enclosure.
- E. Unit shall have a minimum of three duplex outlets to be located as approved by the Owner.
- F. Final finishes and colors to be approved by the Owner.

PART 3 - EXECUTION

3.1 PREFABRICATED CONTROL ROOM

- A. Deliver and install in accordance the Manufacturer's instructions, Construction Drawings, Specifications, and permit requirements.
- B. Deliver, install, and anchor the shed on concrete foundation pad as shown on plans and coordinate with Contractor on Special Inspections as necessary.
- C. Connect electrical service in accordance with the plans and specifications. Electrical CASP system equipment and cabling to be installed by Contractor.

END OF SECTION

SECTION 23 09 13

VALVES

PART 1 - GENERAL

1.1 SUMMARY

- A. The BIDDER shall furnish valves (including nuts and bolts), other materials, and transportation necessary to install valves of the type and size as needed for a complete and proper operation.
- B. The work shall be carried out in accordance with these Specifications.

1.2 SUBMITTALS

- A. Product Data: Before shipping, the BIDDER shall submit:
 - 1. Materials list of items proposed to be provided under this Section.
 - 2. Manufacturer's Specifications, catalog cuts, and other data needed to prove compliance with the specified requirements.
 - 3. Manufacturer's recommended installation procedures which, when approved by the ENGINEER, will become the basis for accepting or rejecting actual installation procedures used on the Work.
- B. If materials proposed to be provided under this Section are shipped prior to ENGINEER's conditional approval or approval, it will be at the BIDDER's risk.

PART 2 - PRODUCTS

2.1 GENERAL

- A. All valves shall be complete with all necessary operators, actuators, handwheels, worm and gear operators, wrenches, and other accessories or appurtenances, which are required for the proper completion of work, included under this Section.
- B. Valves shall be suitable for the intended service. Renewable parts, including discs, packing, and seats, shall be of types recommended by valve manufacturer for intended service, but not of lower quality than specified herein.
- C. Valves and operators shall be suitable for the exposure they are subjected to, enclosed in valve chamber or exposed, as applicable.
- D. All valves shall have the name of the manufacturer and sizes cast on the body or bonnet or shown on a permanently attached plate in raised letters.
- E. For the purpose of designating the type and grade of valve desired, a manufacturer's name is given in the following specifications. Valves of equal quality by other manufacturers will be acceptable.

2.2 MODULATING BALL VALVES

- A. Unless otherwise specified, modulating ball valves used in the compost facility shall be True Union Type, body of PVC or CPVC plastic, and Teflon or Viton seal and seat, rated for 350 psi, or approved equal and an electric actuator with 0-20 mA control signals for full range of valve position.

PART 3 - EXECUTION

Not Used

END OF SECTION

SECTION 41 00 00
COVERED AERATED STATIC PILE BLOWER
SYSTEM

PART 1 GENERAL

1.2 GENERAL

- A. Section Includes
 - a. Design and construct to operate as a complete pre-assembled unit to minimize installation and start-up time.
 - b. Completely fabricate, assemble, pre-wire, and test (functional wiring check, simulated operation, proper operation of all safety systems, etc.) to the extent possible prior to shipment.
 - c. Design and construct three identical enclosed blower skids. Each compost aeration system enclosed skid shall contain one blower, variable frequency drive (VFD), and skid mounted control panel with Programmable Logic Controller (PLC) logic program to incorporate similar controls and operational capabilities for each skid with human-machine interface (HMI) and shall be enclosed. One spare blower will be provided for backup should a blower be out of service.
 - d. Provide a standalone Master Control Panel with PLC for HMI interaction to be located in the control room. Program Logic for the Master Control Panel will be prepared by the BIDDER per the Contract Documents.
 - e. Subsequent to project award, BIDDER shall meet with OWNER and ENGINEER to confirm all design aspects.

1.2 SUBMITTALS

- A. General
 - a. Submit Shop Drawings, Product Data, and Operations and Maintenance (O&M) Data to ENGINEER after BIDDER's receipt of purchase order from the OWNER. Submit Shop Drawings and Product Data in one complete submittal. Partial submittals are unacceptable.
- B. Shop Drawings
 - a. Installation drawings and specifically prepared technical data, including design capacities.
 - b. Specially prepared wiring diagrams unless standard wiring diagrams are submitted with product data.
 - c. Provide written description of operation. Include interface with other components such as flow meters, valves, and temperature probes.

- d. Equipment dimensions, shipping weight component parts, and list of materials.
 - e. Installation and mounting details.
 - f. Special Arrangement: If proposed equipment requires an arrangement differing from that indicated on the drawings and as specified, prepare and submit for review detailed structural, mechanical, electrical, and process/instrumentation drawings and equipment lists, materials of construction and operating instructions, showing all necessary changes and all special features of proposed equipment. The BIDDER shall make such changes, if approved by the ENGINEER, at no additional cost to OWNER.
- C. Product Data
- a. Catalog cuts and product specifications for each product specified.
 - b. Standard wiring diagrams unless wiring diagrams are specially prepared and submitted with shop drawings.
 - c. Motors: Submit product data.
 - d. Variable Frequency Drive: Submit product data.
 - e. Proposed coating system.
- D. Operations and Maintenance Data
- a. The BIDDER shall provide O&M manuals, including two (2) paper copies and one (1) electronic copy, which will include cut sheets, maintenance schedules, and service phone numbers. Submit in accordance with Section 01 33 10.
- E. Submit above in accordance with Instruction to Bidders.

