



VariTech Industries Inc.  
4115 Minnesota Street  
Alexandria, MN 56308  
November 15, 2012

Department of Administration  
Purchasing Division  
2019 Washington Street East  
Charleston, WV 25305-0130

RFQ 6613C013

Dear Sir or Madam-

In light of the detailed specifications proposed by the state, VariTech Industries Inc. is offering its own automated brine production system. Attached you will find specifications and literature detailing the scope of our product.

Thank you for taking the time to consider our proposal, and feel free to contact VariTech Industries at 1-888-208-0686 with any questions.

Please see enclosed specification sheet and product brochure for reference.

Yours Truly-

Bjorn Kleven  
Central Sales

Enclosure: Bid Proposal and literature

RECEIVED

2012 NOV 19 AM 9:41

WV PURCHASING  
DIVISION

4115 Minnesota Street  
P.O. Box 457  
Alexandria, MN 56308  
Phone: 1-888-208-0686 • Fax: 320-763-5612 • Email: [sales@varitech-industries.com](mailto:sales@varitech-industries.com)



State of West Virginia  
 Department of Administration  
 Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

**Solicitation**

|          |
|----------|
| NUMBER   |
| 6613C013 |

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|------|
| PAGE |
| 1    |

|                                        |
|----------------------------------------|
| ADDRESS CORRESPONDENCE TO ATTENTION OF |
| ALAN CUMMINGS<br>304-558-2402          |

|                            |                         |              |
|----------------------------|-------------------------|--------------|
| V<br>E<br>N<br>D<br>O<br>R | *310143042              | 888-208-0686 |
|                            | VARITECH INDUSTRIES INC |              |
|                            | 4115 MINNESOTA ST       |              |
|                            | ALEXANDRIA MN 56308     |              |

|                            |                              |
|----------------------------|------------------------------|
| S<br>H<br>I<br>P<br>T<br>O | DIVISION OF HIGHWAYS         |
|                            | VARIOUS LOCALES AS INDICATED |
|                            | BY ORDER                     |
|                            |                              |

**ORIGINAL**

|                   |
|-------------------|
| DATE PRINTED      |
| 10/29/2012        |
| BID OPENING DATE: |
| 11/21/2012        |

BID OPENING TIME 1:30PM

| LINE | QUANTITY | UOP | CAT NO | ITEM NUMBER                                                                                                                                                                                                                                  | UNIT PRICE | AMOUNT             |
|------|----------|-----|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------------|
| 0001 |          |     |        | 160-12                                                                                                                                                                                                                                       |            | See Price Schedule |
|      |          |     |        | BRINE MAKER SYSTEMS                                                                                                                                                                                                                          |            |                    |
|      |          |     |        | OPEN-END CONTRACT                                                                                                                                                                                                                            |            |                    |
|      |          |     |        | THE WEST VIRGINIA STATE PURCHASING DIVISION FOR THE AGENCY, THE WEST VIRGINIA DIVISION OF HIGHWAYS, IS SOLICITING BIDS TO PROVIDE THE AGENCY WITH AN OPEN-END CONTRACT FOR VARIOUS SIZE BRINE MAKER SYSTEMS PER THE ATTACHED SPECIFICATIONS. |            |                    |
|      |          |     |        | ***** THIS IS THE END OF RFQ 6613C013 ***** TOTAL:                                                                                                                                                                                           |            | See Price Schedule |

|                     |                        |                                   |
|---------------------|------------------------|-----------------------------------|
| SIGNATURE           | TELEPHONE 888-208-0686 | DATE Nov. 15, 2012                |
| TITLE Central Sales | FEIN 41-1557096        | ADDRESS CHANGES TO BE NOTED ABOVE |

WHEN RESPONDING TO SOLICITATION, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

INSTRUCTIONS TO VENDORS SUBMITTING BIDS

- 1. **REVIEW DOCUMENTS THOROUGHLY:** The attached documents contain a solicitation for bids. Please read these instructions and all documents attached in their entirety. These instructions provide critical information about requirements that if overlooked could lead to disqualification of a Vendor's bid. All bids must be submitted in accordance with the provisions contained in these instructions and the Solicitation. Failure to do so may result in disqualification of Vendor's bid.
- 2. **MANDATORY TERMS:** The Solicitation may contain mandatory provisions identified by the use of the words "must," "will," and "shall." Failure to comply with a mandatory term in the Solicitation will result in bid disqualification.
- 3. **PREBID MEETING:** The item identified below shall apply to this Solicitation.

| A pre-bid meeting will not be held prior to bid opening.

| A NON-MANDATORY PRE-BID meeting will be held at the following place and time:

| A MANDATORY PRE-BID meeting will be held at the following place and time:

All Vendors submitting a bid must attend the mandatory pre-bid meeting. Failure to attend the mandatory pre-bid meeting shall result in disqualification of the Vendor's bid. No one person attending the pre-bid meeting may represent more than one Vendor.

An attendance sheet provided at the pre-bid meeting shall serve as the official document verifying attendance. The State will not accept any other form of proof or documentation to verify attendance. Any person attending the pre-bid meeting on behalf of a Vendor must list on the attendance sheet his or her name and the name of the Vendor he or she is representing. Additionally, the person attending the pre-bid meeting should include the Vendor's E-Mail address, phone number, and Fax number on the attendance sheet. It is the Vendor's responsibility to locate the attendance sheet and provide the required

information. Failure to complete the attendance sheet as required may result in disqualification of Vendor's bid.

All Vendors should arrive prior to the starting time for the pre-bid. Vendors who arrive after the starting time but prior to the end of the pre-bid will be permitted to sign in, but are charged with knowing all matters discussed at the pre-bid.

Questions submitted at least five business days prior to a scheduled pre-bid will be discussed at the pre-bid meeting if possible. Any discussions or answers to questions at the pre-bid meeting are preliminary in nature and are non-binding. Official and binding answers to questions will be published in a written addendum to the Solicitation prior to bid opening.

- 4. **VENDOR QUESTION DEADLINE:** Vendors may submit questions relating to this Solicitation to the Purchasing Division. Questions must be submitted in writing. All questions must be submitted on or before the date listed below and to the address listed below in order to be considered. A written response will be published in a Solicitation addendum if a response is possible and appropriate. Non-written discussions, conversations, or questions and answers regarding this Solicitation are preliminary in nature and are non-binding.

Question Submission Deadline:

Submit Questions to:   
  
  
  
 Fax:   
 Email:

- 5. **VERBAL COMMUNICATION:** Any verbal communication between the Vendor and any State personnel is not binding, including that made at the mandatory pre-bid conference. Only information issued in writing and added to the Solicitation by an official written addendum by the Purchasing Division is binding.
- 6. **BID SUBMISSION:** All bids must be signed and delivered by the Vendor to the Purchasing Division at the address listed below on or before the date and time of the bid opening. Any bid received by the Purchasing Division staff is considered to be in the possession of the Purchasing Division and will not be returned for any reason. The bid delivery address is:

Department of Administration, Purchasing Division  
 2019 Washington Street East  
 P.O. Box 50130,  
 Charleston, WV 25305-0130



The bid should contain the information listed below on the face of the envelope or the bid may not be considered:

SEALED BID

BUYER: \_\_\_\_\_

SOLICITATION NO.: \_\_\_\_\_

BID OPENING DATE: \_\_\_\_\_

BID OPENING TIME: \_\_\_\_\_

FAX NUMBER: \_\_\_\_\_

In the event that Vendor is responding to a request for proposal, the Vendor shall submit one original technical and one original cost proposal plus  convenience copies of each to the Purchasing Division at the address shown above. Additionally, the Vendor should identify the bid type as either a technical or cost proposal on the face of each bid envelope submitted in response to a request for proposal as follows:

BID TYPE:     Technical  
                    Cost

7. **BID OPENING:** Bids submitted in response to this Solicitation will be opened at the location identified below on the date and time listed below. Delivery of a bid after the bid opening date and time will result in bid disqualification. For purposes of this Solicitation, a bid is considered delivered when time stamped by the official Purchasing Division time clock.

**Bid Opening Date and Time:**

11/21/2012 - 1:30 P.M.

**Bid Opening Location:**

Department of Administration, Purchasing Division  
 2019 Washington Street East  
 P.O. Box 50130,  
 Charleston, WV 25305-0130

8. **ADDENDUM ACKNOWLEDGEMENT:** Changes or revisions to this Solicitation will be made by an official written addendum issued by the Purchasing Division. Vendor should acknowledge receipt of all addenda issued with this Solicitation by completing an Addendum Acknowledgment Form, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.
9. **BID FORMATTING:** Vendor should type or electronically enter the information onto its bid to prevent errors in the evaluation. Failure to type or electronically enter the information may result in bid disqualification.

**GENERAL TERMS AND CONDITIONS:**

1. **CONTRACTUAL AGREEMENT:** Issuance of a Purchase Order signed by the Purchasing Division Director, or his designee, and approved as to form by the Attorney General's office constitutes acceptance of this Contract made by and between the State of West Virginia and the Vendor. Vendor's signature on its bid signifies Vendor's agreement to be bound by and accept the terms and conditions contained in this Contract.
  
2. **DEFINITIONS:** As used in this Solicitation / Contract, the following terms shall have the meanings attributed to them below. Additional definitions may be found in the specifications included with this Solicitation / Contract.
  - 2.1 **"Agency" or "Agencies"** means the agency, board, commission, or other entity of the State of West Virginia that is identified on the first page of the Solicitation or any other public entity seeking to procure goods or services under this Contract.
  - 2.2 **"Contract"** means the binding agreement that is entered into between the State and the Vendor to provide the goods and services requested in the Solicitation.
  - 2.3 **"Director"** means the Director of the West Virginia Department of Administration, Purchasing Division.
  - 2.4 **"Purchasing Division"** means the West Virginia Department of Administration, Purchasing Division.
  - 2.5 **"Purchase Order"** means the document signed by the Agency and the Purchasing Division, and approved as to form by the Attorney General, that identifies the Vendor as the successful bidder and Contract holder.
  - 2.6 **"Solicitation"** means the official solicitation published by the Purchasing Division and identified by number on the first page thereof.
  - 2.7 **"State"** means the State of West Virginia and/or any of its agencies, commissions, boards, etc. as context requires.
  - 2.8 **"Vendor" or "Vendors"** means any entity submitting a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded the Contract as context requires.

3. **CONTRACT TERM; RENEWAL; EXTENSION:** The term of this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below:

**Term Contract**

**Initial Contract Term:** This Contract becomes effective on   
  
and extends for a period of  year(s).

**Renewal Term:** This Contract may be renewed upon the mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any request for renewal must be submitted to the Purchasing Division Director thirty (30) days prior to the expiration date of the initial contract term or appropriate renewal term. A Contract renewal shall be in accordance with the terms and conditions of the original contract. Renewal of this Contract is limited to  successive one (1) year periods. Automatic renewal of this Contract is prohibited. Notwithstanding the foregoing, Purchasing Division approval is not required on agency delegated or exempt purchases. Attorney General approval may be required for vendor terms and conditions.

**Reasonable Time Extension:** At the sole discretion of the Purchasing Division Director, and with approval from the Attorney General's office (Attorney General approval is as to form only), this Contract may be extended for a reasonable time after the initial Contract term or after any renewal term as may be necessary to obtain a new contract or renew this Contract. Any reasonable time extension shall not exceed twelve (12) months. Vendor may avoid a reasonable time extension by providing the Purchasing Division Director with written notice of Vendor's desire to terminate this Contract 30 days prior to the expiration of the then current term. During any reasonable time extension period, the Vendor may terminate this Contract for any reason upon giving the Purchasing Division Director 30 days written notice. Automatic extension of this Contract is prohibited. Notwithstanding the foregoing, Purchasing Division approval is not required on agency delegated or exempt purchases, but Attorney General approval may be required.

**Fixed Period Contract:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and must be completed within  days.

**One Time Purchase:** The term of this Contract shall run for one year from the date the Purchase Order is issued or from the date the Purchase Order is issued until all of the goods contracted for have been delivered, whichever is shorter.

**Other:** See attached.

4. **NOTICE TO PROCEED:** Vendor shall begin performance of this Contract immediately upon receiving notice to proceed unless otherwise instructed by the Agency. Unless otherwise specified, the fully executed Purchase Order will be considered notice to proceed
5. **QUANTITIES:** The quantities required under this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below.
- | **Open End Contract:** Quantities listed in this Solicitation are approximations only, based on estimates supplied by the Agency. It is understood and agreed that the Contract shall cover the quantities actually ordered for delivery during the term of the Contract, whether more or less than the quantities shown.
  - | **Service:** The scope of the service to be provided will be more clearly defined in the specifications included herewith.
  - | **Combined Service and Goods:** The scope of the service and deliverable goods to be provided will be more clearly defined in the specifications included herewith.
  - | **One Time Purchase:** This Contract is for the purchase of a set quantity of goods that are identified in the specifications included herewith. Once those items have been delivered, no additional goods may be procured under this Contract without an appropriate change order approved by the Vendor, Agency, Purchasing Division, and Attorney General's office.
6. **PRICING:** The pricing set forth herein is firm for the life of the Contract, unless specified elsewhere within this Solicitation/Contract by the State. A Vendor's inclusion of price adjustment provisions in its bid, without an express authorization from the State in the Solicitation to do so, may result in bid disqualification.
7. **EMERGENCY PURCHASES:** The Purchasing Division Director may authorize the Agency to purchase goods or services in the open market that Vendor would otherwise provide under this Contract if those goods or services are for immediate or expedited delivery in an emergency. Emergencies shall include, but are not limited to, delays in transportation or an unanticipated increase in the volume of work. An emergency purchase in the open market, approved by the Purchasing Division Director, shall not constitute of breach of this Contract and shall not entitle the Vendor to any form of compensation or damages. This provision does not excuse the State from fulfilling its obligations under a One Time Purchase contract.
8. **REQUIRED DOCUMENTS:** All of the items checked below must be provided to the Purchasing Division by the Vendor as specified below.
- | **BID BOND:** All Vendors shall furnish a bid bond in the amount of five percent (5%) of the total amount of the bid protecting the State of West Virginia. The bid bond must be submitted with the bid.

| | **PERFORMANCE BOND:** The apparent successful Vendor shall provide a performance bond in the amount of [ ]. The performance bond must be issued and received by the Purchasing Division prior to Contract award. On construction contracts, the performance bond must be 100% of the Contract value.

| | **LABOR/MATERIAL PAYMENT BOND:** The apparent successful Vendor shall provide a labor/material payment bond in the amount of 100% of the Contract value. The labor/material payment bond must be issued and delivered to the Purchasing Division prior to Contract award.

In lieu of the Bid Bond, Performance Bond, and Labor/Material Payment Bond, the Vendor may provide certified checks, cashier's checks, or irrevocable letters of credit. Any certified check, cashier's check, or irrevocable letter of credit provided in lieu of a bond must be of the same amount and delivered on the same schedule as the bond it replaces. A letter of credit submitted in lieu of a performance and labor/material payment bond will only be allowed for projects under \$100,000. Personal or business checks are not acceptable.

| | **MAINTENANCE BOND:** The apparent successful Vendor shall provide a two (2) year maintenance bond covering the roofing system. The maintenance bond must be issued and delivered to the Purchasing Division prior to Contract award.

| | **WORKERS' COMPENSATION INSURANCE:** The apparent successful Vendor shall have appropriate workers' compensation insurance and shall provide proof thereof upon request.

| | **INSURANCE:** The apparent successful Vendor shall furnish proof of the following insurance prior to Contract award:

[ ] **Commercial General Liability Insurance:**  
[ ] or more.

[ ] **Builders Risk Insurance:** builders risk – all risk insurance in an amount equal to 100% of the amount of the Contract.

[ ] [ ]

[ ] [ ]

[ ] [ ]

[ ] [ ]

[ ] [ ]

The apparent successful Vendor shall also furnish proof of any additional insurance requirements contained in the specifications prior to Contract award regardless of whether or not that insurance requirement is listed above.

**LICENSE(S) / CERTIFICATIONS / PERMITS:** In addition to anything required under the Section entitled Licensing, of the General Terms and Conditions, the apparent successful Vendor shall furnish proof of the following licenses, certifications, and/or permits prior to Contract award, in a form acceptable to the Purchasing Division.

|   |  |  |
|---|--|--|
| [ |  |  |
| [ |  |  |
| [ |  |  |
| [ |  |  |

The apparent successful Vendor shall also furnish proof of any additional licenses or certifications contained in the specifications prior to Contract award regardless of whether or not that requirement is listed above.