1.2 QUALITY ASSURANCE

- A. Bidder's Qualifications
- a. Firms regularly engaged in design and fabrication of CASP compost facilities of types and sizes required.
 - b. BIDDER products have been in similar service at least 5 operational systems and whose products have been in satisfactory use in similar service for not less than 2 years.
 - c. BIDDER must build Industrial Control Panels to UL 508A/698A.

1.2 MAINTENANCE REQUIREMENTS

- A. All replaceable parts shall be manufactured to definite standards for tolerance, clearance, and finish in order that any such part may be field installed without further machining or fitting. All parts shall be permanently and legibly marked with original seller's part number where practical. Parts or assemblies that require "fitting" for proper assembly shall be identified and separately listed in

parts manual.

1.2 WARRANTY

- A. BIDDER shall warrant all systems and equipment provided to be free of defects in materials and workmanship. BIDDER shall provide new or reconditioned components, assemblies, parts, or materials to replace defective elements within warranty period, at no cost to OWNER, if OWNER complies with requirements of BIDDER's warranty provisions. Warranty applies to replacement material only and does not include labor for removal and reinstallation.
- B. Warranty Period: Earlier of 12 months from date of startup or 18 months from date of delivery unless noted otherwise.
- C. Warranty requirements shall not be split up among individual sellers of components comprising system but shall be assumed solely by BIDDER.

PART 2 PRODUCTS

2.1 GENERAL All equipment, piping, controls, etc. shall not have been in service, except for shop tests, at any time prior to delivery.

- B. All parts of equipment shall be amply proportioned for all regular stresses that occur during shipping, operation, fabrication, transportation, handling, and erection.
- C. The equipment shall be factory assembled to the maximum extent possible. Some minor amounts of field assembly are permissible if disassembly is required for safe transport.

2.2 EQUIPMENT

- A. Bidder (RESERVED)
- B. The Enclosed Blower Systems for the CASP system shall include the following Equipment mounted on a structural steel skid(s) at a minimum:
 - a. Outdoor enclosed skid mounted devices:
 - i. Blower with variable frequency drive (VFD)
 - ii. Electrical Power and control panel
 - iii. Blower Inlet and Outlet Piping and Hand Valve
 - b. Indoor Master Control skid:
 - i. Power and control panel to be located in the control room.
- C. The additional instrumentation for the CASP system shall include the following at minimum:
 - a. Pressure Indicating Transmitter
 - b. Flow Meter

- c. Dual Depth Temperature Probe or approved equal
- d. Header, Lateral, and Manifold Piping and Modulating Ball Valve
- e. Oxygen Probe (Optional)

2.3 Outdoor Skid Mounted Devices for Enclosed Blower Skids:

- A. All components mounted, piped and wired on skid with the exception of the flow meter, temperature indicator, and the pressure transmitter.
- B. Unitized welded heavy duty AISC designed structural steel skid.
- C. Designed for safe deflections to prevent damage to piping and equipment during one-point lifting with spreader bar (i.e., when lifted from the four skid corners by a single crane using a spreader bar).
- D. Completely galvanized or painted after fabrication.
 - a. Color: Dunn Edwards – SP2800 Chaparral, “beige”.
 - b. Slip resistant diamond plate deck over entire skid.
- E. Lifting lugs.
- F. Anchor brackets.
- G. 480V and 120V electrical components to be wired to the junction box(es) on the skid.
- H. Condensate drains piped to edge of skid.
- I. Designed for seismic zone IV.
 - a. Seismic Design Parameters:
 - i. Location: 14201 Del Monte Blvd, Monterey County (Salinas), CA 93908
 - ii. Data Source: ASCE/SEI 7-16, ASCE Online Hazard Tool.
 - iii. Site Class: D
 - iv. Risk Category: II
 - v. Seismic Ground Accelerations
 - 1) $F_a = 1.2$
 - 2) $S_s = 1.547$
 - 3) $S_1 = 0.553$
 - 4) $S_{DS} = 1.237$
 - 5) *Note: If geotechnical investigation is performed, the Bidder shall use the accelerations in that report if higher than the values specified within this document.*
- J. Blowers and VFDs

- a. Each blower capable of providing 19,165 standard cubic feet per minute (SCFM) at a minimum positive pressure of 29 inches of water column.
- b. Provide one blower each on its own enclosed structural steel skid (3 total skids) and one blower for back-up (to be wrapped securely to prevent weathering and stored in electrical control room). Each skid is enclosed to limit exposure to the elements.
- c. Fan or multi-stage centrifugal construction.
 - i. Blower shall be direct drive with VFD.
 - ii. Blower motors to be inverter duty and suitable for use with the selected VFD.
 - iii. VFD should be able to adjust blower speed to meet required positive pressures and flows to the positive pressure header manifolds based on input sensors connected to the control panel and based on the logic control within the logic controls.
 - iv. Relative Humidity: 0 - 95% non-condensing.
 - v. Elevation: 100 ft. above mean sea level (AMSL)
 - vi. Conform to NEMA standards.
- d. Wetted parts (except blower shaft) to be stainless steel, steel with a phenolic coating, aluminum, or other corrosion-resistant materials.
- e. Grease lubricated bearings with closed bearing housings (non-leaking) with seals and stuffing box on the drive shaft end (or approved alternative).
- f. Premium efficiency TEFC motors.
- g. Drains with valves to drain entire machine per manufacturers recommendations at each blower, piped to edge of skid.
- h. Blower to be mounted and enclosed on individual structural steel skid by blower manufacturer (blower skid). Blower skid to be mounted on the compost aeration system skid with vibration pads in a manner that: adequately secures the unit during shipment; prevents lateral movement during operation; and allows the unit to "float" a small amount vertically on vibration pads such that the blower warranty is not impacted. Enclosure for blower skid to be weatherproof and noise reducing.
- i. Blower to have air intake cover protector to prevent precipitation from entering air intake and large diameter screen to prevent materials intake.

K. Blower Inlet and Outlet Piping and Hand Valve

- a. HDPE, stainless steel, or carbon steel that is internally coated after fabrication, sized suitably to provide minimal head loss.
- b. Flanged flexible couplings (Buna-N or hypalon) rated for gas service at blower inlet and outlet.
- c. Fully assembled, mounted, and supported throughout the skid.

- d. Inlet and outlet manual hand valve on each blower (three total) to be suitable for operating conditions (i.e., corrosion resistant) and operational requirements described herein. Refer to Section 23 09 13 of these Specifications for additional requirements.

L. Electrical

- a. Per NEC standards.
- b. All wiring within threaded rigid galvanized steel conduit.
- c. Provide NEMA Type 3R, 4, 12 and 13.
- d. Electrical service: 460 volt, 3 ph, 60 Hertz.
- e. Electrical items are to be housed in the control room, refer to Section 13 34 19.

M. Control Logic

- a. See Contract Drawings.
- b. Individual blower skid and master skid control panels to be programmed including the option for adjustable on/off periods by Bidder.
- c. Flow modulation to each pile can be timer controlled as needed by Owner based on individual performance.
- d. Overall control and monitoring system shall be able to be controllable remotely and at the master control panel by Owner.
- e. Pile grouping can be modified by Owner.
- f. System must have the option to be controlled both by temperature and manually with the option of additional control methods such as oxygen.
- g. Various alarms based on permit conditions to be programmable by Owner.
- h. Detailed Process Logic to be provided by Bidder following project award.
- i. Communication between local PLC control panels and the master control panel is preferred to be through Ethernet radio. If local internet connection is unavailable and cellular coverage is acceptable in the area, it can be used to provide remote access to the system.
- j. For cybersecurity, the software and communication design and implementation will adhere to owner requirements and follow industry standards for Industrial Control Systems. At minimum, communication architecture with secure remote access, device configuration and documentation shall be in accordance with NIST SP800-82.

N. Control Panel (Skid Mounted (3) and Master (1))

- a. The master control panel will be located within the control room.
- b. Self-supporting steel rack for skids with mounted panels.
- c. Lockable control panels, NEMA 1 or 2.

- d. Main power supply disconnect for 480V, 3 phase power supply (separate box) to be provided at the master control panel within the control room.
- e. Power transformers as necessary to convert from 480V, 3 phase power supply to single phase.
- f. Motor starters with phase unbalance protection, phase loss protection, and separate motor circuit protector.
- g. Electrical surge protection on each control panel.
- h. Automatic blower and control system restart following power restoration after outage.
- i. Two 15-amp convenience outlets with weatherproof cover (located outside of each skid mounted control panel).
- j. One 100-watt security light with On/Off/Photocell switch and photocell.
- k. Data Recorder.
 - i. Electronic paperless recorder
 - 1) *Yokogawa or Engineer approved equivalent data recorder capable of performing a minimum of 122 data recording operations for the individual skid mounted recorder.*
 - ii. Data viewable over web-based interface from remote location.
 - iii. No loss of data in the event of power failure.
 - iv. Ability to view/chart all data on recorder screen in graphical and numerical format simultaneously.
 - v. Viewable without opening control panel or control panel access door.
 - vi. Recorded parameters:
 - 1) *Header pressure (1 readout) which is also sent to the Master PLC (1 readout for each of the three groups containing 15 active compost piles per group) for processing, supplied by Bidder;*
 - 2) *Flow meter on header (1 readout) which is sent to the Master PLC (1 readout for each three pile groups), supplied by Bidder;*
 - 3) *Actuated valves that state the percent for open/close/throttle control (15 readouts from the piles from each group for a total of 45 valves) which is also sent to the Master PLC (15 readouts for each three pile groups for a total of 45 readouts) for processing, supplied by Bidder;*
 - 4) *Pile manifold flow meters located at pile manifolds (15 readouts) which is also sent to the Master PLC (15 readouts x 3 Pile Groups) for processing, supplied by Bidder;*
 - 5) *Processing of raw data provided by temperature monitoring probe receivers. Three probes at each pile, each probe providing two temperature readings for a total of six temperature readings per pile and 90 temperature readings per group of 15 piles. This information will be*

sent wirelessly to a receiver that will be mounted on the control panel racks and provide information to the control panel. From there, the temperature information will be sent to the Master control panel (90 readouts for each three pile groups for a total of 270 temperature readouts), receiver and probes provided by Bidder.