**9. LITIGATION BOND:** The Director reserves the right to require any Vendor that files a protest of an award to submit a litigation bond in the amount equal to one percent of the lowest bid submitted or \$5,000, whichever is greater. The entire amount of the bond shall be forfeited if the hearing officer determines that the protest was filed for frivolous or improper purpose, including but not limited to, the purpose of harassing, causing unnecessary delay, or needless expense for the Agency. All litigation bonds shall be made payable to the Purchasing Division. In lieu of a bond, the protester may submit a cashier's check or certified check payable to the Purchasing Division. Cashier's or certified checks will be deposited with and held by the State Treasurer's office. If it is determined that the protest has not been filed for frivolous or improper purpose, the bond or deposit shall be returned in its entirety.

**10. ALTERNATES:** Any model, brand, or specification listed herein establishes the acceptable level of quality only and is not intended to reflect a preference for, or in any way favor, a particular brand or vendor. Vendors may bid alternates to a listed model or brand provided that the alternate is at least equal to the model or brand and complies with the required specifications. The equality of any alternate being bid shall be determined by the State at its sole discretion. Any Vendor bidding an alternate model or brand should clearly identify the alternate items in its bid and should include manufacturer's specifications, industry literature, and/or any other relevant documentation demonstrating the equality of the alternate items. Failure to provide information for alternate items may be grounds for rejection of a Vendor's bid.

**11. EXCEPTIONS AND CLARIFICATIONS:** The Solicitation contains the specifications that shall form the basis of a contractual agreement. Vendor shall clearly mark any exceptions, clarifications, or



other proposed modifications in its bid. Exceptions to, clarifications of, or modifications of a requirement or term and condition of the Solicitation may result in bid disqualification.

**12. LIQUIDATED DAMAGES:** Vendor shall pay liquidated damages in the amount

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|  | for |  |
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This clause shall in no way be considered exclusive and shall not limit the State or Agency's right to pursue any other available remedy.

**13. ACCEPTANCE/REJECTION:** The State may accept or reject any bid in whole, or in part. Vendor's signature on its bid signifies acceptance of the terms and conditions contained in the Solicitation and Vendor agrees to be bound by the terms of the Contract, as reflected in the Purchase Order, upon receipt.

**14. REGISTRATION:** Prior to Contract award, the apparent successful Vendor must be properly registered with the West Virginia Purchasing Division and must have paid the \$125 fee if applicable.

**15. COMMUNICATION LIMITATIONS:** In accordance with West Virginia Code of State Rules §148-1-6.6, communication with the State of West Virginia or any of its employees regarding this Solicitation during the solicitation, bid, evaluation or award periods, except through the Purchasing Division, is strictly prohibited without prior Purchasing Division approval. Purchasing Division approval for such communication is implied for all agency delegated and exempt purchases.

**16. FUNDING:** This Contract shall continue for the term stated herein, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise made available, this Contract becomes void and of no effect beginning on July 1 of the fiscal year for which funding has not been appropriated or otherwise made available.

**17. PAYMENT:** Payment in advance is prohibited under this Contract. Payment may only be made after the delivery and acceptance of goods or services. The Vendor shall submit invoices, in arrears, to the Agency at the address on the face of the purchase order labeled "Invoice To."

**18. UNIT PRICE:** Unit prices shall prevail in cases of a discrepancy in the Vendor's bid.

**19. DELIVERY:** All quotations are considered freight on board destination ("F.O.B. destination") unless alternate shipping terms are clearly identified in the bid. Vendor's listing of shipping terms that contradict the shipping terms expressly required by this Solicitation may result in bid disqualification.

**20. INTEREST:** Interest attributable to late payment will only be permitted if authorized by the West Virginia Code. Presently, there is no provision in the law for interest on late payments.

**21. PREFERENCE:** Vendor Preference may only be granted upon written request and only in accordance with the West Virginia Code § 5A-3-37 and the West Virginia Code of State Rules. A Resident Vendor Certification form has been attached hereto to allow Vendor to apply for the preference. Vendor's

failure to submit the Resident Vendor Certification form with its bid will result in denial of Vendor Preference. Vendor Preference does not apply to construction projects.

- 22. SMALL, WOMEN-OWNED, OR MINORITY-OWNED BUSINESSES:** For any solicitations publicly advertised for bid on or after July 1, 2012, in accordance with West Virginia Code §5A-3-37(a)(7) and W. Va. CSR § 148-22-9, any non-resident vendor certified as a small, women-owned, or minority-owned business under W. Va. CSR § 148-22-9 shall be provided the same preference made available to any resident vendor. Any non-resident small, women-owned, or minority-owned business must identify itself as such in writing, must submit that writing to the Purchasing Division with its bid, and must be properly certified under W. Va. CSR § 148-22-9 prior to submission of its bid to receive the preferences made available to resident vendors. Preference for a non-resident small, women-owned, or minority owned business shall be applied in accordance with W. Va. CSR § 148-22-9.
- 23. TAXES:** The Vendor shall pay any applicable sales, use, personal property or any other taxes arising out of this Contract and the transactions contemplated thereby. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
- 24. CANCELLATION:** The Purchasing Division Director reserves the right to cancel this Contract immediately upon written notice to the vendor if the materials or workmanship supplied do not conform to the specifications contained in the Contract. The Purchasing Division Director may cancel any purchase or Contract upon 30 days written notice to the Vendor in accordance with West Virginia Code of State Rules § 148-1-7.16.2.
- 25. WAIVER OF MINOR IRREGULARITIES:** The Director reserves the right to waive minor irregularities in bids or specifications in accordance with West Virginia Code of State Rules § 148-1-4.6.
- 26. TIME:** Time is of the essence with regard to all matters of time and performance in this Contract.
- 27. APPLICABLE LAW:** This Contract is governed by and interpreted under West Virginia law without giving effect to its choice of law principles. Any information provided in specification manuals, or any other source, verbal or written, which contradicts or violates the West Virginia Constitution, West Virginia Code or West Virginia Code of State Rules is void and of no effect.
- 28. COMPLIANCE:** Vendor shall comply with all applicable federal, state, and local laws, regulations and ordinances. By submitting a bid, Vendors acknowledge that they have reviewed, understand, and will comply with all applicable law.
- 29. PREVAILING WAGE:** On any contract for the construction of a public improvement, Vendor and any subcontractors utilized by Vendor shall pay a rate or rates of wages which shall not be less than the fair minimum rate or rates of wages (prevailing wage), as established by the West Virginia Division of Labor under West Virginia Code §§ 21-5A-1 et seq. and available at <http://www.sos.wv.gov/administrative-law/wagerates/Pages/default.aspx>. Vendor shall be responsible for ensuring compliance with prevailing wage requirements and determining when prevailing wage



requirements are applicable. The required contract provisions contained in West Virginia Code of State Rules § 42-7-3 are specifically incorporated herein by reference.

30. **ARBITRATION:** Any references made to arbitration contained in this Contract, Vendor's bid, or in any American Institute of Architects documents pertaining to this Contract are hereby deleted, void, and of no effect.
31. **MODIFICATIONS:** This writing is the parties' final expression of intent. Notwithstanding anything contained in this Contract to the contrary, no modification of this Contract shall be binding without mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). **No Change shall be implemented by the Vendor until such time as the Vendor receives an approved written change order from the Purchasing Division.**
32. **WAIVER:** The failure of either party to insist upon a strict performance of any of the terms or provision of this Contract, or to exercise any option, right, or remedy herein contained, shall not be construed as a waiver or a relinquishment for the future of such term, provision, option, right, or remedy, but the same shall continue in full force and effect. Any waiver must be expressly stated in writing and signed by the waiving party.
33. **SUBSEQUENT FORMS:** The terms and conditions contained in this Contract shall supersede any and all subsequent terms and conditions which may appear on any form documents submitted by Vendor to the Agency or Purchasing Division such as price lists, order forms, invoices, sales agreements, or maintenance agreements, and includes internet websites or other electronic documents. Acceptance or use of Vendor's forms does not constitute acceptance of the terms and conditions contained thereon.
34. **ASSIGNMENT:** Neither this Contract nor any monies due, or to become due hereunder, may be assigned by the Vendor without the express written consent of the Agency, the Purchasing Division, the Attorney General's office (as to form only), and any other government agency or office that may be required to approve such assignments. Notwithstanding the foregoing, Purchasing Division approval may or may not be required on certain agency delegated or exempt purchases.
35. **WARRANTY:** The Vendor expressly warrants that the goods and/or services covered by this Contract will: (a) conform to the specifications, drawings, samples, or other description furnished or specified by the Agency; (b) be merchantable and fit for the purpose intended; and (c) be free from defect in material and workmanship.
36. **STATE EMPLOYEES:** State employees are not permitted to utilize this Contract for personal use and the Vendor is prohibited from permitting or facilitating the same.
37. **BANKRUPTCY:** In the event the Vendor files for bankruptcy protection, the State of West Virginia may deem this Contract null and void, and terminate this Contract without notice.

- 38. HIPAA BUSINESS ASSOCIATE ADDENDUM:** The West Virginia State Government HIPAA Business Associate Addendum (BAA), approved by the Attorney General, is available online at <http://www.state.wv.us/admin/purchase/vrc/hipaa.html> and is hereby made part of the agreement provided that the Agency meets the definition of a Covered entity (45 CFR §160.103) and will be disclosing Protected Health Information (45 CFR §160.103) to the Vendor.
- 39. CONFIDENTIALITY:** The Vendor agrees that it will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the Agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the Agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in <http://www.state.wv.us/admin/purchase/privacy/default.html>.
- 40. DISCLOSURE:** Vendor's response to the Solicitation and the resulting Contract are considered public documents and will be disclosed to the public in accordance with the laws, rules, and policies governing the West Virginia Purchasing Division. Those laws include, but are not limited to, the Freedom of Information Act found in West Virginia Code § 29B-1-1 et seq.

If a Vendor considers any part of its bid to be exempt from public disclosure, Vendor must so indicate by specifically identifying the exempt information, identifying the exemption that applies, providing a detailed justification for the exemption, segregating the exempt information from the general bid information, and submitting the exempt information as part of its bid but in a segregated and clearly identifiable format. Failure to comply with the foregoing requirements will result in public disclosure of the Vendor's bid without further notice. A Vendor's act of marking all or nearly all of its bid as exempt is not sufficient to avoid disclosure and WILL NOT BE HONORED. Vendor's act of marking a bid or any part thereof as "confidential" or "proprietary" is not sufficient to avoid disclosure and WILL NOT BE HONORED. In addition, a legend or other statement indicating that all or substantially all of the bid is exempt from disclosure is not sufficient to avoid disclosure and WILL NOT BE HONORED. Vendor will be required to defend any claimed exemption for nondisclosure in the event of an administrative or judicial challenge to the State's nondisclosure. Vendor must indemnify the State for any costs incurred related to any exemptions claimed by Vendor. Any questions regarding the applicability of the various public records laws should be addressed to your own legal counsel prior to bid submission.

- 41. LICENSING:** In accordance with West Virginia Code of State Rules §148-1-6.1.7, Vendor must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agency or political subdivision. Upon request, the Vendor must provide all necessary releases to obtain information to enable the Purchasing Division Director or the Agency to verify that the Vendor is licensed and in good standing with the above entities.

- 42. ANTITRUST:** In submitting a bid to, signing a contract with, or accepting a Purchase Order from any agency of the State of West Virginia, the Vendor agrees to convey, sell, assign, or transfer to the State of West Virginia all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to Vendor.
- 43. VENDOR CERTIFICATIONS:** By signing its bid or entering into this Contract, Vendor certifies (1) that its bid was made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, person or entity submitting a bid for the same material, supplies, equipment or services; (2) that its bid is in all respects fair and without collusion or fraud; (3) that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; and (4) that it has reviewed this RFQ in its entirety; understands the requirements, terms and conditions, and other information contained herein. Vendor's signature on its bid also affirms that neither it nor its representatives have any interest, nor shall acquire any interest, direct or indirect, which would compromise the performance of its services hereunder. Any such interests shall be promptly presented in detail to the Agency.

The individual signing this bid on behalf of Vendor certifies that he or she is authorized by the Vendor to execute this bid or any documents related thereto on Vendor's behalf; that he or she is authorized to bind the Vendor in a contractual relationship; and that, to the best of his or her knowledge, the Vendor has properly registered with any State agency that may require registration.

- 44. PURCHASING CARD ACCEPTANCE:** The State of West Virginia currently utilizes a Purchasing Card program, administered under contract by a banking institution, to process payment for goods and services. The Vendor must accept the State of West Virginia's Purchasing Card for payment of all orders under this Contract unless the box below is checked.

Vendor is not required to accept the State of West Virginia's Purchasing Card as payment for all goods and services.

- 45. VENDOR RELATIONSHIP:** The relationship of the Vendor to the State shall be that of an independent contractor and no principal-agent relationship or employer-employee relationship is contemplated or created by this Contract. The Vendor as an independent contractor is solely liable for the acts and omissions of its employees and agents. Vendor shall be responsible for selecting, supervising, and compensating any and all individuals employed pursuant to the terms of this Solicitation and resulting contract. Neither the Vendor, nor any employees or subcontractors of the Vendor, shall be deemed to be employees of the State for any purpose whatsoever. Vendor shall be exclusively responsible for payment of employees and contractors for all wages and salaries, taxes, withholding payments, penalties, fees, fringe benefits, professional liability insurance premiums, contributions to insurance and pension, or other deferred compensation plans, including but not limited to, Workers' Compensation and Social Security obligations, licensing fees, *etc.* and the filing of all necessary documents, forms and returns pertinent to all of the foregoing. Vendor shall hold harmless the

State, and shall provide the State and Agency with a defense against any and all claims including, but not limited to, the foregoing payments, withholdings, contributions, taxes, Social Security taxes, and employer income tax returns.

- 46. INDEMNIFICATION:** The Vendor agrees to indemnify, defend, and hold harmless the State and the Agency, their officers, and employees from and against: (1) Any claims or losses for services rendered by any subcontractor, person, or firm performing or supplying services, materials, or supplies in connection with the performance of the Contract; (2) Any claims or losses resulting to any person or entity injured or damaged by the Vendor, its officers, employees, or subcontractors by the publication, translation, reproduction, delivery, performance, use, or disposition of any data used under the Contract in a manner not authorized by the Contract, or by Federal or State statutes or regulations; and (3) Any failure of the Vendor, its officers, employees, or subcontractors to observe State and Federal laws including, but not limited to, labor and wage and hour laws.
- 47. PURCHASING AFFIDAVIT:** In accordance with West Virginia Code § 5A-3-10a, all Vendors are required to sign, notarize, and submit the Purchasing Affidavit stating that neither the Vendor nor a related party owe a debt to the State in excess of \$1,000. The affidavit must be submitted prior to award, but should be submitted with the Vendor's bid. A copy of the Purchasing Affidavit is included herewith.
- 48. ADDITIONAL AGENCY AND LOCAL GOVERNMENT USE:** This Contract may be utilized by and extends to other agencies, spending units, and political subdivisions of the State of West Virginia; county, municipal, and other local government bodies; and school districts ("Other Government Entities"). This Contract shall be extended to the aforementioned Other Government Entities on the same prices, terms, and conditions as those offered and agreed to in this Contract. If the Vendor does not wish to extend the prices, terms, and conditions of its bid and subsequent contract to the Other Government Entities, the Vendor must clearly indicate such refusal in its bid. A refusal to extend this Contract to the Other Government Entities shall not impact or influence the award of this Contract in any manner.
- 49. CONFLICT OF INTEREST:** Vendor, its officers or members or employees, shall not presently have or acquire any interest, direct or indirect, which would conflict with or compromise the performance of its obligations hereunder. Vendor shall periodically inquire of its officers, members and employees to ensure that a conflict of interest does not arise. Any conflict of interest discovered shall be promptly presented in detail to the Agency.
- 50. REPORTS:** Vendor shall provide the Agency and/or the Purchasing Division with the following reports identified by a checked box below:
- [ ] Such reports as the Agency and/or the Purchasing Division may request. Requested reports may include, but are not limited to, quantities purchased, agencies utilizing the contract, total contract expenditures by agency, etc.

- | Quarterly reports detailing the total quantity of purchases in units and dollars, along with a listing of purchases by agency. Quarterly reports should be delivered to the Purchasing Division via email at [purchasing.requisitions@wv.gov](mailto:purchasing.requisitions@wv.gov).

**51. BACKGROUND CHECK:** In accordance with W. Va. Code § 15-2D-3, the Director of the Division of Protective Services shall require any service provider whose employees are regularly employed on the grounds or in the buildings of the Capitol complex or who have access to sensitive or critical information to submit to a fingerprint-based state and federal background inquiry through the state repository. The service provider is responsible for any costs associated with the fingerprint-based state and federal background inquiry.

After the contract for such services has been approved, but before any such employees are permitted to be on the grounds or in the buildings of the Capitol complex or have access to sensitive or critical information, the service provider shall submit a list of all persons who will be physically present and working at the Capitol complex to the Director of the Division of Protective Services for purposes of verifying compliance with this provision.