- vii. Data recording and storing interval: 15 seconds
- viii. Alarm and dial-out upon data recorder system failure or when memory storage capacity falls below 10%.
- ix. Ethernet and USB port.
- x. Exportable to.xlsx format.
- xi. Data storage/transfer
 - 1) *Capable of storing a minimum of 90 days of data*
 - 2) *Suitable flash memory card for physical storage and for transfer of data*
 - 3) *Cloud/server storage capabilities for data backup*
 - 4) *One copy of SMARTDOC+ or similar software, fully licensed with all materials and original program disks.*
- l. Amp meter for each blower (200% scale).
- m. Hour meter for each blower.
- n. Panel power ON selector switch.

O. Indoor Master Control Skid:

- a. The Bidder will provide a single 480V/3Ph/60Hz feed to the Control Panel located within the control room. The size of the feed will be as required by the system Bidder.
- b. Control Panel to have main fused disconnect.
- c. Wiring between the instrumentation and the Control Panel will be by others.
- d. Instrumentation will be wired directly to the Control Panel.
- e. Control Panel shall include VFDs.
- f. 120/240VAC and 24VDC devices to be wired to Type 7 UL listed junction boxes. Separate junction boxes shall be used for 120/240VAC and 24VDC wiring.
- g. Control Panel will include fuses for over current protection and motor starters for each 480VAC motor load.
- h. PLC Based
 - i. PLC by proven established manufacturer such as Modicon, Allen Bradley, or approved equal.
 - ii. Detailed ladder logic provided.
 - iii. Backup of operating program provided in hard copy and USB format.

- iv. Communicate wirelessly over supervisory control and data acquisition (SCADA) from the control panel to the Master data recorder.
- v. Web-based interface allowing control of user selectable options from remote location.
- vi. Human Machine Interface
 - 1) *12" Color Touchscreen, suitable for outdoor use.*
- i. Control Panel Security
 - i. Keyed switches (same key for all switches) or all controls (except E-Stop) behind a lockable glass panel door.

P. Automatic Dial-out Device

- a. Dial-out on any system malfunction.
- b. Identify system malfunction.
 - i. Blower failure
 - ii. Pile Pressure of Design Operating Range
 - iii. Data recorder failure or memory approaching full
 - iv. Other control system components
- c. Software based system, integral to SCADA software.
- d. Capable of calling multiple numbers until alarm is acknowledged.
- e. Minimum 10-hour battery backup.

Q. Underwriters Laboratories Certification

- a. UL listing symbol for Industrial Control Panels on motor starters.
- b. UL classification symbol on Control Panels.

R. Operating Manuals

- a. Three (3) hard copies minimum (shipped directly to site).
- b. One (1) electronic copy to the site.
- c. Contents
 - i. Installation Instructions
 - ii. Instrument Specification Sheets
 - iii. Operating Instructions
 - iv. Maintenance Instructions
 - v. Detailed list of recommended spare parts
 - vi. PLC ladder logic printout
 - vii. PLC program in hard copy and electronic (CD) format

- viii. Detailed equipment drawings (Signed and Sealed by Professional Engineer in State of Project)
 - 1) *Structural*
 - 2) *Electrical schematic*
 - 3) *P&ID*
- ix. All manuals and manufacturer information for all equipment and parts
- x. Settings for all user programmable devices such as instrumentation, VFDs, radios, network equipment, etc.
- xi. Recommended service schedule

2.4 Additional CASP System Instrumentation

S. Pressure Indicating Transmitter

- a. Measurement type suitable for application.
- b. Signal to PLC (with instantaneous pressure reading displayed on recorder).
- c. ½ -in. MNPT process connection for mounting on header pipe.
- d. Installation so that any condensation drains away from the transmitter location, as recommended by manufacturer.
- e. To be located on Blower Outlet Piping, one per each skid.
- f. Range: 0 to 35 inches water column.
- g. 4-20 mA.
- h. Pressure to be conveyed to allow VFD to control blower speed to maintain set pressure.
- i. Suitable for outdoor service.

T. Flow Meter

- a. Measurement type suitable for application. Calibrated for air.
- b. Signal to PLC (with instantaneous flow rate display on recorder).
- c. Flexible conduit to allow meter to be removed from pipe without disconnecting wiring.
- d. Installation so that any condensation drains away from the sensor location, as recommended by manufacturer.
- e. To be located in accordance with manufacturers published recommendations for minimum lengths of straight pipe.
- f. To be located on Blower Outlet Piping to main header, one flow meter per blower skid outlet (three blower skid outlets for a total of three flow meters for the blower outlet piping) and one flow meter per manifold on each lateral pipe to each sparger manifold (with one sparger manifold per active compost

pile for a total of 45 sparger manifolds), one flow meter per manifold (48 total flow meters).

- g. Flow straightening devices may be used in accordance with manufacturers published recommendations.
- h. Suitable for outdoor service.

U. Dual Depth Temperature Probes or approved equal:

- a. Minimum of three (3) temperature probes with two (2) readings each per active pile or approved equal (for a total of six readings per active pile) and capable of providing continuous monitoring. Selected Bidder to submit specifications of temperature probes and quantity to be provided.
- b. Probes shall be capable of recording a temperature range of zero to 212 degrees Fahrenheit (°F).
- c. Readings from probes shall be collected at both 2.5 feet and 5 feet below the cover or approved equal.
- d. Probes must be robust, durable, and utilize chemically resistant materials. Temperature probes must be rated for outdoor use.
- e. Probes shall transmit temperature data wirelessly to the probe receiver mounted and wired to the individual blower control system.
- f. Suitable for outdoor service.

V. Header, Lateral, and Manifold Piping and Modulating Ball Valves:

- a. HDPE piping and fittings sized suitably to provide minimal head loss.
- b. Expansion joints for header piping.
- c. Sparger piping for placement underneath active compost piles. HDPE piping and fittings, solid and perforated, and snook flexible hoses and worm gear clamps for each pile. Three sparger system per pile, 45 piles total.
- d. Modulating ball valve on pile manifold (45 total) to be suitable for operating conditions (i.e., corrosion resistant) and operational requirements described herein. Valves shall be equipped with electronic actuators and shall be able to be wirelessly adjusted for each pile based on the required amount of flow per hour. Refer to Section 23 09 13 of these Specifications for additional requirements.

W. Oxygen Probe (optional):

- a. Probe must be robust, durable, and utilize chemically resistant materials and be rated for outdoor use.
- b. Capable of measuring between 0.1 and 25 percent, by volume oxygen while operating at temperature up to 212 °F.
- c. Able to provide monitoring every 15 seconds and recording via wired or wireless communication.
- d. Suitable for outdoor service.

PART 3 EXECUTION

3.1 FIELD QUALITY CONTROL

A. Bidder's Field Services:

- a. BIDDER's representative for equipment specified herein shall be present at job site designated by ENGINEER for man-days indicated, travel time excluded, as defined below for assistance during installation, plant startup, and training of OWNER personnel for proper operation. Include minimum of:
 1. 3 man-days for Installation Services.
 2. 1 man-day for Instructional Services for training of on-site personnel.
 3. 5 man-days for Post Startup Services.
- b. BIDDER shall direct services to system and equipment operation, maintenance, troubleshooting, and equipment and system related areas other than wastewater treatment process.
- c. BIDDER shall direct services to specific system and equipment operation, maintenance, and troubleshooting.
- d. BIDDER shall furnish a spare parts list including a list of sellers to procure the items from a part numbers.

B. Field Performance Testing:

- a. BIDDER shall furnish an authorized field engineer to inspect, test, and adjust field assembled component and equipment installation including connections and control system programming modifications, as necessary, and to supervise field test performance. BIDDER's representative shall issue an installation certificate to OWNER confirming that equipment has been installed in accordance with BIDDER's recommendations.

3.2 BIDDER'S QUALITY CONTROL

A. Factory Testing

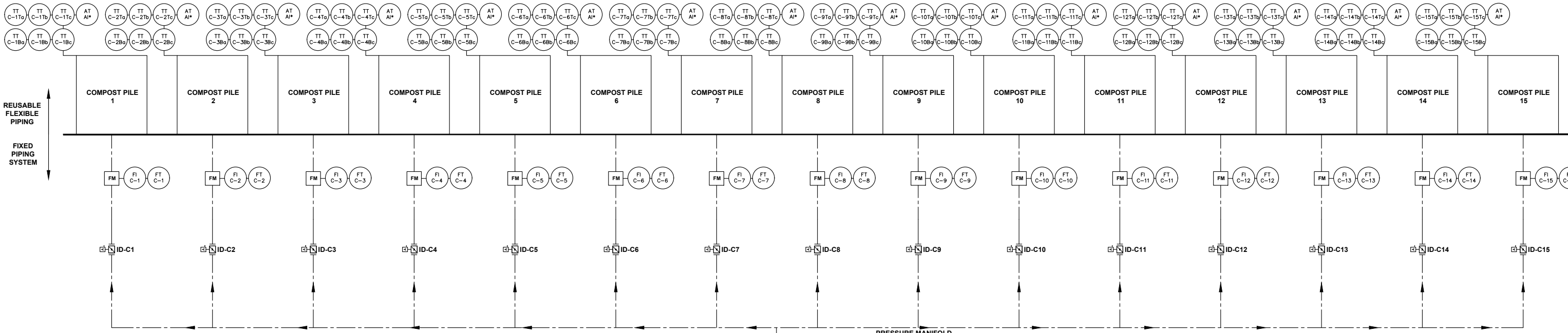
- a. Each skid and control panel shall be factory witness tested on ambient air at the BIDDER's facility prior to shipment. Test records shall be included in O&M manual.
- b. Test records shall be reviewed by the BIDDER's project engineer. Test records shall be made available if the OWNER requests them.

3.3 DELIVERY, STORAGE, AND HANDLING

- A. Units will be fully covered during transit and all pipe connections and openings shall be sealed.
- B. Provide rigging and storage instructions.

- C. Provide instructions for pieces of equipment that must be removed and/or unlocked before attempting to start unit.
- D. Provide instructions for storage and preventative maintenance of spare blower, including, but not limited to, protection from weather and climate, lubrication, and periodic shaft rotation.