The State reserves the right to prohibit a service provider's employees from accessing sensitive or critical information or to be present at the Capitol complex based upon results addressed from a criminal background check.

Service providers should contact the West Virginia Division of Protective Services by phone at (304) 558-9911 for more information.

**52. PREFERENCE FOR USE OF DOMESTIC STEEL PRODUCTS:** Except when authorized by the Director of the Purchasing Division pursuant to W. Va. Code § 5A-3-56, no contractor may use or supply steel products for a State Contract Project other than those steel products made in the United States. A contractor who uses steel products in violation of this section may be subject to civil penalties pursuant to W. Va. Code § 5A-3-56. As used in this section:

- a. "State Contract Project" means any erection or construction of, or any addition to, alteration of or other improvement to any building or structure, including, but not limited to, roads or highways, or the installation of any heating or cooling or ventilating plants or other equipment, or the supply of and materials for such projects, pursuant to a contract with the State of West Virginia for which bids were solicited on or after June 6, 2001.
- b. "Steel Products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed, or processed by a combination of two or more or such operations, from steel made by the open heath, basic oxygen, electric furnace, Bessemer or other steel making process.

The Purchasing Division Director may, in writing, authorize the use of foreign steel products if:

- a. The cost for each contract item used does not exceed one tenth of one percent (.1%) of the total



State, and shall provide the State and Agency with a defense against any and all claims including, but not limited to, the foregoing payments, withholdings, contributions, taxes, Social Security taxes, and employer income tax returns.

- 46. INDEMNIFICATION:** The Vendor agrees to indemnify, defend, and hold harmless the State and the Agency, their officers, and employees from and against: (1) Any claims or losses for services rendered by any subcontractor, person, or firm performing or supplying services, materials, or supplies in connection with the performance of the Contract; (2) Any claims or losses resulting to any person or entity injured or damaged by the Vendor, its officers, employees, or subcontractors by the publication, translation, reproduction, delivery, performance, use, or disposition of any data used under the Contract in a manner not authorized by the Contract, or by Federal or State statutes or regulations; and (3) Any failure of the Vendor, its officers, employees, or subcontractors to observe State and Federal laws including, but not limited to, labor and wage and hour laws.
- 47. PURCHASING AFFIDAVIT:** In accordance with West Virginia Code § 5A-3-10a, all Vendors are required to sign, notarize, and submit the Purchasing Affidavit stating that neither the Vendor nor a related party owe a debt to the State in excess of \$1,000. The affidavit must be submitted prior to award, but should be submitted with the Vendor's bid. A copy of the Purchasing Affidavit is included herewith.
- 48. ADDITIONAL AGENCY AND LOCAL GOVERNMENT USE:** This Contract may be utilized by and extends to other agencies, spending units, and political subdivisions of the State of West Virginia; county, municipal, and other local government bodies; and school districts ("Other Government Entities"). This Contract shall be extended to the aforementioned Other Government Entities on the same prices, terms, and conditions as those offered and agreed to in this Contract. If the Vendor does not wish to extend the prices, terms, and conditions of its bid and subsequent contract to the Other Government Entities, the Vendor must clearly indicate such refusal in its bid. A refusal to extend this Contract to the Other Government Entities shall not impact or influence the award of this Contract in any manner.
- 49. CONFLICT OF INTEREST:** Vendor, its officers or members or employees, shall not presently have or acquire any interest, direct or indirect, which would conflict with or compromise the performance of its obligations hereunder. Vendor shall periodically inquire of its officers, members and employees to ensure that a conflict of interest does not arise. Any conflict of interest discovered shall be promptly presented in detail to the Agency.
- 50. REPORTS:** Vendor shall provide the Agency and/or the Purchasing Division with the following reports identified by a checked box below:
- | Such reports as the Agency and/or the Purchasing Division may request. Requested reports may include, but are not limited to, quantities purchased, agencies utilizing the contract, total contract expenditures by agency, etc.

- | | Quarterly reports detailing the total quantity of purchases in units and dollars, along with a listing of purchases by agency. Quarterly reports should be delivered to the Purchasing Division via email at [purchasing.requisitions@wv.gov](mailto:purchasing.requisitions@wv.gov).

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The State reserves the right to prohibit a service provider's employees from accessing sensitive or critical information or to be present at the Capitol complex based upon results addressed from a criminal background check.

Service providers should contact the West Virginia Division of Protective Services by phone at (304) 558-9911 for more information.

**52. PREFERENCE FOR USE OF DOMESTIC STEEL PRODUCTS:** Except when authorized by the Director of the Purchasing Division pursuant to W. Va. Code § 5A-3-56, no contractor may use or supply steel products for a State Contract Project other than those steel products made in the United States. A contractor who uses steel products in violation of this section may be subject to civil penalties pursuant to W. Va. Code § 5A-3-56. As used in this section:

- a. "State Contract Project" means any erection or construction of, or any addition to, alteration of or other improvement to any building or structure, including, but not limited to, roads or highways, or the installation of any heating or cooling or ventilating plants or other equipment, or the supply of and materials for such projects, pursuant to a contract with the State of West Virginia for which bids were solicited on or after June 6, 2001.
- b. "Steel Products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed, or processed by a combination of two or more or such operations, from steel made by the open heath, basic oxygen, electric furnace, Bessemer or other steel making process.

The Purchasing Division Director may, in writing, authorize the use of foreign steel products if:

- a. The cost for each contract item used does not exceed one tenth of one percent (.1%) of the total

contract cost or two thousand five hundred dollars (\$2,500.00), whichever is greater. For the purposes of this section, the cost is the value of the steel product as delivered to the project; or

- b. The Director of the Purchasing Division determines that specified steel materials are not produced in the United States in sufficient quantity or otherwise are not reasonably available to meet contract requirements.

**53. PREFERENCE FOR USE OF DOMESTIC ALUMINUM, GLASS, AND STEEL:** In Accordance with W. Va. Code § 5-19-1 et seq., and W. Va. CSR § 148-10-1 et seq., for every contract or subcontract, subject to the limitations contained herein, for the construction, reconstruction, alteration, repair, improvement or maintenance of public works or for the purchase of any item of machinery or equipment to be used at sites of public works, only domestic aluminum, glass or steel products shall be supplied unless the spending officer determines, in writing, after the receipt of offers or bids, (1) that the cost of domestic aluminum, glass or steel products is unreasonable or inconsistent with the public interest of the State of West Virginia, (2) that domestic aluminum, glass or steel products are not produced in sufficient quantities to meet the contract requirements, or (3) the available domestic aluminum, glass, or steel do not meet the contract specifications. This provision only applies to public works contracts awarded in an amount more than fifty thousand dollars (\$50,000) or public works contracts that require more than ten thousand pounds of steel products.

The cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than twenty percent (20%) of the bid or offered price for foreign made aluminum, glass, or steel products. If the domestic aluminum, glass or steel products to be supplied or produced in a "substantial labor surplus area", as defined by the United States Department of Labor, the cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than thirty percent (30%) of the bid or offered price for foreign made aluminum, glass, or steel products.

This preference shall be applied to an item of machinery or equipment, as indicated above, when the item is a single unit of equipment or machinery manufactured primarily of aluminum, glass or steel, is part of a public works contract and has the sole purpose or of being a permanent part of a single public works project. This provision does not apply to equipment or machinery purchased by a spending unit for use by that spending unit and not as part of a single public works project.

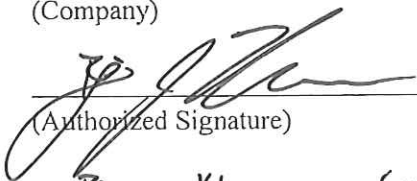
All bids and offers including domestic aluminum, glass or steel products that exceed bid or offer prices including foreign aluminum, glass or steel products after application of the preferences provided in this provision may be reduced to a price equal to or lower than the lowest bid or offer price for foreign aluminum, glass or steel products plus the applicable preference. If the reduced bid or offer prices are made in writing and supersede the prior bid or offer prices, all bids or offers, including the reduced bid or offer prices, will be reevaluated in accordance with this rule.



CERTIFICATION AND SIGNATURE PAGE

By signing below, I certify that I have reviewed this Solicitation in its entirety; understand the requirements, terms and conditions, and other information contained herein; that I am submitting this bid or proposal for review and consideration; that I am authorized by the bidder to execute this bid or any documents related thereto on bidder's behalf; that I am authorized to bind the bidder in a contractual relationship; and that to the best of my knowledge, the bidder has properly registered with any State agency that may require registration.

VariTech Industries Inc.  
(Company)

  
(Authorized Signature)

Bjorn Kleven Central Sales  
(Representative Name, Title)

888-208-0686      320-763-5612  
(Phone Number)      (Fax Number)

11/15/12  
(Date)

**ADDENDUM ACKNOWLEDGEMENT FORM**

**SOLICITATION NO.:** 6613C013

**Instructions:** Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

**Acknowledgment:** I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

**Addendum Numbers Received:**

(Check the box next to each addendum received)

- |                                         |                                          |
|-----------------------------------------|------------------------------------------|
| <input type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6  |
| <input type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7  |
| <input type="checkbox"/> Addendum No. 3 | <input type="checkbox"/> Addendum No. 8  |
| <input type="checkbox"/> Addendum No. 4 | <input type="checkbox"/> Addendum No. 9  |
| <input type="checkbox"/> Addendum No. 5 | <input type="checkbox"/> Addendum No. 10 |

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

- None -

VariTech Industries Inc.  
 \_\_\_\_\_  
 Company  
  
 \_\_\_\_\_  
 Authorized Signature  
 11/15/12  
 \_\_\_\_\_  
 Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

REQUEST FOR QUOTATION  
6613C013 Various Sizes Automatic Brine Makers

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**SPECIFICATIONS**

1. **PURPOSE AND SCOPE:** The West Virginia Purchasing Division is soliciting bids on behalf of the West Virginia Division of Highways and any other state agency that desires to utilize this contract to establish an open-end contract for Various Sizes of Automatic Brine Makers. The Contract may be utilized by West Virginia State agencies and all political subdivisions of the State of in all 55 counties.

The intent of this request is to provide for the purchase and installation for any of three various sizes of new and unused automatic brine makers which shall be capable of producing brine, without the intervention of an operator after the initial system start and automatically monitor and control brine concentration during production.

2. **DEFINITIONS:** The terms listed below shall have the meanings assigned to them below. Additional definitions can be found in section 2 of the General Terms and Conditions.

- 2.1 **“Desired Item”** or **“Desired Items”** means the list of items identified in Section 3, subsection 3.3.
- 2.2 **“Pricing Pages”** means the schedule of prices, estimated order quantity, and totals attached hereto as Exhibit A and used to evaluate the RFQ.
- 2.3 **“RFQ”** means the official RFQ published by the Purchasing Division and identified as 6613C013.
- 2.4 **“WVDOH”** used throughout this RFQ means the West Virginia Division of Highways.
- 2.5 **“Contractor”** or **“Vendor”** used throughout this RFQ and in any cited sections of the West Virginia Department of Transportation, Division of Highways Standard Specifications, Roads and Bridges, adopted 2010, as modified by the January 1, 2011 Supplemental Specifications and the January 1, 2012 Supplemental Specifications are interchangeable.

3. **GENERAL REQUIREMENTS:**

- 3.1 **Desired Items and Mandatory Requirements:** Vendor shall provide Agency the Desired Items listed below on an open-end and continuing basis. Desired Items must meet or exceed the mandatory requirements as shown below.

REQUEST FOR QUOTATION  
6613C013 Various Sizes Automatic Brine Makers

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- 3.2 Pre-Service:** The WVDOH may or may not provide a heated room for placement of the automatic brine maker; however, whether the brine maker itself is located in a heated room or not, the control system will be located in a heated room. This will be determined by the WVDOH once the need arises to purchase an automatic brine maker. The location and size of the heated room will be provided to the vendor on the Agency Release.

Whether inside a heated room or not, the vendor shall install the automatic brine maker by hooking up all lines and plumbing, preparing the unit for immediate use. The automatic brine maker shall be completely serviced, all equipment installed and all adjustments made which are required to prepare the unit ready for immediate and continuous use upon delivery.

The WVDOH will provide electrical and water service to the placement area of the automatic brine maker. If a heated room is used, all electrical and plumbing inside the heated room to the automatic brine maker shall be provided by the vendor and included in the vendor's bid cost.

- 3.3 Items:** Listed below are three brine makers being pursued with this RFQ:

- 3.3.1 An Automatic Brine Maker with Remote Truck Fill Capabilities
- 3.3.2 An Automatic Brine Maker with Remote Truck Fill Capabilities including One Additive Blending Capability
- 3.3.3 An Automatic Brine Maker with Remote Truck Fill Capabilities including Two Additive Blending Capability

**4. EQUIPMENT REQUIREMENTS:**

- 4.1 An Automatic Brine Maker with Remote Truck Fill Capabilities** shall make the salt act as a filter bed as the water moves down through to the sump area and filter screen. The automatic brine production system shall be capable of producing 5,000 gallons of brine per hour (based on available water supply of 6,000 gallon/hour and storage tank configuration static discharge of 45 ft./head pressure). The system shall be capable of remotely filling trucks with brine and the truck fill data recorded via RFID card reader system.

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| <b>4.1.1 List of <u>Minimum</u> Requirements for the Salt Hopper:</b>                                                                         |
| The salt hopper shall have a minimum capacity of 5 cubic yards.                                                                               |
| The salt hopper shall hold a minimum .75 cubic yards of sediment without interfering with the brine outlet.                                   |
| The minimum inside dumping width shall be no less than 120 inches.                                                                            |
| The salt hopper shall be constructed of 16,000 pound tensile strength fiberglass and isophthalic resin with all inside surfaces coated with a |

REQUEST FOR QUOTATION  
6613C013 Various Sizes Automatic Brine Makers

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| ceramic resin .050 inches thick.                                                                                                                                                                                                                                                                                                             |
| The vessel shall have structural integral ribs allowing minimal flex with the salt hopper from full to empty.                                                                                                                                                                                                                                |
| The salt hopper shall be capable of being cleaned via flush components of the unit and any disassembly of components for cleaning is not acceptable.                                                                                                                                                                                         |
| Whether full or empty, the salt hopper shall be able to be cleaned by a process of opening the sump outlet cap and water flush valves. If the salt hopper is empty, the inside floor panel should have the capability of being removed for cleaning by attached lifting straps or some other form of easily removing the inside floor panel. |
| There shall be a fresh water flushing system to force sediment to and out of the sump.                                                                                                                                                                                                                                                       |
| All valves, bulkhead fittings, etc. 1 inch and larger shall be manifold type fittings.                                                                                                                                                                                                                                                       |
| There shall be a pressure transducer connected to the PLC to activate brine pump on and off and water flow into the salt tank. These levels shall be adjustable from the HMI Interface and be adjustable to within 1 inch increments.                                                                                                        |
| The transducer shall have an air capillary to the inside of the salt hopper.                                                                                                                                                                                                                                                                 |
| The vessel shall have 2 inch male cam-lock type fittings and on/off ball valves for hose connections (fresh water, brine return, brine outlet to pump).                                                                                                                                                                                      |
| There shall be reinforced forklift pockets for moving the salt tank.                                                                                                                                                                                                                                                                         |
| 304 stainless steel is required for all metallic items as it is the most corrosion resistant of the 300 series of stainless steel. <a href="http://www.ccsi-inc.com/t-stainless.htm">http://www.ccsi-inc.com/t-stainless.htm</a> .                                                                                                           |

**4.1.2 List of Minimum Requirements for the Control System:**

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| Brine pumped from the salt tank shall be monitored for salt concentration by a sensor which shall monitor the brine for temperature and automatically compensate brine concentration accordingly. Any need for an operator to manually test the brine concentration is not acceptable. |
| All brine exiting the salt tank shall pass over the brine concentration sensor that monitors brine between 19.6 and 27.0 percent concentration by weight.                                                                                                                              |
| The system shall come complete with the ability to access the HMI (operator interface) via Internet.                                                                                                                                                                                   |
| The system shall include a 256-color LCD touch screen display, 7 ½ diagonal.                                                                                                                                                                                                           |
| The information on the display screen shall include, but not be limited to:<br>1) actual brine production concentration in the form of percentage                                                                                                                                      |

REQUEST FOR QUOTATION  
6613C013 Various Sizes Automatic Brine Makers

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| of sodium chloride concentration by weight.<br>2) gallons of fresh water used to make brine.                                                                                                                                                                                                                                                                                                                                                      |
| If the brine concentration is above the target, the brine shall be returned to the salt tank until the correct amount of water is automatically added and the brine reaches the desired concentration.                                                                                                                                                                                                                                            |
| Once the brine is at the desired concentration (+or-3% of target concentration), the brine will be diverted to storage tanks.                                                                                                                                                                                                                                                                                                                     |
| In the event that the concentration is below the minimum desired concentration, the system shall automatically divert the brine to the salt tank for a second pass through the salt bed to achieve the desired concentration.                                                                                                                                                                                                                     |
| The system shall be configured to accept a signal from a pressure transducer located in a storage tank to automatically stop brine production when the tank is full or when production batch is complete.                                                                                                                                                                                                                                         |
| The system shall be capable of displaying the storage tank volume.                                                                                                                                                                                                                                                                                                                                                                                |
| The system shall monitor total gallons of water used, salt used and brine produced daily and seasonally for record keeping.                                                                                                                                                                                                                                                                                                                       |
| All electric valves shall include manual overrides for operation of the system in the event of an electrical component failure.                                                                                                                                                                                                                                                                                                                   |
| In the event of a component failure, the system shall automatically shut down and inform the operator of the specific failure along with a corrective measure. This includes how to manually override the problem and provide a part number.                                                                                                                                                                                                      |
| The system shall be designed with a manual valve counterpart to the electric valve to run parallel for a redundant manual control system.                                                                                                                                                                                                                                                                                                         |
| Electric components mounted onto the control panel shall have UL rated conduit protecting connections and wiring outside of the enclosure.                                                                                                                                                                                                                                                                                                        |
| Individual components over 10 amps shall have circuit breakers so if the machine is not working, the operator may quickly assess by checking the breaker and if tripped, flip the breaker and be back in brine production. This will also provide more protection in the water environment. Components less than 10 amps shall be fuse protected from inside of the control panel. Fuses shall illuminate when diagnostic LED detects fuse fault. |
| All wetted parts on the control panel except for the pump shall be manifold type glass filled polypropylene rated for 150 psi.                                                                                                                                                                                                                                                                                                                    |

**4.1.3 List of Minimum Requirements for the Mechanical Components:**

The pump shall be constructed of cast 304 stainless steel with a stainless steel shaft and impeller. 304 stainless steel is required as it is the most corrosion resistant of the 300 series of stainless steel. <http://www.ccsi-inc.com/t-stainless.htm>.