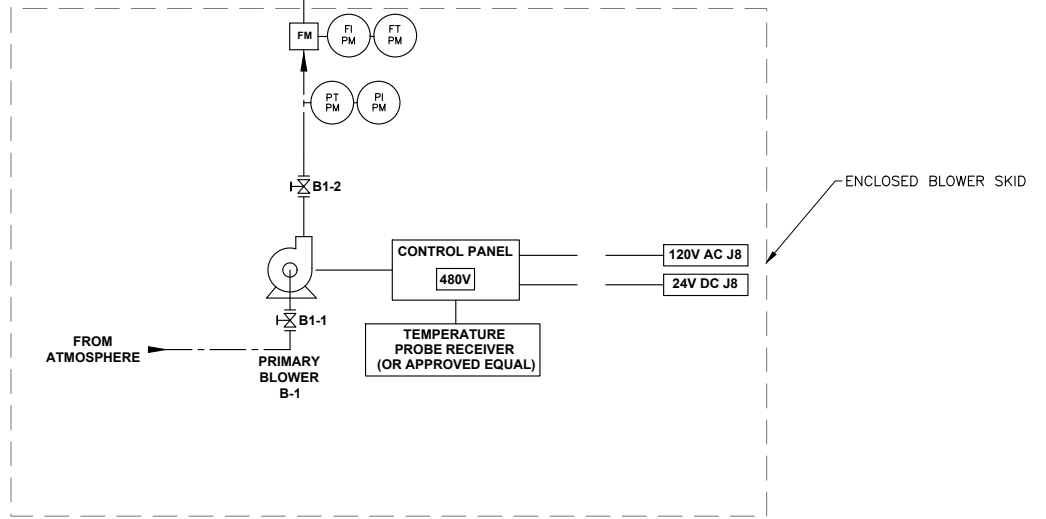
END OF SECTION



LEGEND:

- AIR PROCESS FLOW
- ELECTRICAL CONDUIT
- BLOWER
- ACTUATED MODULATING VALVE AND IDENTIFIER
- MANUAL VALVE AND IDENTIFIER
- FLOW METER
- TEMPERATURE PROBE TRANSMITTER
- FIELD MOUNTED FLOW METER READOUT
- FLOW TRANSMITTER
- FIELD MOUNTED PRESSURE READOUT
- PRESSURE TRANSMITTER
- ANALYTICAL TRANSMITTER/INDICATOR FOR OXYGEN SENSOR (OPTIONAL)

NOTE:
 1. EACH PILE TO HAVE 6 THERMOCOUPLES, 3 IN THE UPPER VERTICAL PROFILE OF PILE, 3 IN THE LOWER VERTICAL PROFILE OF PILE.



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MONTEREY REGIONAL WASTE MANAGEMENT DISTRICT
 MONTEREY COUNTY, CALIFORNIA

**COVERED AERATED STATIC PILE DESIGN
 PIPING AND INSTRUMENTATION DIAGRAM**

SHEET NO.
PID1
 PROJECT NO.
 220063

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
1	1/20/25			GVP	CME	
				ECM	PJS	

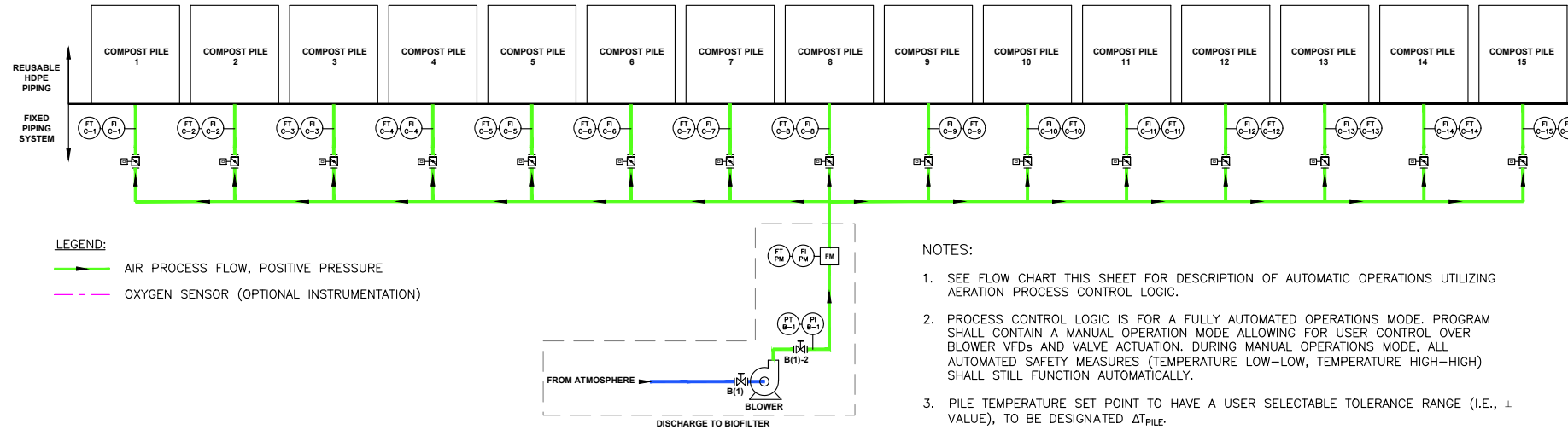
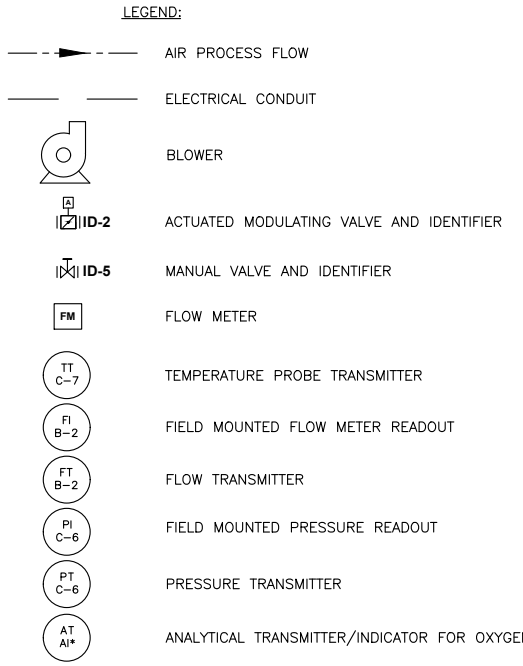


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ALL PROFESSIONAL ENGINEERING WORK IS PERFORMED BY DULY LICENSED PROFESSIONAL ENGINEERS UNDER THE APPROPRIATE STATE REGISTERED PROFESSIONAL ENTITY.

1" = 1/2" 0"
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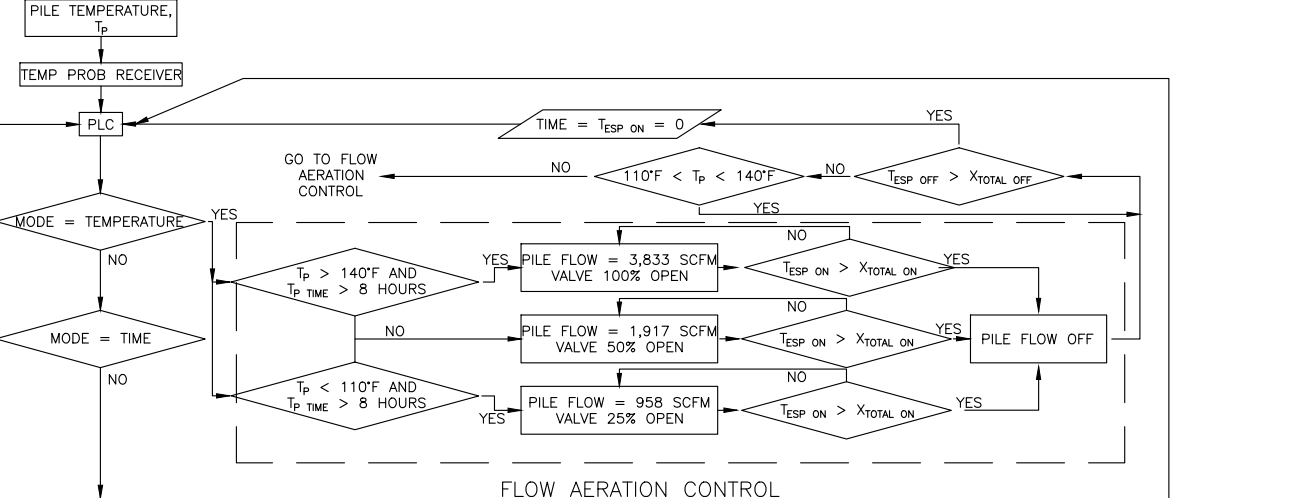
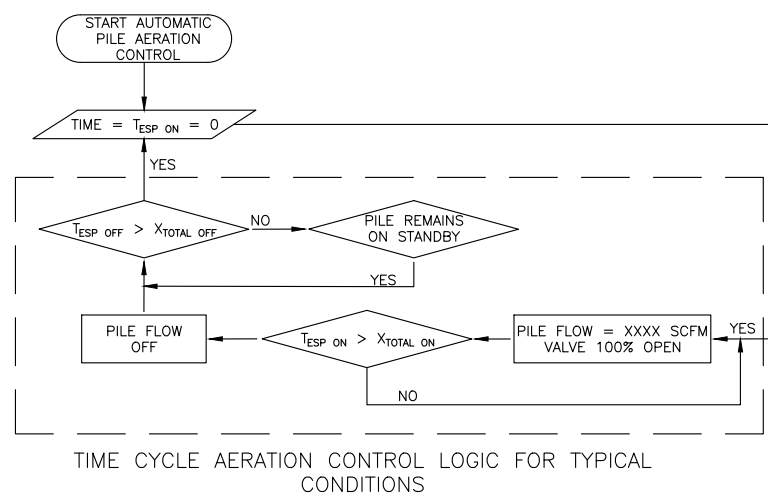
TYPICAL EXAMPLE SCENARIO – POSITIVE AERATION CONDITIONS