REQUEST FOR QUOTATION  
6613C013 Various Sizes Automatic Brine Makers

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| The electric pump motor shall be thermally protected 3 HP 220 volt single phase.                                                                                                                                                                                                                                                        |
| The pump shall be capable of delivery 5,000 gallons per hour of salt brine to storage tanks with a dynamic head of 45 feet.                                                                                                                                                                                                             |
| All fittings and valves shall be manifold type glass filled polypropylene.                                                                                                                                                                                                                                                              |
| Wetted steel components shall be kept to a minimum; all steel components shall be constructed of 304 grade stainless steel. 304 stainless steel is required as it is the most corrosion resistant of the 300 series of stainless steel. <a href="http://www.ccsi-inc.com/t-stainless.htm">http://www.ccsi-inc.com/t-stainless.htm</a> . |
| All exposed electric components shall be rated at NEMA 12X.                                                                                                                                                                                                                                                                             |
| All fasteners shall be constructed of stainless steel.                                                                                                                                                                                                                                                                                  |

- 4.2 An Automatic Brine Maker with Remote Truck Fill Capabilities including One Additive Blending Capability** shall make the salt act as a filter bed as the water moves down through to the sump area and filter screen. The automatic brine production system shall be capable of producing 5,000 gallons of brine per hour (based on available water supply of 6,000 gallon/hour and storage tank configuration static discharge of 45 ft./head pressure); flushing out all sediment collected in the bottom of the vessel with salt level full in the tank; producing a blended product by injecting one additive with a ratio between 1 and 100%. The system shall be capable of remotely filling trucks with brine, blend or additive liquids and recording truck fill data via RFID card reader system.

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| <b>4.2.1 List of <u>Minimum</u> Requirements for the Salt Hopper:</b>                                                                                                                                                                                                                                                                        |
| The salt hopper shall have a minimum capacity of 5 cubic yards.                                                                                                                                                                                                                                                                              |
| The salt hopper shall hold a minimum .75 cubic yards of sediment without interfering with the brine outlet.                                                                                                                                                                                                                                  |
| The minimum inside dumping width shall be no less than 120 inches.                                                                                                                                                                                                                                                                           |
| The salt hopper shall be constructed of 16,000 pound tensile strength fiberglass and isophthalic resin with all inside surfaces coated with a ceramic resin .050 inches thick.                                                                                                                                                               |
| The vessel shall have structural integral ribs allowing minimal flex with the salt hopper from full to empty.                                                                                                                                                                                                                                |
| The salt hopper shall be capable of being cleaned via flush components of the unit and any disassembly of components for cleaning is not acceptable.                                                                                                                                                                                         |
| Whether full or empty, the salt hopper shall be able to be cleaned by a process of opening the sump outlet cap and water flush valves. If the salt hopper is empty, the inside floor panel should have the capability of being removed for cleaning by attached lifting straps or some other form of easily removing the inside floor panel. |
| There shall be a fresh water flushing system to force sediment to and out of the sump.                                                                                                                                                                                                                                                       |



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| All valves, bulkhead fittings, etc. 1 inch and larger shall be manifold type fittings.                                                                                                                                                |
| There shall be a pressure transducer connected to the PLC to activate brine pump on and off and water flow into the salt tank. These levels shall be adjustable from the HMI Interface and be adjustable to within 1 inch increments. |
| The transducer shall have an air capillary to the inside of the salt hopper.                                                                                                                                                          |
| The vessel shall have 2 inch male cam-lock type fittings and on/off ball valves for hose connections (fresh water, brine return, brine outlet to pump).                                                                               |
| There shall be reinforced forklift pockets for moving the salt tank.                                                                                                                                                                  |
| 304 stainless steel is required for all metallic items as it is the most corrosion resistant of the 300 series of stainless steel. <a href="http://www.ccsi-inc.com/t-stainless.htm">http://www.ccsi-inc.com/t-stainless.htm</a> .    |

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| <b>4.2.2 List of <u>Minimum</u> Requirements for the Control System:</b>                                                                                                                                                                                                               |
| Brine pumped from the salt tank shall be monitored for salt concentration by a sensor which shall monitor the brine for temperature and automatically compensate brine concentration accordingly. Any need for an operator to manually test the brine concentration is not acceptable. |
| All brine exiting the salt tank shall pass over the brine concentration sensor that monitors brine between 19.6 and 27.0 percent concentration by weight.                                                                                                                              |
| The system shall come complete with the ability to access the HMI (operator interface) via Internet.                                                                                                                                                                                   |
| The system shall include a 256-color LCD touch screen display, 7 ½ diagonal.                                                                                                                                                                                                           |
| The information on the display screen shall include, but not be limited to:<br>1) actual brine production concentration in the form of percentage of sodium chloride concentration by weight.<br>2) gallons of fresh water used to make brine.                                         |
| If the brine concentration is above the target, the brine shall be returned to the salt tank until the correct amount of water is automatically added and the brine reaches the desired concentration.                                                                                 |
| Once the brine is at the desired concentration (+or-3% of target concentration), the brine will be diverted to storage tanks.                                                                                                                                                          |
| In the event that the concentration is below the minimum desired concentration, the system shall automatically divert the brine to the salt tank for a second pass through the salt bed to achieve the desired concentration.                                                          |
| The system shall be configured to accept a signal from a pressure transducer located in a storage tank to automatically stop brine production when the tank is full or when production batch is complete.                                                                              |



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| The system shall be capable of displaying the storage tank volume.                                                                                                                                                                                                                                                                                                                                                                                |
| The system shall monitor total gallons of water used, salt used and brine produced daily and seasonally for record keeping.                                                                                                                                                                                                                                                                                                                       |
| All electric valves shall include manual overrides for operation of the system in the event of an electrical component failure.                                                                                                                                                                                                                                                                                                                   |
| In the event of a component failure, the system shall automatically shut down and inform the operator of the specific failure along with a corrective measure. This includes how to manually override the problem and provide a part number.                                                                                                                                                                                                      |
| The system shall be designed with a manual valve counterpart to the electric valve to run parallel for a redundant manual control system.                                                                                                                                                                                                                                                                                                         |
| Electric components mounted onto the control panel shall have UL rated conduit protecting connections and wiring outside of the enclosure.                                                                                                                                                                                                                                                                                                        |
| Individual components over 10 amps shall have circuit breakers so if the machine is not working, the operator may quickly assess by checking the breaker and if tripped, flip the breaker and be back in brine production. This will also provide more protection in the water environment. Components less than 10 amps shall be fuse protected from inside of the control panel. Fuses shall illuminate when diagnostic LED detects fuse fault. |
| All wetted parts on the control panel except for the pump shall be manifold type glass filled polypropylene rated for 150 psi.                                                                                                                                                                                                                                                                                                                    |

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| <b>4.2.3 List of <u>Minimum</u> Requirements for the Mechanical Components:</b>                                                                                                                                                                                                                                                         |
| The pump shall be constructed of cast 304 stainless steel with a stainless steel shaft and impeller. 304 stainless steel is required as it is the most corrosion resistant of the 300 series of stainless steel. <a href="http://www.ccsi-inc.com/t-stainless.htm">http://www.ccsi-inc.com/t-stainless.htm</a> .                        |
| The electric pump motor shall be thermally protected 3 HP 220 volt single phase.                                                                                                                                                                                                                                                        |
| The pump shall be capable of delivery 5,000 gallons per hour of salt brine to storage tanks with a dynamic head of 45 feet.                                                                                                                                                                                                             |
| All fittings and valves shall be manifold type glass filled polypropylene.                                                                                                                                                                                                                                                              |
| Wetted steel components shall be kept to a minimum; all steel components shall be constructed of 304 grade stainless steel. 304 stainless steel is required as it is the most corrosion resistant of the 300 series of stainless steel. <a href="http://www.ccsi-inc.com/t-stainless.htm">http://www.ccsi-inc.com/t-stainless.htm</a> . |
| All exposed electric components shall be rated at NEMA 12X.                                                                                                                                                                                                                                                                             |
| All fasteners shall be constructed of stainless steel.                                                                                                                                                                                                                                                                                  |

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| <b>4.2.4 List of <u>Minimum</u> Requirements for the Single Additive Injection System:</b> |
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| The control system shall be capable of automatically injecting a pre-determined ratio of brine and a single additive into the finished product tank (0 to 100%).                                                          |
| There shall be an additive storage tank volume sensor to determine if enough additive is available to produce desired volume ratio batch.                                                                                 |
| There shall be a blended product storage tank volume sensor to determine if enough volume is available to produce desired batch/ratio of blended product.                                                                 |
| Tank volume sensors shall be solid state.                                                                                                                                                                                 |
| There shall be actuated valves to divert brine or additive into the processing pump, with manual override valves mounted onto an expandable modular panel.                                                                |
| Processing shall be graphically displayed on to HMI (operator display).                                                                                                                                                   |
| Process shall be fully automated with self-diagnostics.                                                                                                                                                                   |
| The sub-panel shall come equipped with one additional modular plumbing module for recirculation of additive storage tank.                                                                                                 |
| Modules shall include electric ball valve, manual override valve and electric circuitry.                                                                                                                                  |
| Modules shall be mounted onto the stainless steel modular panel.                                                                                                                                                          |
| Electric valves shall be controlled via the automation process where the operator may select a desired "on" and "off" time for desired recirculation intervals.                                                           |
| The control system shall be capable of automatically injecting a predetermined ratio of a micro ingredient into the finished product tank or truck fill, if equipped.                                                     |
| The system shall include a diaphragm pump and automation controls to inject a predetermined ratio of micro ingredient between a ratio of 1:1,000 and 1:10,000 units. Set up shall be configured via the operator display. |

- 4.3 An Automatic Brine Maker with Remote Truck Fill Capabilities including Two Additive Blending Capability** shall make the salt act as a filter bed as the water moves down through to the sump area and filter screen. The automatic brine production system shall be capable of producing 5,000 gallons of brine per hour (based on available water supply of 6,000 gallon/hour and storage tank configuration static discharge of 45 ft./head pressure); flushing out all sediment collected in the bottom of the vessel with salt level full in the tank; producing a blended product by injecting two additives with a ratio between 1 and 100%. The system shall be capable of remotely filling trucks with brine, blend or additive liquids and recording truck fill data via RFID card reader system.

**4.3.1 List of Minimum Requirements for the Salt Hopper:**

The salt hopper shall have a minimum capacity of 5 cubic yards.

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| The salt hopper shall hold a minimum .75 cubic yards of sediment without interfering with the brine outlet.                                                                                                                                                                                                                                  |
| The minimum inside dumping width shall be no less than 120 inches.                                                                                                                                                                                                                                                                           |
| The salt hopper shall be constructed of 16,000 pound tensile strength fiberglass and isophthalic resin with all inside surfaces coated with a ceramic resin .050 inches thick.                                                                                                                                                               |
| The vessel shall have structural integral ribs allowing minimal flex with the salt hopper from full to empty.                                                                                                                                                                                                                                |
| The salt hopper shall be capable of being cleaned via flush components of the unit and any disassembly of components for cleaning is not acceptable.                                                                                                                                                                                         |
| Whether full or empty, the salt hopper shall be able to be cleaned by a process of opening the sump outlet cap and water flush valves. If the salt hopper is empty, the inside floor panel should have the capability of being removed for cleaning by attached lifting straps or some other form of easily removing the inside floor panel. |
| There shall be a fresh water flushing system to force sediment to and out of the sump.                                                                                                                                                                                                                                                       |
| All valves, bulkhead fittings, etc. 1 inch and larger shall be manifold type fittings.                                                                                                                                                                                                                                                       |
| There shall be a pressure transducer connected to the PLC to activate brine pump on and off and water flow into the salt tank. These levels shall be adjustable from the HMI Interface and be adjustable to within 1 inch increments.                                                                                                        |
| The transducer shall have an air capillary to the inside of the salt hopper.                                                                                                                                                                                                                                                                 |
| The vessel shall have 2 inch male cam-lock type fittings and on/off ball valves for hose connections (fresh water, brine return, brine outlet to pump).                                                                                                                                                                                      |
| There shall be reinforced forklift pockets for moving the salt tank.                                                                                                                                                                                                                                                                         |
| 304 stainless steel is required for all metallic items as it is the most corrosion resistant of the 300 series of stainless steel. <a href="http://www.ccsi-inc.com/t-stainless.htm">http://www.ccsi-inc.com/t-stainless.htm</a> .                                                                                                           |

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| <b>4.3.2 List of <u>Minimum</u> Requirements for the Control System:</b>                                                                                                                                                                                                               |
| Brine pumped from the salt tank shall be monitored for salt concentration by a sensor which shall monitor the brine for temperature and automatically compensate brine concentration accordingly. Any need for an operator to manually test the brine concentration is not acceptable. |
| All brine exiting the salt tank shall pass over the brine concentration sensor that monitors brine between 19.6 and 27.0 percent concentration by weight.                                                                                                                              |
| The system shall come complete with the ability to access the HMI (operator interface) via Internet.                                                                                                                                                                                   |

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| The system shall include a 256-color LCD touch screen display, 7 ½ diagonal.                                                                                                                                                                                                                                                                                                                                                                      |
| The information on the display screen shall include, but not be limited to:<br>1) actual brine production concentration in the form of percentage of sodium chloride concentration by weight.<br>2) gallons of fresh water used to make brine.                                                                                                                                                                                                    |
| If the brine concentration is above the target, the brine shall be returned to the salt tank until the correct amount of water is automatically added and the brine reaches the desired concentration.                                                                                                                                                                                                                                            |
| Once the brine is at the desired concentration (+or-3% of target concentration), the brine will be diverted to storage tanks.                                                                                                                                                                                                                                                                                                                     |
| In the event that the concentration is below the minimum desired concentration, the system shall automatically divert the brine to the salt tank for a second pass through the salt bed to achieve the desired concentration.                                                                                                                                                                                                                     |
| The system shall be configured to accept a signal from a pressure transducer located in a storage tank to automatically stop brine production when the tank is full or when production batch is complete.                                                                                                                                                                                                                                         |
| The system shall be capable of displaying the storage tank volume.                                                                                                                                                                                                                                                                                                                                                                                |
| The system shall monitor total gallons of water used, salt used and brine produced daily and seasonally for record keeping.                                                                                                                                                                                                                                                                                                                       |
| All electric valves shall include manual overrides for operation of the system in the event of an electrical component failure.                                                                                                                                                                                                                                                                                                                   |
| In the event of a component failure, the system shall automatically shut down and inform the operator of the specific failure along with a corrective measure. This includes how to manually override the problem and provide a part number.                                                                                                                                                                                                      |
| The system shall be designed with a manual valve counterpart to the electric valve to run parallel for a redundant manual control system.                                                                                                                                                                                                                                                                                                         |
| Electric components mounted onto the control panel shall have UL rated conduit protecting connections and wiring outside of the enclosure.                                                                                                                                                                                                                                                                                                        |
| Individual components over 10 amps shall have circuit breakers so if the machine is not working, the operator may quickly assess by checking the breaker and if tripped, flip the breaker and be back in brine production. This will also provide more protection in the water environment. Components less than 10 amps shall be fuse protected from inside of the control panel. Fuses shall illuminate when diagnostic LED detects fuse fault. |
| All wetted parts on the control panel except for the pump shall be manifold type glass filled polypropylene rated for 150 psi.                                                                                                                                                                                                                                                                                                                    |

**4.3.3 List of Minimum Requirements for the Mechanical Components:**

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| The pump shall be constructed of cast 304 stainless steel with a stainless steel shaft and impeller. 304 stainless steel is required as it is the most corrosion resistant of the 300 series of stainless steel. <a href="http://www.ccsi-inc.com/t-stainless.htm">http://www.ccsi-inc.com/t-stainless.htm</a> .                        |
| The electric pump motor shall be thermally protected 3 HP 220 volt single phase.                                                                                                                                                                                                                                                        |
| The pump shall be capable of delivery 5,000 gallons per hour of salt brine to storage tanks with a dynamic head of 45 feet.                                                                                                                                                                                                             |
| All fittings and valves shall be manifold type glass filled polypropylene.                                                                                                                                                                                                                                                              |
| Wetted steel components shall be kept to a minimum; all steel components shall be constructed of 304 grade stainless steel. 304 stainless steel is required as it is the most corrosion resistant of the 300 series of stainless steel. <a href="http://www.ccsi-inc.com/t-stainless.htm">http://www.ccsi-inc.com/t-stainless.htm</a> . |
| All exposed electric components shall be rated at NEMA 12X.                                                                                                                                                                                                                                                                             |
| All fasteners shall be constructed of stainless steel.                                                                                                                                                                                                                                                                                  |

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| <b>4.3.4 List of <u>Minimum</u> Requirements for the Two Additives Injection System:</b>                                                                        |
| The control system shall be capable of automatically injecting a pre-determined ratio of brine and two additives into the finished product tank (0 to 100%).    |
| There shall be two additive storage tank volume sensors to determine if enough volume of each additive is available to produce desired volume ratio batch.      |
| There shall be a blended product storage tank volume sensor to determine if enough volume is available to produce desired batch/ratio of blended product.       |
| Tank volume sensors shall be solid state.                                                                                                                       |
| There shall be actuated valves to divert brine or additives into the processing pump, with manual override valves mounted onto an expandable modular panel.     |
| Processing shall be graphically displayed on to HMI (operator display).                                                                                         |
| Process shall be fully automated with self-diagnostics.                                                                                                         |
| The sub-panel shall come equipped with two additional modular plumbing modules for recirculation of two additive storage tanks.                                 |
| Modules shall include electric ball valve, manual override valve and electric circuitry.                                                                        |
| Modules shall be mounted onto the stainless steel modular panel.                                                                                                |
| Electric valves shall be controlled via the automation process where the operator may select a desired "on" and "off" time for desired recirculation intervals. |
| The control system shall be capable of automatically injecting a                                                                                                |



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| predetermined ratio of a micro ingredient into the finished product tank or truck fill, if equipped. |
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| The system shall include a diaphragm pump and automation controls to inject a predetermined ratio of micro ingredient between a ratio of 1:1,000 and 1:10,000 units. Set up shall be configured via the operator display. |
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**5. BID INSTRUCTIONS AND AWARD:**

- 5.1 Bid Instructions:** Vendors may bid any or all items on Exhibit A, Pricing Schedule. Bidding price shall be one price per District, FOB job site per county.

The Pricing Schedule contains a list of three automatic brine makers as described in Sections 3.3 and Section 4. The actual number of units to be ordered during the term of this contract, per District or Statewide is unknown at this time. Vendors are strongly cautioned that there may or may not be a need for any of the three automatic brine makers on the RFQ during the term of this contract.

Notwithstanding the foregoing, the Purchasing Division may correct errors at its discretion. Vendor should type or electronically enter the information into the Pricing Pages to prevent errors in the evaluation. The Pricing Pages were created as a Microsoft Excel document and Vendor can request an electronic copy for bid purposes by sending an email request to the following address:  
[alan.w.cummings@wv.gov](mailto:alan.w.cummings@wv.gov).

- 5.2 Award:** The contract is intended to provide Agencies with a purchase price on all Desired Items. The contract shall be awarded to the vendor that provides the Desired Items meeting the required specifications for the lowest cost per item per District as shown on the Pricing Pages.

An Agency Release will be issued to the awarded vendor at the time of need. The Agency Release will advise the awarded vendor of the job site.

**6. ORDERING AND PAYMENT:**

- 6.1 Ordering:** Vendor shall accept orders by regular mail, facsimile, e-mail, or any other written forms of communication. Vendor may, but is not required to, accept on-line orders through a secure internet ordering portal/website. If Vendor has the ability to accept on-line orders, it should include in its response a brief description of how Agencies may utilize the on-line ordering system. Any on-line ordering system must have the capability to restrict prices and available items to conform to the Catalog originally submitted with this RFQ. Vendor shall ensure

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that its on-line ordering system is properly secured prior to processing Agency orders on-line.

- 6.2 Payment:** Vendor shall accept payment in accordance with the payment procedures of the State of West Virginia. Methods of acceptable payment must include the West Virginia Purchasing Card. Payment in advance is not permitted under this Contract.

**7. DELIVERY AND RETURN:**

- 7.1 Delivery Time:** Vendor shall deliver the automatic brine maker to the specific WVDOH District site within sixty (60) calendar days of the date of the Agency Release or an alternative delivery date that has been established between the WVDOH and the vendor. This date shall be noted on the Agency Release. Vendor shall deliver emergency orders within an established acceptable time frame after the Agency Release has been issued. Vendor shall ship all orders in accordance with the agreed schedule and shall not hold orders until a minimum delivery quantity is met. If the vendor is unable to furnish material in accordance with the agreed delivery schedule, the WVDOH District Engineer/Manager shall be advised in writing within five (5) working days of the reason for failure to conform to the delivery requirements.

The WVDOH shall provide a loader with forks, or forklift and operator to unload the brine maker at the time of delivery.

- 7.2 Late Delivery:** The Agency placing the order under this Contract must be notified in writing within five (5) days if orders will be delayed for any reason. Any delay in delivery that could cause harm to an Agency will be grounds for cancellation of the delayed order, and/or obtaining the items ordered from a third party.

Any Agency seeking to obtain items from a third party under this provision must first obtain approval of the Purchasing Division.

- 7.3 Delivery Payment/Risk of Loss:** Standard order delivery shall be F.O.B. destination to the Agency's location. Vendor shall include the cost of standard order delivery charges in its bid pricing/discount and is not permitted to charge the Agency separately for such delivery. The Agency will pay delivery charges on all emergency orders provided that Vendor invoices those delivery costs as a separate charge with the original freight bill attached to the invoice.
- 7.4 Return of Unacceptable Items:** If the Agency deems the Desired Items to be unacceptable, the Desired Items shall be returned to Vendor at Vendor's expense

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and with no restocking charge. Vendor shall either make arrangements for the return within five (5) days of being notified that items are unacceptable, or permit the Agency to arrange for the return and reimburse Agency for delivery expenses. If the original packaging cannot be utilized for the return, Vendor will supply the Agency with appropriate return packaging upon request. All returns of unacceptable items shall be F.O.B. the Agency's location. The returned product shall either be replaced, or the Agency shall receive a full credit or refund for the purchase price, at the Agency's discretion.

- 7.5 Return Due to Agency Error:** Items ordered in error by the Agency will be returned for credit within thirty (30) days of receipt, F.O.B. Vendor's location. Vendor shall not charge a restocking fee if returned products are in a resalable condition. Items shall be deemed to be in a resalable condition if they are unused and in the original packaging. Any restocking fee for items not in a resalable condition shall be the lower of the Vendor's customary restocking fee or 5% of the total invoiced value of the returned items.
- 8. WARRANTY:** The awarded vendor(s) shall provide to the WVDOH a copy of the manufacturer's standard warranty and service policy upon delivery of the automatic brine maker. A standard warranty of less than one (1) year is not acceptable.
- 9. SERVICE MANUALS, PARTS LISTS AND TRAINING:** Two (2) copies of the parts list, service and maintenance manuals and operator's manual shall be furnished with the automatic brine maker at the time of delivery. The vendor is required to provide on-site training on operation and maintenance of each automatic brine maker purchased.
- 10. MISCELLANIOUS:**
- 10.1 No Substitutions:** Vendor shall supply only Desired Items submitted in response to the RFQ. Vendor shall not supply substitute items without Purchasing Division approval.
- 10.2 Vendor Supply:** Vendor must carry sufficient inventory of the Desired Items being offered to fulfill its obligations under this Contract. By signing its bid, Vendor certifies that it can supply the Desired Items contained in its bid response.



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- 10.3 Reports:** Vendor shall provide quarterly reports and annual summaries to the Agency showing the Agency's items purchased, quantities of items purchased, and total dollar value of the items purchased. Vendor shall also provide reports, upon request, showing the items purchased during the term of this Contract, the quantity purchased for each of those items, and the total value of purchases for each of those items. Failure to supply such reports may be grounds for cancellation of this Contract.
- 10.4 Contract Manager:** During its performance of this Contract, Vendor must designate and maintain a primary contract manager responsible for overseeing Vendor's responsibilities under this Contract. The Contract manager must be available during normal business hours to address any customer service or other issues related to this Contract.

Exhibit A Automatic Brine Maker  
Pricing Schedule

#6613C013

Per section 5.1

The actual number or estimated number of units to be ordered is unknown.  
As the need arises, an Agency Release will be sent to the awarded vendor.  
Vendor shall bid one price per item, per District.  
Vendor submitting the lowest cost per item, per District will be awarded  
a contract for that item.

Item

- 3.3.1 An Automatic Brine Maker with Remote Truck Fill Capabilities  
3.3.2 An Automatic Brine Maker with Remote Truck Fill Capabilities  
including One Additive Blending Capability  
3.3.3 An Automatic Brine Maker with Remote Truck Fill Capabilities  
including Two Additive Blending Capability

|             |                                                                                                                      | Item 3.3.1<br>Unit Cost* | Item 3.3.2<br>Unit Cost | Item 3.3.3<br>Unit Cost |
|-------------|----------------------------------------------------------------------------------------------------------------------|--------------------------|-------------------------|-------------------------|
| District 1  | Boone County, Clay County, Kanawha County,<br>Mason County and Putnam County                                         | 44,900.00                | →                       | 64,150.00               |
| District 2  | Cabell County, Lincoln County, Logan County,<br>Mingo County and Wayne County                                        | 44,900.00                | →                       | 64,150.00               |
| District 3  | Calhoun County, Jackson County, Pleasants County, Ritchie<br>County, Roane County, Wirt County and Wood County       | 44,900.00                | →                       | 64,150.00               |
| District 4  | Doddridge County, Harrison County, Marion County,<br>Monongalia County, Preston County and Taylor County             | 45,000.00                | →                       | 64,250.00               |
| District 5  | Berkeley County, Grant County, Hampshire County, Hardy<br>County, Jefferson County, Mineral County and Morgan County | 45,100.00                | →                       | 64,350.00               |
| District 6  | Brooke County, Hancock County, Marshall County,<br>Ohio County, Tyler County and Wetzel County                       | 44,900.00                | →                       | 64,150.00               |
| District 7  | Barbour County, Braxton County, Gilmer County,<br>Lewis County, Upshur County and Webster County                     | 44,900.00                | →                       | 64,150.00               |
| District 8  | Pendleton County, Pocahontas County, Randolph<br>County and Tucker County                                            | 45,000.00                | →                       | 64,250.00               |
| District 9  | Fayette County, Greenbrier County, Monroe County,<br>Nicholas County and Summers County                              | 45,000.00                | →                       | 64,250.00               |
| District 10 | McDowell County, Mercer County, Raleigh County<br>and Wyoming County                                                 | 44,900.00                | →                       | 64,150.00               |

\*\*\*\*\* On a separate sheet of paper, Vendors should describe, in detail, the style/model of the automatic brine maker(s) being bid. If available, please provide a brochure or some form of equipment documentation. This is for informational purposes only.

\* Heated Shelter available for an additional  
\$19,280 per unit.

-Please see literature for proposed system.-

# State of West Virginia VENDOR PREFERENCE CERTIFICATE

Certification and application\* is hereby made for Preference in accordance with *West Virginia Code*, §5A-3-37. (Does not apply to construction contracts). *West Virginia Code*, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the *West Virginia Code*. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Resident Vendor Preference, if applicable.

**1. Application is made for 2.5% resident vendor preference for the reason checked:**

- Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preceding the date of this certification; or,
- Bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or 80% of the ownership interest of Bidder is held by another individual, partnership, association or corporation resident vendor who has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or,
- Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; or,

**2. Application is made for 2.5% resident vendor preference for the reason checked:**

- Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; or,

**3. Application is made for 2.5% resident vendor preference for the reason checked:**

- Bidder is a nonresident vendor employing a minimum of one hundred state residents or is a nonresident vendor with an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia employing a minimum of one hundred state residents who certifies that, during the life of the contract, on average at least 75% of the employees or Bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; or,

**4. Application is made for 5% resident vendor preference for the reason checked:**

- Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; or,

**5. Application is made for 3.5% resident vendor preference who is a veteran for the reason checked:**

- Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; or,

**6. Application is made for 3.5% resident vendor preference who is a veteran for the reason checked:**

- Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.

**7. Application is made for preference as a non-resident small, women- and minority-owned business, in accordance with *West Virginia Code* §5A-3-59 and *West Virginia Code of State Rules*.**

- Bidder has been or expects to be approved prior to contract award by the Purchasing Division as a certified small, women- and minority-owned business.

Bidder understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the requirements for such preference, the Secretary may order the Director of Purchasing to: (a) reject the bid; or (b) assess a penalty against such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency or deducted from any unpaid balance on the contract or purchase order.

By submission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and authorizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid the required business taxes, provided that such information does not contain the amounts of taxes paid nor any other information deemed by the Tax Commissioner to be confidential.

Under penalty of law for false swearing (*West Virginia Code*, §61-5-3), Bidder hereby certifies that this certificate is true and accurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate changes during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.

Bidder: VariTech Industries

Signed: \_\_\_\_\_

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

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



# VARITECH INDUSTRIES, INC.

## FAX TRANSMISSION SHEET

|                            |                                     |
|----------------------------|-------------------------------------|
| TO:                        | FROM:                               |
| Alan Cummings              | Bjom Kleven                         |
| FAX NUMBER:                | DATE:                               |
| 304-558-3970               | 12/10/12                            |
| COMPANY:                   | TOTAL NO. OF PAGES INCLUDING COVER: |
| WV Dept. of Administration | 5                                   |
| PHONE NUMBER:              | FAX:                                |
| 1-888-208-0686             | (320)-763-5612                      |

- URGENT   
 FOR REVIEW   
 PLEASE COMMENT   
 PLEASE REPLY   
 PLEASE RECYCLE

NOTES/COMMENTS: IF THERE IS A PROBLEM WITH THIS FAX, PLEASE CALL (320) 763-5074 OR THE TOLL FREE NUMBER LISTED ABOVE.

Solicitation # 6613C013 - Addendum # 01

12/10/12 03:14:02 PM  
West Virginia Purchasing Division

From: VariTech Ind/TMAX

320 763 5612

12/10/2012 14:10

#390 P.002/005

WV PURCHASING AGENCY SECTION FAX 304-558-4115

Nov 19 2012 02:34pm P001/004



State of West Virginia  
Department of Administration  
Purchasing Division  
2019 Washington Street East  
Post Office Box 50130  
Charleston, WV 25305-0130

|                                         |   |
|-----------------------------------------|---|
| 6613C013                                | 1 |
| ADDRESS CORRESPONDENCE TO ATTENTION OF: |   |
| ALAN CUMMINGS<br>304-558-2402           |   |

\*310143042 888-208-0686  
 VARITECH INDUSTRIES INC  
 4115 MINNESOTA ST  
 ALEXANDRIA MN 56308

DIVISION OF HIGHWAYS  
 VARIOUS LOCALES AS INDICATED  
 BY ORDER

DATE PRINTED  
 11/19/2012

| LINE                                                                                                                                                                          | QUANTITY | UOP | DAT NO | ITEM NUMBER | UNIT PRICE | AMOUNT |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----|--------|-------------|------------|--------|
| 0001                                                                                                                                                                          | 1        | EA  |        | 060-12      |            |        |
| ADDENDUM NO. 01<br>ISSUED TO CHANGE BID OPENING DATE AND TIME PER THE<br>ATTACHED DOCUMENTATION.<br>BRINE MAKER SYSTEMS<br>***** THIS IS THE END OF RFQ 6613C013 ***** TOTAL: |          |     |        |             |            |        |

SIGNATURE: *[Signature]* TELEPHONE: 888-208-0686 DATE: 12/03/12  
 TITLE: Central Sales FEIN: 41-1557096  
 ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO SOLICITATION, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

**SOLICITATION NUMBER: 6613C013**  
**Addendum Number: 1**

---

The purpose of this addendum is to modify the solicitation identified as ("Solicitation") to reflect the change(s) identified and described below.