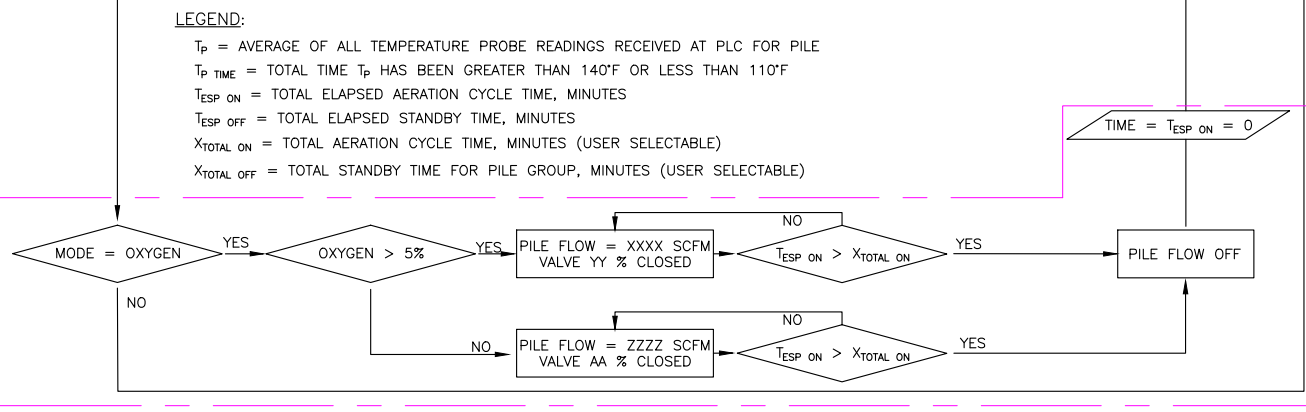
- NOTES:**
- SEE FLOW CHART THIS SHEET FOR DESCRIPTION OF AUTOMATIC OPERATIONS UTILIZING AERATION PROCESS CONTROL LOGIC.
 - PROCESS CONTROL LOGIC IS FOR A FULLY AUTOMATED OPERATIONS MODE. PROGRAM SHALL CONTAIN A MANUAL OPERATION MODE ALLOWING FOR USER CONTROL OVER BLOWER VFDs AND VALVE ACTUATION. DURING MANUAL OPERATIONS MODE, ALL AUTOMATED SAFETY MEASURES (TEMPERATURE LOW-LOW, TEMPERATURE HIGH-HIGH) SHALL STILL FUNCTION AUTOMATICALLY.
 - PILE TEMPERATURE SET POINT TO HAVE A USER SELECTABLE TOLERANCE RANGE (I.E., ± VALUE), TO BE DESIGNATED ΔT_{PILE}.
 - PILE AERATION TO BE CONTROLLED BY AVERAGE OF TEMPERATURE PROBE READINGS.
 - PILE TEMPERATURE SENSORS TO BE MEASURED AT 15 MINUTE INTERVALS.
 - ACTUATED VALVE MODULATION FREQUENCY TO BE MODIFIABLE BY OPERATOR.

PILE AERATION CONTROL LOGIC

NOTE:
1. EACH PILE TO HAVE 6 THERMOCOUPLES, 3 IN THE UPPER VERTICAL PROFILE OF PILE, 3 IN THE LOWER VERTICAL PROFILE OF PILE.



PROCESS CONTROL LOGIC SUMMARY			
PROCESS ELEMENT	CONTROL ELEMENT	CONTROL LOGIC	
		CONDITION	ACTION
BLOWER FLOW METER	BLOWER VFD	SYSTEM REQUESTED FLOW	TOTAL FLOW REQUESTED BY X PILES OPERATING AT A TIME. MAXIMUM TOTAL FLOW FROM BLOWERS 19,167 SCFM.
BLOWER PRESSURE METER		VFD CONTROL	SETS BLOWER VFD TO MAINTAIN USER SELECTABLE PRESSURE SET POINT
PILE TEMPERATURE METER	PILE ACTUATED VALVE	TEMPERATURE NORMAL: 110 DEGREES F TO 140 DEGREES F	SET PILE VALVE IN APPROPRIATE POSITION IN ACCORDANCE TO THE AERATION PROCESS CONTROL LOGIC. SEE NOTE 3.
		TEMPERATURE LOW: TEMP < 110 DEGREES F FOR 8 HOURS	SET PILE VALVE IN APPROPRIATE POSITION IN ACCORDANCE TO THE AERATION PROCESS CONTROL LOGIC. SEE NOTE 3.
		TEMPERATURE HIGH: TEMP > 140 DEGREES F FOR 8 HOURS	SET PILE VALVE IN APPROPRIATE POSITION IN ACCORDANCE TO THE AERATION PROCESS CONTROL LOGIC. SEE NOTE 3.
PILE FLOW METER	PILE ACTUATED VALVE	VALVE ACTUATION	PILE VALVES TO REGULATE PILE FLOW BY MAINTAINING USER SELECTABLE FLOW RATE AS DETERMINED BY TEMPERATURE. PILE VALVES TO BE ADJUSTED WITHIN FIXED SET POINTS (I.E., 1/4, 1/2, FULL OPEN) AND NOT TO BE CONTINUALLY ADJUSTED TO AVOID ISSUES WITH OVER MODULATION OF VALVES.
		PILE FLOW REQUIREMENT (BASED ON TEMPERATURE INPUTS)	PILE VALVES TO REGULATE PILE FLOW BY MAINTAINING USER SELECTABLE FLOW RATE AS DETERMINED BY TEMPERATURE. PILE VALVES TO BE ADJUSTED WITHIN FIXED SET POINTS (I.E., 1/4, 1/2, FULL OPEN) AND NOT TO BE CONTINUALLY ADJUSTED TO AVOID ISSUES WITH OVER MODULATION OF VALVES.



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REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
1	1/20/25					



MONTEREY REGIONAL WASTE MANAGEMENT DISTRICT
MONTEREY COUNTY, CALIFORNIA

COVERED AERATED STATIC PILE DESIGN
PROCESS CONTROL LOGIC SUMMARY

SHEET NO.
PID2
PROJECT NO.
220063

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1" = 1/2" 0"
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