**Applicable Addendum Category:**

- Modify bid opening date and time
- Modify specifications of product or service being sought
- Attachment of vendor questions and responses
- Attachment of pre-bid sign-in sheet
- Correction of error
- Other

**Description of Modification to Solicitation:**

Issued to change bid opening date and time:

From - 11/21/2012 - at 1:30 P.M.

To - 12/05/2012 - at 1:30 P.M.

**Additional Documentation:** Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

**Terms and Conditions:**

1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.
2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.



From:VariTech Ind/TMAX

320 763 5612

12/10/2012 14:10

#390 P.004/005

WV PURCHASING ACA SECT Fax 304-558-4115

Nov 19 2012 02:35pm P003/004

3

## ATTACHMENT A

Revised 6/8/2012

**ADDENDUM ACKNOWLEDGEMENT FORM**  
**SOLICITATION NO.: 6613C013**

**Instructions:** Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

**Acknowledgment:** I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

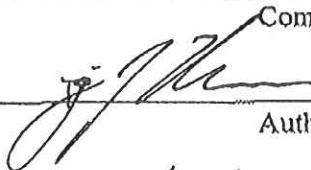
**Addendum Numbers Received:**

(Check the box next to each addendum received)

- |                                                    |                                          |
|----------------------------------------------------|------------------------------------------|
| <input checked="" type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6  |
| <input type="checkbox"/> Addendum No. 2            | <input type="checkbox"/> Addendum No. 7  |
| <input type="checkbox"/> Addendum No. 3            | <input type="checkbox"/> Addendum No. 8  |
| <input type="checkbox"/> Addendum No. 4            | <input type="checkbox"/> Addendum No. 9  |
| <input type="checkbox"/> Addendum No. 5            | <input type="checkbox"/> Addendum No. 10 |

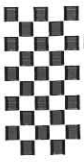
I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

VariTech Industries Inc.  
Company

  
Authorized Signature

12/03/12  
Date

**NOTE:** This addendum acknowledgement should be submitted with the bid to expedite document processing.  
Revised 6/8/2012



# VARITECH INDUSTRIES, INC.

FAXED

DEC 10 2012

## FAX TRANSMISSION SHEET

|               |                            |                                     |                |
|---------------|----------------------------|-------------------------------------|----------------|
| TO:           | Alan Cummings              | FROM:                               | Bjom Kleven    |
| FAX NUMBER:   | 304-558-3970               | DATE:                               | 12/10/12       |
| COMPANY:      | WV Dept. of Administration | TOTAL NO. OF PAGES INCLUDING COVER: | 7              |
| PHONE NUMBER: | 1-888-208-0686             | FAX:                                | (320)-763-5612 |

- URGENT   
 FOR REVIEW   
 PLEASE COMMENT   
 PLEASE REPLY   
 PLEASE RECYCLE

NOTES/COMMENTS: IF THERE IS A PROBLEM WITH THIS FAX, PLEASE CALL (320) 763-5074 OR THE TOLL FREE NUMBER LISTED ABOVE.

Solicitation # 6613.C013 - Addendum # 02

12/10/12 03:15:29 PM

West Virginia Purchasing Division



State of West Virginia  
Department of Administration  
Purchasing Division  
2019 Washington Street East  
Post Office Box 50130  
Charleston, WV 25305-0130

Solicitation

NUMBER  
6613C013

PAGE  
1

ADDRESS CORRESPONDENCE TO ATTENTION OF  
ALAN CUMMINGS  
304-558-2402

V  
E  
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D  
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\*310143042 888-208-0686  
VARITECH INDUSTRIES INC  
4115 MINNESOTA ST  
ALEXANDRIA MN 56308

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DIVISION OF HIGHWAYS  
VARIOUS LOCALES AS INDICATED  
BY ORDER

DATE PRINTED  
11/29/2012

BID OPENING DATE: 12/12/2012 BID OPENING TIME 1:30PM

| LINE                                               | QUANTITY | UOP | CAT. NO. | ITEM NUMBER                                                                                             | UNIT PRICE | AMOUNT |
|----------------------------------------------------|----------|-----|----------|---------------------------------------------------------------------------------------------------------|------------|--------|
|                                                    |          |     |          | ADDENDUM NO. 02                                                                                         |            |        |
|                                                    |          |     |          | ISSUED TO ANSWER QUESTIONS POSED BY VENDORS AND TO<br>MODIFY BID OPENING DATE TO 12/12/2012 AT 1:30 PM. |            |        |
| 0001                                               | 1        | EA  |          | 160-12                                                                                                  |            |        |
|                                                    |          |     |          | BRINE MAKER SYSTEMS                                                                                     |            |        |
| ***** THIS IS THE END OF RFQ 6613C013 ***** TOTAL: |          |     |          |                                                                                                         |            |        |

SIGNATURE *[Signature]* TELEPHONE 888-208-0686 DATE 12/10/12  
 TITLE Central Sales FEIN 41-1557096 ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO SOLICITATION, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

**SOLICITATION NUMBER: 6613C013**  
**Addendum Number: 2**

---

The purpose of this addendum is to modify the solicitation identified as ("Solicitation") to reflect the change(s) identified and described below.

**Applicable Addendum Category:**

- Modify bid opening date and time
- Modify specifications of product or service being sought
- Attachment of vendor questions and responses
- Attachment of pre-bid sign-in sheet
- Correction of error
- Other

**Description of Modification to Solicitation:**

To answer questions posed from vendors  
To modify the bid opening date to 12/12/2012

**Additional Documentation:** Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

**Terms and Conditions:**

1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.
2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

## ATTACHMENT A



To answer questions posed by vendor.

RFQ#6613C013  
Addendum #2

Question #1: Would the State of West Virginia please clarify the pricing terms as related to the possible contract extensions of two successive one year periods? Will a price increase be allowed and under what conditions; i.e. grace period to request price increase, reasonable evidence required?

Response #1: The pricing terms for the possible two successive one year periods would be to renew at the current terms, conditions, prices and specifications contained in the original contract and all authorized change orders. If the awarded vendor would need to request a price increase at the time of either renewal, a justification on materials price increase would need to very specific on pass-through increases only, before an increase would be acceptable to the State of West Virginia.

Question #2: Section 4.1 The system shall be capable of remotely filling trucks with brine and truck data be recorded via RFID card reader system. Question: Is an alpha numeric keypad system to input individual user passwords, to track truck flow rates, employee ID numbers, volumes and blend ratios an acceptable alternative?

Response #2: This type of alternative system would deviate from the original RFQ specifications and would not be considered acceptable.

Question #3: Section 4.1.2 The brine concentration sensor that monitors brine between 19.6 and 27.0% concentration by weight. Question: Is a sensor that measures brine concentration between 0.0 and 26.4% via the liquids density an acceptable alternative? Concentration via density is highly accurate and does not require operator recalibration to account for changing liquid temperatures.

Response #3: Yes, this is acceptable.

Question #4: Section 4.1.2 The system shall come complete with the ability to access the HMI (operator interface) via the internet. Question: Does the HMI accessibility via internet need to run through the locations network?

Response #4: The posed question is unclear. The system shall have the ability for the operator to view the brine maker's functions, remotely, via internet connection.

Question #5: Section 4.1.2 All electric valves shall include manual overrides for operation of the system in the event of an electrical component failure. Question: Are pneumatic operated industrial diaphragm valves with manual override an acceptable alternative? Pneumatic diaphragm valves are superior in performance and have a longer life than electric motorized valves.

To answer questions posed by vendor.  
(CONTINUED)

RFQ#6613C013  
Addendum #2

Response #5: Yes, this is acceptable.

Question #6: Section 4.1.2 The system shall be designed with a manual valve counterpart to the electric valve to run parallel for a redundant manual control system. Question: Are pneumatic operated, industrial diaphragm valves with manual override an acceptable alternative? Pneumatic diaphragm valves are superior in performance and have a longer life than electric motorized valves.

Response #6: Yes, this is acceptable.

Question #7: Section 4.1.3 All wetted parts on the control panel accept for the pump shall be manifold type glass filled polypropylene rated fro 150 psi. Question: Schedule 80 PVC pipe and fittings are rated for 270 psi, is PVC pipe and fittings acceptable alternatives?

Response #7: Yes, this is acceptable.

Question #8: Section 4.1.3 The electric pump motor shall be a thermally protected 3 HP 220 volt single phase. Question: Variable speed motor drives supplied with machine would convert single phase to three phase and use energy efficient, vector duty, three phase motors. Is this an acceptable alternative?

Response #8: Yes, this is acceptable.

Question #9: Section 4.2.4 The control system shall be capable of injecting a predetermined ratio of brine and a single additive into a finished product tank. (0-100%). Question: Is it desired to blend the brine and single additive directly into the truck, in addition to the storage tank?

Response #9: WVDOH will be using calcium chloride as our main additive. If the solution is premixed in a large storage container and allowed to sit, the calcium chloride solid will settle back out of the solution. It is most important to be able to mix the additives as the trucks are being loaded.

**ADDENDUM ACKNOWLEDGEMENT FORM**  
**SOLICITATION NO.: 6613C013**

**Instructions:** Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

**Acknowledgment:** I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

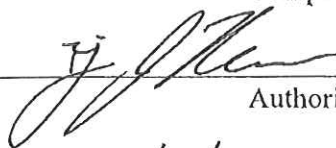
**Addendum Numbers Received:**

(Check the box next to each addendum received)

- |                                                    |                                          |
|----------------------------------------------------|------------------------------------------|
| <input checked="" type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6  |
| <input checked="" type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7  |
| <input type="checkbox"/> Addendum No. 3            | <input type="checkbox"/> Addendum No. 8  |
| <input type="checkbox"/> Addendum No. 4            | <input type="checkbox"/> Addendum No. 9  |
| <input type="checkbox"/> Addendum No. 5            | <input type="checkbox"/> Addendum No. 10 |

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

VariTech Industries Inc.  
Company

  
Authorized Signature

12/10/12  
Date

NOTE: This addendum acknowledgment should be submitted with the bid to expedite document processing.  
Revised 6/8/2012

STATE OF WEST VIRGINIA  
Purchasing Division

**PURCHASING AFFIDAVIT**

West Virginia Code §5A-3-10a states: No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owed is an amount greater than one thousand dollars in the aggregate.

**DEFINITIONS:**

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Debtor" means any individual, corporation, partnership, association, limited liability company or any other form or business association owing a debt to the state or any of its political subdivisions. "Political subdivision" means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more counties or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities. "Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

**EXCEPTION:** The prohibition of this section does not apply where a vendor has contested any tax administered pursuant to chapter eleven of this code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

Under penalty of law for false swearing (*West Virginia Code §61-5-3*), it is hereby certified that the vendor affirms and acknowledges the information in this affidavit and is in compliance with the requirements as stated.

**WITNESS THE FOLLOWING SIGNATURE**

Vendor's Name: VariTech Industries Inc.

Authorized Signature: [Signature] Date: 11/15/12

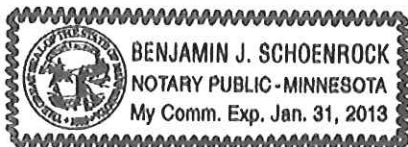
State of Minnesota

County of Douglas, to-wit:

Taken, subscribed, and sworn to before me this 15<sup>TH</sup> day of NOVEMBER, 2012.

My Commission expires JANUARY 31, 2013.

AFFIX SEAL HERE



NOTARY PUBLIC

[Signature]



## Production Systems

Brine Boss

For use with the SB600 or HSCB1400-SS Salt Brine Production Systems.

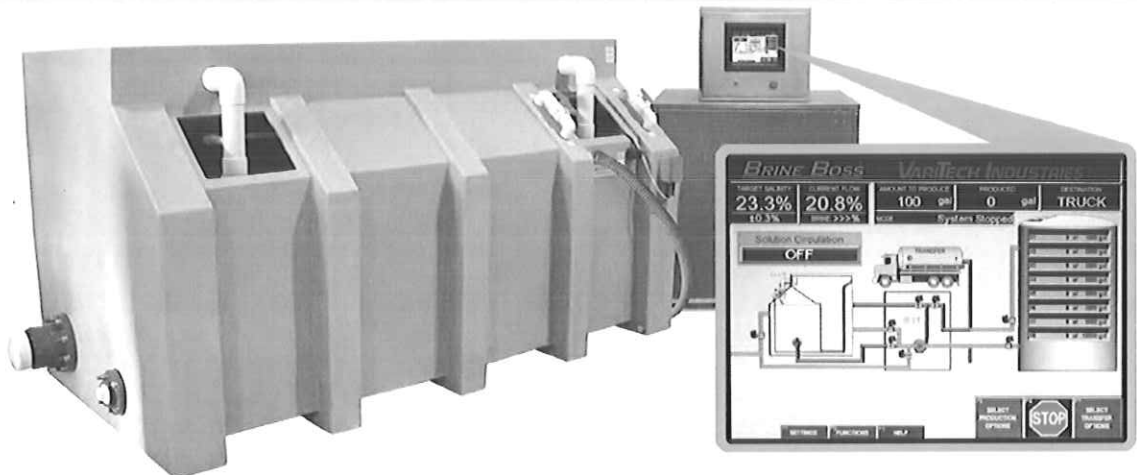
When coupled with our patented up-flow brine process, you will be able to produce cleaner, more consistent brine faster than ever before.

The stand alone cabinet is ideal for new installations or it can easily be placed into service for use with any existing VariTech brine production system.

### F E A T U R E S

- **12.1-inch Color Touch Screen**
  - Clear, bright screen makes page navigation smooth and easy even in low light conditions
- **Administer Security Protection**
  - Ensures that target salinity and system settings can only be accessed through password verification
- **Multiple Group User Options**
  - Allows multiple users such as State, County, and City personnel to use the same system while tracking usage per group
- **Advanced Data Tracking and Transfer Capabilities**
  - Allows the administrator to view and transfer data such as salt used, gallons of brine produced, truck ID numbers, date, time, and more
  - Add-on software packages allow the administrator to download and transmit the information to remote locations
- **Heavy-Duty Pump and Plumbing Components**
  - Stainless steel centrifugal pump coupled to a TEFC motor and poly housed ball valves with stainless steel balls will provide years of dependable use
- **Truck Loading and Offloading**
  - The system allows for loading and offloading of mobile truck tanks while tracking truck ID, date, time, and gallons dispensed
- **Temperature Compensated Brine Production**
  - Our Interface monitors water temperature to make sure the brine that is produced is consistent each and every time
- **Multiple Tank Monitoring System**
  - Producing and pumping brine to multiple storage tanks is no problem at all with add-on valve and hose packages

SB600 sold separately



888-208-0686

[www.varitech-industries.com](http://www.varitech-industries.com)

4115 Minnesota Street, Alexandria, MN 56308 / PH: 320-763-5074 FX: 320-763-5612 EM: [info@varitech-industries.com](mailto:info@varitech-industries.com)



Specifications  
 VariTech **BRINE BOSS™**  
 Automatic Salt Brine Production System

**1.0 Scope:**

This specification covers requirements for an Automated Salt Brine Production System intended for use as a generator of quality salt brine that is used as a prewetting, anti-icing, and/or a de-icing agent on pavement or roadways. The system shall be fully automated eliminating the need for manual salinity testing, monitoring, and adjustment.

The system must use an upflow brine production process to insure single pass saturation of fresh water being introduced into the salt bed for increased production. In addition, the upflow process will provide a sediment free brine solution that can be stored in standard flat bottom storage vessels. The need for cone bottom storage vessels is unacceptable.

The system shall include a secondary pump and plumbing arrangement allowing for manual brine production in the event of a primary pump, valve, or other electrical component failure. The secondary plumbing must include a means of automatic shutdown when the onboard storage tank is full. The secondary pump and all plumbing components shall be pre-installed and wired to provide immediate operation.

**2.0 Dimensions:**

Model # BB600 - 62" W X 62" H X 119" Long

**3.0 Storage/Holding Capacity (U.S. Gallons):**

|             | <u>Main Tank</u> | <u>Hopper Tank</u> | <u>Total</u> |
|-------------|------------------|--------------------|--------------|
| Model BB600 | 600              | 800                | 1400         |

Rock Salt Holding Capacity (Cubic Yards)

Model BB600.....3.68

**4.0 Production Rate:**

Model BB600.....5000 Gallons Per Hour (Based on Customers Water Supply)

**5.0 Tank Materials:**

The salt brine production systems shall be comprised of rotationally molded, one-piece tanks. Rotationally molded polyethylene SBPS tanks shall be manufactured from a polyethylene compound that conforms to the following properties.....

- Density- ASTM D-1505 .942 g/cm<sup>3</sup>
- Melt Index- ASTM D-1238 2.0 g/10min.
- Tensile Strength- ASTM D-638 2,700 PSI
- Flexural Modulus- ASTM D-790 103,000 PSI
- Low Temp Impact- ARM-Low Impact (1/4") 175 ft. lbs.

4115 Minnesota Street  
 P.O. Box 457  
 Alexandria, MN 56308

Phone: 1-888-208-0686 • Fax: 320-763-5612 • Email: sales@varitech-industries.com





### **Specifications for Model BB600 continued.....**

#### *Main Salt Brine Tank:*

Rotationally molded one piece (no welds, joints, or seams) polyethylene plastic tank- UV stabilized to provide protection from sunlight- 5/8" nominal thickness- Open floor with interior rib to prevent any type of tank bulging - Pitched bottom to lower sump area provides total drainage- 3" schedule 80 PVC drain pipe with threaded plug end

#### *Hopper/Rock Salt Tank:*

Rotationally molded one - piece (no welds, joints, or seams) polyethylene plastic tank-UV stabilized to provide protection from sunlight- 5/8" nominal thickness-Open floor (No interior floor ribs to hinder cleaning)- Pitched bottom to lower sump area provides total drainage- 6" schedule 80 PVC drain pipe with threaded cap end- Full length 2" PVC water in-feed manifold provides even filling and salt saturation through an up flow process

#### *Secondary Containment Tank:*

Rotationally molded one piece (no welds, joints, or seams) polyethylene plastic tank- UV stabilized to provide protection from sunlight- 5/8" nominal thickness- Self supporting, molded in vertical support ribs and 3" high skid bottoms provide easy forklift entry- Requires no complex saddling or support structures- 2-1" PVC threaded plug drain fittings- Minimum 110% containment capacity

### **6.0 Plumbing and Plumbing Components:**

All plumbing fittings shall be constructed of corrosion resistant materials such as PVC, glass reinforced polypropylene, or stainless steel. All electric valves shall be constructed of glass reinforced polypropylene with stainless steel balls and stems. Wherever possible, the use of manifold flange fittings with EPDM gaskets and stainless steel clamps shall be used for ease of maintenance. All metal fasteners shall be a minimum of 316 grade stainless steel.

The primary pump shall be a 2" x 1 1/2" stainless steel centrifugal pump that is close coupled to a 3 HP, 230V, single phase, TEFC motor. Based on water, the pump shall produce 165 GPM at 30' TDH. A dual volute casing and mechanical shaft seal shall prevent the intrusion of liquid to the electric motor.

The secondary pump shall be an epoxy coated cast iron effluent ejector pump which includes a 1/2 HP, 115V oil filled motor with thermal overload protection. Based on water, the 1 1/2" pump discharge shall be capable of pumping 100 GPM at 10' TDH.

### **7.0 Control Package:**

The control system shall allow for either continuous brine production to fill a single or multiple vertical storage tanks, or batch production to fill a truck mounted applicator tank. In addition, the control system shall allow for truck loading and offloading from a single or multiple vertical storage tanks. All of these functions shall be accomplished with a single pump and control package.

4115 Minnesota Street  
P.O. Box 457  
Alexandria, MN 56308

Phone: 1-888-208-0686 • Fax: 320-763-5612 • Email: [sales@varitech-industries.com](mailto:sales@varitech-industries.com)



### **Specifications for Model BB600 continued.....**

The system controls shall come standard with the option of multiple users tracking for filling and offloading of storage tanks in a shared environment. Each user shall have their password to access the truck fill operation. The system will track the time and date, gallons ordered, gallons produced, and truck identification number for viewing and/or downloading by the system administrator.

All operation and calibration features shall be password protected to prevent unauthorized use or inadvertent start-up. During production, the system shall utilize a dual toroidal sensor application to insure that the brine that is transferred to storage or truck tanks is within the acceptable range of 23.3% plus or minus .3%. If the brine is oversaturated it shall be looped back through the system while fresh water is incorporated to provide an acceptable solution. Once the brine is within range it would be diverted to a storage or truck tank. Should the brine concentration fall below the target range the system will shut down and the user will be prompted to add more salt.

The controller shall include a 12.1" TFT, 32000 color touch screen. The controller shall include USB ports and a CompactFLASH card that is removable for data transfer. The controller shall also be capable of integrating optional networking and Ethernet support for remote access and data transfer.

The operation screen of the controller shall be capable of showing the following: target brine concentration, real-time brine concentration, mode, gallons ordered, gallons produced or transferred, and storage tank volume in gallons for up to 8 storage tanks. In addition, the liquid flow throughout the system shall be displayed in real-time.

The controller shall be capable of logging the following information per production event: time and date, brine concentration produced, salt used, water used, gallons ordered, gallons completed, truck ID, user group if multiple users are selected, and any errors. Any transfer event shall track: time and date, gallons ordered, gallons completed, truck ID, user group if multiple users are selected, and any errors.

In the event of a component malfunction or failure, the system shall shut down and perform a self-diagnosis to inform the user of the fault.

### **8.0 Installation:**

The controller shall come prewired and ready to plug into a customer supplied 220V, single phase power service. The brine system will be plumbed into customer supplier water service. The seller must provide a minimum of 8 hours of on-site support for installation and training.

### **9.0 Warranty:**

The unit shall be warranted for a period of 1 year from the date of purchase.

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P.O. Box 457  
Alexandria, MN 56308

Phone: 1-888-208-0686 • Fax: 320-763-5612 • Email: sales@varitech-industries.com



Specifications  
VariTech **BRINE BOSS™**  
Automatic Salt Brine Production System

**1.0 Scope:**

This specification covers requirements for an Automated Salt Brine Production System intended for use as a generator of quality salt brine that is used as a prewetting, anti-icing, and/or a de-icing agent on pavement or roadways. The system shall be fully automated eliminating the need for manual salinity testing, monitoring, and adjustment.

The system must use an upflow brine production process to insure single pass saturation of fresh water being introduced into the salt bed for increased production. In addition, the upflow process will provide a sediment free brine solution that can be stored in standard flat bottom storage vessels. The need for cone bottom storage vessels is unacceptable.

The system shall include a secondary pump and plumbing arrangement allowing for manual brine production in the event of a primary pump, valve, or other electrical component failure. The secondary plumbing must include a means of automatic shutdown when the onboard storage tank is full. The secondary pump and all plumbing components shall be pre-installed and wired to provide immediate operation.

**2.0 Dimensions:**

Model # BB600 - 62" W X 62" H X 119" Long

**3.0 Storage/Holding Capacity (U.S. Gallons):**

|             | <u>Main Tank</u> | <u>Hopper Tank</u> | <u>Total</u> |
|-------------|------------------|--------------------|--------------|
| Model BB600 | 600              | 800                | 1400         |

**Rock Salt Holding Capacity (Cubic Yards)**

Model BB600.....3.68

**4.0 Production Rate:**

Model BB600.....5000 Gallons Per Hour (Based on Customers Water Supply)

**5.0 Tank Materials:**

The salt brine production systems shall be comprised of rotationally molded, one-piece tanks. Rotationally molded polyethylene SBPS tanks shall be manufactured from a polyethylene compound that conforms to the following properties.....

- Density- ASTM D-1505 .942 g/cm<sup>3</sup>
- Melt Index- ASTM D-1238 2.0 g/10min.
- Tensile Strength- ASTM D-638 2,700 PSI
- Flexural Modulus- ASTM D-790 103,000 PSI
- Low Temp Impact- ARM-Low Impact (1/4") 175 ft. lbs.

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### **Specifications for Model BB600 continued.....**

#### *Main Salt Brine Tank:*

Rotationally molded one piece (no welds, joints, or seams) polyethylene plastic tank- UV stabilized to provide protection from sunlight- 5/8" nominal thickness- Open floor with interior rib to prevent any type of tank bulging - Pitched bottom to lower sump area provides total drainage- 3" schedule 80 PVC drain pipe with threaded plug end

#### *Hopper/Rock Salt Tank:*

Rotationally molded one - piece (no welds, joints, or seams) polyethylene plastic tank-UV stabilized to provide protection from sunlight- 5/8" nominal thickness-Open floor (No interior floor ribs to hinder cleaning)- Pitched bottom to lower sump area provides total drainage- 6" schedule 80 PVC drain pipe with threaded cap end- Full length 2" PVC water in-feed manifold provides even filling and salt saturation through an up flow process

#### *Secondary Containment Tank:*

Rotationally molded one piece (no welds, joints, or seams) polyethylene plastic tank- UV stabilized to provide protection from sunlight- 5/8" nominal thickness- Self supporting, molded in vertical support ribs and 3" high skid bottoms provide easy forklift entry- Requires no complex saddling or support structures- 2-1" PVC threaded plug drain fittings- Minimum 110% containment capacity

### **6.0 Plumbing and Plumbing Components:**

All plumbing fittings shall be constructed of corrosion resistant materials such as PVC, glass reinforced polypropylene, or stainless steel. All electric valves shall be constructed of glass reinforced polypropylene with stainless steel balls and stems. Wherever possible, the use of manifold flange fittings with EPDM gaskets and stainless steel clamps shall be used for ease of maintenance. All metal fasteners shall be a minimum of 316 grade stainless steel.

The primary pump shall be a 2" x 1 1/2" stainless steel centrifugal pump that is close coupled to a 3 HP, 230V, single phase, TEFC motor. Based on water, the pump shall produce 165 GPM at 30' TDH. A dual volute casing and mechanical shaft seal shall prevent the intrusion of liquid to the electric motor.

The secondary pump shall be an epoxy coated cast iron effluent ejector pump which includes a 1/2 HP, 115V oil filled motor with thermal overload protection. Based on water, the 1 1/2" pump discharge shall be capable of pumping 100 GPM at 10' TDH.

### **7.0 Control Package:**

The control system shall allow for either continuous brine production to fill a single or multiple vertical storage tanks, or batch production to fill a truck mounted applicator tank. In addition, the control system shall allow for truck loading and offloading from a single or multiple vertical storage tanks. All of these functions shall be accomplished with a single pump and control package.

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### **Specifications for Model BB600 continued.....**

The system controls shall come standard with the option of multiple users tracking for filling and offloading of storage tanks in a shared environment. Each user shall have their password to access the truck fill operation. The system will track the time and date, gallons ordered, gallons produced, and truck identification number for viewing and/or downloading by the system administrator.

All operation and calibration features shall be password protected to prevent unauthorized use or inadvertent start-up. During production, the system shall utilize a dual toroidal sensor application to insure that the brine that is transferred to storage or truck tanks is within the acceptable range of 23.3% plus or minus .3%. If the brine is oversaturated it shall be looped back through the system while fresh water is incorporated to provide an acceptable solution. Once the brine is within range it would be diverted to a storage or truck tank. Should the brine concentration fall below the target range the system will shut down and the user will be prompted to add more salt.

The controller shall include a 12.1" TFT, 32000 color touch screen. The controller shall include USB ports and a CompactFLASH card that is removable for data transfer. The controller shall also be capable of integrating optional networking and Ethernet support for remote access and data transfer.

The operation screen of the controller shall be capable of showing the following: target brine concentration, real-time brine concentration, mode, gallons ordered, gallons produced or transferred, and storage tank volume in gallons for up to 8 storage tanks. In addition, the liquid flow throughout the system shall be displayed in real-time.

The controller shall be capable of logging the following information per production event: time and date, brine concentration produced, salt used, water used, gallons ordered, gallons completed, truck ID, user group if multiple users are selected, and any errors. Any transfer event shall track: time and date, gallons ordered, gallons completed, truck ID, user group if multiple users are selected, and any errors.

In the event of a component malfunction or failure, the system shall shut down and perform a self-diagnosis to inform the user of the fault.

### **8.0 Installation:**

The controller shall come prewired and ready to plug into a customer supplied 220V, single phase power service. The brine system will be plumbed into customer supplier water service. The seller must provide a minimum of 8 hours of on-site support for installation and training.

### **9.0 Warranty:**

The unit shall be warranted for a period of 1 year from the date of purchase.

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### F E A T U R E S

The Blend Boss is a stand-alone chemical blending station that will allow for up to a three product in-line blend of nearly all liquid de-icing chemicals. This groundbreaking unit can be installed with any new or existing tank farm. Quick and accurate volume based blending can now be accomplished with the touch of a button.

All plumbing components are enclosed in a stainless steel enclosure with a rugged, galvanized steel base. The control panel and remote fill pendant are enclosed in NEMA rated enclosure to withstand the harshest winter environments.

- **Three Product Volumetric Blending**
  - Ability to make "hot-mix" blends using nearly any de-icing chemical
- **On-the-Fly Adjustability**
  - Make changes to your blend before or during a storm depending on precipitation and temperate changes
- **Inline Blending**
  - Fill the truck as needed – no need to store a premixed blend in a storage tank prior to an event. This also eliminates the "layering" effect associated with a manual filling process.
- **Password Protection**
  - Prevents any unauthorized changes to blending target rates
- **Closed Loop Control**
  - Ensures fast, efficient blending with an automatic shutdown once the target gallonage has been met
- **Storage Tank Recirculation**
  - Allows for off-season recirculation of tank farm to prevent material settling
- **Stainless Steel Pump Head**
  - Corrosion resistant material needed for transferring abrasive materials used in anti-icing applications
- **Totally Enclosed Fan Cooled (TEFC), Thermally Protected Motors**
  - Available in 115/230volt
- **Pre-Wired On/Off Control**
  - Ready for use by simply supplying power
- **EPDM Wire Reinforced Hose**
  - Prevents kinks and hose collapse for added system reliability

LCD Control Pad



Blending Unit







### **Specifications for Model BB600 continued.....**

The system controls shall come standard with the option of multiple users tracking for filling and offloading of storage tanks in a shared environment. Each user shall have their password to access the truck fill operation. The system will track the time and date, gallons ordered, gallons produced, and truck identification number for viewing and/or downloading by the system administrator.

All operation and calibration features shall be password protected to prevent unauthorized use or inadvertent start-up. During production, the system shall utilize a dual toroidal sensor application to insure that the brine that is transferred to storage or truck tanks is within the acceptable range of 23.3% plus or minus .3%. If the brine is oversaturated it shall be looped back through the system while fresh water is incorporated to provide an acceptable solution. Once the brine is within range it would be diverted to a storage or truck tank. Should the brine concentration fall below the target range the system will shut down and the user will be prompted to add more salt.

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The operation screen of the controller shall be capable of showing the following: target brine concentration, real-time brine concentration, mode, gallons ordered, gallons produced or transferred, and storage tank volume in gallons for up to 8 storage tanks. In addition, the liquid flow throughout the system shall be displayed in real-time.

The controller shall be capable of logging the following information per production event: time and date, brine concentration produced, salt used, water used, gallons ordered, gallons completed, truck ID, user group if multiple users are selected, and any errors. Any transfer event shall track: time and date, gallons ordered, gallons completed, truck ID, user group if multiple users are selected, and any errors.

In the event of a component malfunction or failure, the system shall shut down and perform a self-diagnosis to inform the user of the fault.

### **8.0 Installation:**

The controller shall come prewired and ready to plug into a customer supplied 220V, single phase power service. The brine system will be plumbed into customer supplier water service. The seller must provide a minimum of 8 hours of on-site support for installation and training.

### **9.0 Warranty:**

The unit shall be warranted for a period of 1 year from the date of purchase.

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Specifications  
VariTech **BLEND BOSS™**  
Automatic Three Product Chemical Blending System

**1.0 Scope:**

This specification covers requirements for an Automatic Three Product Chemical Blending System intended for use as a generator of quality blended liquid solutions that are used as a prewetting, anti-icing, and/or a de-icing agent on pavement or roadways. The system shall be fully automated eliminating the need for manual testing, monitoring, and adjustment.

The system shall be capable of blending up to 3 different liquid deicing chemicals in order to create a custom blended solution on demand. The user interface shall be capable of selecting a 2 product blend in the range of 60/40 to 95/5 and a 3 product blend in the range of 50/40/10 to 90/5/5. The desired blends shall be controlled automatically through the use of flow meters and 12 volt PWM regulating ball valves. In addition, the system must also have the capability to inject an anti-foam agent through the use of a 12 volt dispensing pump.

**2.0 Pumps:**

The brine pump shall be a 1 ½" stainless steel centrifugal pump that is close coupled to a 2 HP, 115/230 volt, single phase electric motor. Based on water, this pump shall be capable of pumping 120 GPM at 10 TDH. The discharge side of the brine pump shall include a 2" poly flanged flowmeter with flow capabilities from 10 to 100 GPM.

The primary additive pump shall be a 1 ½" stainless steel centrifugal pump that is close coupled to a 2 HP, 115/230 volt, single phase electric motor. Based on water, this pump shall be capable of pumping 120 GPM at 10 TDH. The discharge side of the brine pump shall include a 2" poly flanged flowmeter with flow capabilities from 2 to 70 GPM. In addition to the flowmeter, the discharge line shall also include a 2" 12 VDC, PWM regulating ball valve.

The secondary additive pump shall be a 1" stainless steel centrifugal pump that is close coupled to a 3/4 HP, 115/230 volt, single phase electric motor. Based on water, this pump shall be capable of pumping 40 GPM at 10 TDH. The discharge side of the brine pump shall include a 2" poly flanged flowmeter with flow capabilities from 2 to 70 GPM. In addition to the flowmeter, the discharge line shall also include a 2" 12 VDC, PWM regulating ball valve.

The anti-foam injection pump shall be a ¼" stainless steel piston driven pump with EPDM elastomers that is coupled to a 115 volt solenoid operated piston. The pump shall be capable of 120 ml/min based on a stroke rate of 120 strokes/minute.

The discharge lines of the brine pump and additive pumps must each include a 2" 3-way electric ball valve that will divert flow back to storage tanks while the interface is calculating the user defined blend percentages. Once the percentages have been verified these 3-way valves shall automatically shift allowing the liquid to be discharged to the truck.

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Specifications  
VariTech **BLEND BOSS™**  
Automatic Three Product Chemical Blending System

**3.0 Enclosure:**

The pumps, flow meters, valves, and mixing manifold shall be enclosed in a cabinet that is constructed of a galvanized frame with stainless steel top and side panels. The enclosure shall have a means for accessing the pumps and plumbing for troubleshooting and maintenance while protecting all of the components from the outside elements.

**4.0 Controller:**

The controller shall include a 2.8" LCD color display that has LED illumination and adjustable brightness controls. The display shall include 5 silicone keyboard function keys with tactile feedback that will allow for all calibration and operating functions. The display shall have an IP rating of no less than 67 and shall have a single CAN connection point on the back of the display for cable routing to control all functions. The controller shall be capable of 12 configurable inputs and 12 configurable outputs and shall also include a 2 color status LED.

The display shall be mounted in a NEMA 4 rated plastic enclosure that is large enough to enclose the controller and also allow for the following switch mounting: On/Off, Blend/Recirculate, Reset, and E-Stop. The enclosure shall be mounted on the stainless steel pump enclosure in order to provide a turnkey package.

**5.0 Remote Fill Pendant:**

The system shall include a remote fill pendant that allows the operator to have start/stop and E-stop controls while standing at the truck during the filling process. The pendant must include a minimum 25' cable and pendant and switches shall be able to withstand the outside elements.

**6.0 Installation:**

The system shall come prewired and ready for connection to a customer supplied 220V, 30 amp, single phase power service.

**7.0 Warranty:**

The unit shall be warranted for a period of 1 year from the date of purchase.

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## F E A T U R E S

The Blend Boss is a stand-alone chemical blending station that will allow for up to a three product in-line blend of nearly all liquid de-icing chemicals. This groundbreaking unit can be installed with any new or existing tank farm. Quick and accurate volume based blending can now be accomplished with the touch of a button.

All plumbing components are enclosed in a stainless steel enclosure with a rugged, galvanized steel base. The control panel and remote fill pendant are enclosed in NEMA rated enclosure to withstand the harshest winter environments.

- **Three Product Volumetric Blending**
  - Ability to make "hot-mix" blends using nearly any de-icing chemical
- **On-the-Fly Adjustability**
  - Make changes to your blend before or during a storm depending on precipitation and temperate changes
- **Inline Blending**
  - Fill the truck as needed – no need to store a premixed blend in a storage tank prior to an event. This also eliminates the "layering" effect associated with a manual filling process.
- **Password Protection**
  - Prevents any unauthorized changes to blending target rates
- **Closed Loop Control**
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- **Stainless Steel Pump Head**
  - Corrosion resistant material needed for transferring abrasive materials used in anti-icing applications
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  - Available in 115/230volt
- **Pre-Wired On/Off Control**
  - Ready for use by simply supplying power
- **EPDM Wire Reinforced Hose**
  - Prevents kinks and hose collapse for added system reliability

LCD Control Pad



Blending Unit



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Specifications  
VariTech **BLEND BOSS™**  
Automatic Three Product Chemical Blending System

**1.0 Scope:**

This specification covers requirements for an Automatic Three Product Chemical Blending System intended for use as a generator of quality blended liquid solutions that are used as a prewetting, anti-icing, and/or a de-icing agent on pavement or roadways. The system shall be fully automated eliminating the need for manual testing, monitoring, and adjustment.

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**2.0 Pumps:**

The brine pump shall be a 1 ½" stainless steel centrifugal pump that is close coupled to a 2 HP, 115/230 volt, single phase electric motor. Based on water, this pump shall be capable of pumping 120 GPM at 10 TDH. The discharge side of the brine pump shall include a 2" poly flanged flowmeter with flow capabilities from 10 to 100 GPM.

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The secondary additive pump shall be a 1" stainless steel centrifugal pump that is close coupled to a 3/4 HP, 115/230 volt, single phase electric motor. Based on water, this pump shall be capable of pumping 40 GPM at 10 TDH. The discharge side of the brine pump shall include a 2" poly flanged flowmeter with flow capabilities from 2 to 70 GPM. In addition to the flowmeter, the discharge line shall also include a 2" 12 VDC, PWM regulating ball valve.

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The discharge lines of the brine pump and additive pumps must each include a 2" 3-way electric ball valve that will divert flow back to storage tanks while the interface is calculating the user defined blend percentages. Once the percentages have been verified these 3-way valves shall automatically shift allowing the liquid to be discharged to the truck.

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Specifications  
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**3.0 Enclosure:**

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The controller shall include a 2.8" LCD color display that has LED illumination and adjustable brightness controls. The display shall include 5 silicone keyboard function keys with tactile feedback that will allow for all calibration and operating functions. The display shall have an IP rating of no less than 67 and shall have a single CAN connection point on the back of the display for cable routing to control all functions. The controller shall be capable of 12 configurable inputs and 12 configurable outputs and shall also include a 2 color status LED.

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**5.0 Remote Fill Pendant:**

The system shall include a remote fill pendant that allows the operator to have start/stop and E-stop controls while standing at the truck during the filling process. The pendant must include a minimum 25' cable and pendant and switches shall be able to withstand the outside elements.

**6.0 Installation:**

The system shall come prewired and ready for connection to a customer supplied 220V, 30 amp, single phase power service.

**7.0 Warranty:**

The unit shall be warranted for a period of 1 year from the date of purchase.

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A Subsidiary of FORCE America, Inc.

## Storage Systems

## Modular Shelter

### F E A T U R E S

Modular Shelters are constructed of high-density U.V. stabilized material. The walls and roof feature double insulated walls allowing users to install climate control systems to maintain material temperature.

The interlocking walls and roof, in addition to the molded bottom flange allow for easy installation and expansion to any length. Each Modular Shelter comes standard with locking door providing an economical solution to all storage needs.

- **Completely Rust Proof**  
Plastic construction combined with stainless steel and galvanized parts make it ideal for storing corrosive chemicals
- **Innovative Modular Design**  
Using simple interlocking wall and roof panels, allows construction of any length
- **High-density U.V. Stabilized Polyethylene Plastic**  
Exceptional protection from sun deterioration for extended life
- **Foam Insulation Installed During the Molding Process**  
Plastic and polyethylene material bonds to prevent the structure from delaminating, offering longer life than traditional materials
- **Floorless Design**  
Easily place shelter over existing equipment
- **Hinged Roof**  
Allows materials to be loaded or unloaded through the roof opening
- **Lockable Entrance Door**  
Securable door prevents loss or damage to stored material or property
- **Easily Assembled Light-weight Structure**  
Build a weather tight structure in minutes that easily moves to any location
- **Optional Electrical and Heating Systems Available**  
Easily add temperature control to the shelter system for material temperature control



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## Storage Systems

## Modular Shelter

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Modular Shelters are constructed of high-density U.V. stabilized material. The walls and roof feature double insulated walls allowing users to install climate control systems to maintain material temperature.

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Allows materials to be loaded or unloaded through the roof opening
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Securable door prevents loss or damage to stored material or property
- **Easily Assembled Light-weight Structure**  
Build a weather tight structure in minutes that easily moves to any location
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Easily add temperature control to the shelter system for material temperature control



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**SPECIFICATIONS FOR  
VARITECH INDUSTRIES, INC.  
SALT BRINE PRODUCTION SYSTEM SHELTER  
MODEL HBSS816**

**1.0 Scope:**

This specification covers requirements for Salt Brine Production System Shelters (HBSS) intended for use as a heated facility for Model SB600 Salt Brine Production Systems. Providing a heated shelter for the SB600 will allow the Department the option of locating the salt brine production system closer to salt piles, and away from steel built truck stations that will corrode from the salt used in and around the salt brine system. Reducing corrosion in the truck station facilities will extend the life of the building and the building's infrastructure.

**2.0 Dimensions:**

Model HBSS812 – 107”W x 200” L x 121” H overall

**3.0 Materials:**

The salt brine production system shelter shall be comprised of rotationally molded, one-piece polyethylene. Rotationally molded polyethylene shall be manufactured from a polyethylene compound that conforms to the following properties...

Density – ASTM D-1505 .942g/cm<sup>3</sup>

Melt Index- ASTM D-1238 2.0g/10min.

Tensile Strength- ASTM D-638 2,700 PSI

Flexural Modulus- ASTM D-790 103,000 PSI

Lower Temp Impact- ARM-Low Impact (1/4”) 175 ft. lbs.

The shelter shall be constructed of rotationally molded high-density polyethylene, UV stabilized, and double walled with a minimum of 3” of foam between the two walls to obtain a minimum R-value of 9. The shelter shall include a molded flange at the bottom of the unit to allow proper anchoring capabilities to customer supplied concrete or asphalt foundations.

The shelter shall be constructed of rotationally molded interlocking wall panels, modular in form, to allow for any size length to be constructed. Each wall panel shall be usable for either a straight wall section, or an outside corner section. The roof panels shall be molded and modular, interlocking polyethylene plastic, foam filled, and shall incorporate a molded in hinge. The hinged side of the roof panel shall be able to mate with the hinge

side of the upper wall panels. A stainless steel hinge pin shall be utilized to allow the entire roof to be opened by means of air-actuated cylinders, one on each inside end of the shelter. Each air cylinder shall be equipped with flow control valves, and the entire air actuation shall be controlled for up and down motion, by means of a muffled air valve. All bolts used to bolt the interlocking wall and roof panels together, shall be a minimum of #304 stainless steel, including washers and nuts.

A molded, one piece interlocking door panel, which incorporates a molded in hinge, shall be utilized for entry into the shelter. A molded, one-piece door, that mates with the door panel opening shall be hinged using stainless steel hinge bolts. Each door shall be equipped with stainless steel toggle clamps to hold the door securely closed. A rubber draw latch shall be mounted on each door, to allow the door to be securely closed from the inside.

Each shelter that will be placed into service for salt brine production system protection, shall be equipped with a plastic spill shield, mounted on the upper frame cross members. The plastic spill shield prevents over spilled salt to be directed into the hopper of the salt brine production system.

The entire shelter shall be wired for 120 Volt, single-phase electrical service to all electrical components. Each shelter shall have two stainless steel radiant heaters, thermostatically controlled, and mounted on the inside of the wall panels. Each heater shall be plugged into a Ground Fault Interrupter Receptacle for prevention of shock in a wet location. All wiring shall be inside PVC conduit, with watertight terminal connections. The main breaker service shall be enclosed in a Nema 4 fiberglass enclosure.

The shelter shall be equipped with wall mounted, pendant style, vapor proof lights, both inside and outside, with each light being independently controlled via a waterproof, wet location PVC toggle switch cover.

A through wall pipe provides a means of attaching a hose to the brine system, once the brine system is connected to the through wall pipe. This allows the operator to pump salt brine directly from the brine system, into storage vessels, or truck tanks, without having a discharge hose exiting through the door opening.

**The Salt Brine Production System Shelter and Salt Brine Production System shall be furnished by the same manufacturer.**

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**SPECIFICATIONS FOR  
VARITECH INDUSTRIES, INC.  
SALT BRINE PRODUCTION SYSTEM SHELTER  
MODEL HBSS816**

**1.0 Scope:**

This specification covers requirements for Salt Brine Production System Shelters (HBSS) intended for use as a heated facility for Model SB600 Salt Brine Production Systems. Providing a heated shelter for the SB600 will allow the Department the option of locating the salt brine production system closer to salt piles, and away from steel built truck stations that will corrode from the salt used in and around the salt brine system. Reducing corrosion in the truck station facilities will extend the life of the building and the building's infrastructure.

**2.0 Dimensions:**

Model HBSS812 – 107”W x 200” L x 121” H overall

**3.0 Materials:**

The salt brine production system shelter shall be comprised of rotationally molded, one-piece polyethylene. Rotationally molded polyethylene shall be manufactured from a polyethylene compound that conforms to the following properties...

Density – ASTM D-1505 .942g/cm<sup>3</sup>

Melt Index- ASTM D-1238 2.0g/10min.

Tensile Strength- ASTM D-638 2,700 PSI

Flexural Modulus- ASTM D-790 103,000 PSI

Lower Temp Impact- ARM-Low Impact (1/4”) 175 ft. lbs.

The shelter shall be constructed of rotationally molded high-density polyethylene, UV stabilized, and double walled with a minimum of 3” of foam between the two walls to obtain a minimum R-value of 9. The shelter shall include a molded flange at the bottom of the unit to allow proper anchoring capabilities to customer supplied concrete or asphalt foundations.

The shelter shall be constructed of rotationally molded interlocking wall panels, modular in form, to allow for any size length to be constructed. Each wall panel shall be usable for either a straight wall section, or an outside corner section. The roof panels shall be molded and modular, interlocking polyethylene plastic, foam filled, and shall incorporate a molded in hinge. The hinged side of the roof panel shall be able to mate with the hinge





A Subsidiary of FORCE America, Inc.

## Storage Systems

## Modular Shelter

### F E A T U R E S

Modular Shelters are constructed of high-density U.V. stabilized material. The walls and roof feature double insulated walls allowing users to install climate control systems to maintain material temperature.

The interlocking walls and roof, in addition to the molded bottom flange allow for easy installation and expansion to any length. Each Modular Shelter comes standard with locking door providing an economical solution to all storage needs.

- **Completely Rust Proof**  
Plastic construction combined with stainless steel and galvanized parts make it ideal for storing corrosive chemicals
- **Innovative Modular Design**  
Using simple interlocking wall and roof panels, allows construction of any length
- **High-density U.V. Stabilized Polyethylene Plastic**  
Exceptional protection from sun deterioration for extended life
- **Foam Insulation Installed During the Molding Process**  
Plastic and polyethylene material bonds to prevent the structure from delaminating, offering longer life than traditional materials
- **Floorless Design**  
Easily place shelter over existing equipment
- **Hinged Roof**  
Allows materials to be loaded or unloaded through the roof opening
- **Lockable Entrance Door**  
Securable door prevents loss or damage to stored material or property
- **Easily Assembled Light-weight Structure**  
Build a weather tight structure in minutes that easily moves to any location
- **Optional Electrical and Heating Systems Available**  
Easily add temperature control to the shelter system for material temperature control



888-208-0686

[www.varitech-industries.com](http://www.varitech-industries.com)

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**SPECIFICATIONS FOR  
VARITECH INDUSTRIES, INC.  
SALT BRINE PRODUCTION SYSTEM SHELTER  
MODEL HBSS816**

**1.0 Scope:**

This specification covers requirements for Salt Brine Production System Shelters (HBSS) intended for use as a heated facility for Model SB600 Salt Brine Production Systems. Providing a heated shelter for the SB600 will allow the Department the option of locating the salt brine production system closer to salt piles, and away from steel built truck stations that will corrode from the salt used in and around the salt brine system. Reducing corrosion in the truck station facilities will extend the life of the building and the building's infrastructure.

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Model HBSS812 – 107”W x 200” L x 121” H overall

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