



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

# Request for Quotation

RFQ NUMBER  
**708EC012**

PAGE  
**1**

ADDRESS CORRESPONDENCE TO ATTENTION OF  
**MICHAEL AUSTIN**  
**304-558-2402**

VENDOR

\*712113101      800-423-8903  
**ATLANTIC MACHINERY INC**  
**2702 GARFIELD AVENUE**  
  
**SILVER SPRING MD 20910**

SHIP TO

**DIVISION OF HIGHWAYS**  
**EQUIPMENT DIVISION**  
**ROUTE 33**  
**BRUSHY FORK ROAD**  
**BUCKHANNON, WV**  
**26201**      **304-472-1750**

DATE PRINTED <b>04/02/2008</b>	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
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BID OPENING DATE: **05/07/2008**      BID OPENING TIME **01:30PM**

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	EA		765-77	<b>\$176,937.<sup>00</sup></b>	<b>\$176,937.<sup>00</sup></b>
<p><b>AIR STREET SWEEPER</b></p> <p><b>OPEN END CONTRACT</b></p> <p>TO PROVIDE TRUCK MOUNTED REGENERATIVE AIR STREET SWEEPER PER THE ATTACHED SPECIFICATIONS.</p> <p>THERE WILL BE A MANDATORY PRE-BID CONFERENCE AT THE STATE CAPITAL COMPLEX 2019 WASHINGTON, ST. EAST CHARLESTON, WV. AT 10:00 AM ON 04/24/2008. FAILURE TO ATTEND THE PRE-BID CONFERENCE WILL RESULT IN BID DISQUALIFICATION.</p> <p>QUESTIONS: WRITTEN QUESTIONS WILL BE ACCEPTED THROUGH CLOSE OF BUSINESS (5:00 PM EST.) ON FRIDAY 04/18/08.</p> <p>SEND YOUR QUESTIONS TO: PURCHASING DIVISION          ATTENTION: MICHAEL AUSTIN          2019 WASHINGTON STREET EAST          CHARLESTON, WV 25305</p> <p>QUESTIONS MAY BE SENT VIA FAX, E-MAIL, OR REGULAR MAIL          E-MAIL: MICHAEL.D.AUSTIN@WV.GOV          FAX: 304-558-4115</p> <p>IT IS THE VENDORS RESPONSIBILITY TO VERIFY THAT THEIR QUESTIONS HAVE BEEN RECEIVED BY CALLING 304-558-2402.</p> <p>EXHIBIT 2</p>						

**RECEIVED**  
 2008 MAY 28 A 9:47  
 PURCHASING DIVISION  
 STATE OF WV

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE *[Signature]*      TELEPHONE **800-423-8903**      DATE **5/27/08**

TITLE **Sales Manager**      FEIN **521190648**      ADDRESS CHANGES TO BE NOTED ABOVE

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

**GENERAL TERMS & CONDITIONS  
REQUEST FOR QUOTATION (RFQ) AND REQUEST FOR PROPOSAL (RFP)**

1. Awards will be made in the best interest of the State of West Virginia.
2. The State may accept or reject in part, or in whole, any bid.
3. All quotations are governed by the *West Virginia Code* and the *Legislative Rules* of the Purchasing Division.
4. Prior to any award, the apparent successful vendor must be properly registered with the Purchasing Division and have paid the required \$125.00 registration fee.
5. All services performed or goods delivered under State Purchase Orders/Contracts are to be continued for the term of the Purchase Order/Contract, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise available for these services or goods, this Purchase Order/Contract becomes void and of no effect after June 30.
6. Payment may only be made after the delivery and acceptance of goods or services.
7. Interest may be paid for late payment in accordance with the *West Virginia Code*.
8. Vendor preference will be granted upon written request in accordance with the *West Virginia Code*.
9. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
10. The Director of Purchasing may cancel any Purchase Order/Contract upon 30 days written notice to the seller.
11. The laws of the State of West Virginia and the *Legislative Rules* of the Purchasing Division shall govern all rights and duties under the Contract, including without limitation the validity of this Purchase Order/Contract.
12. Any reference to automatic renewal is hereby deleted. The Contract may be renewed only upon mutual written agreement of the parties.
13. **BANKRUPTCY:** In the event the vendor/contractor files for bankruptcy protection, this Contract may be deemed null and void, and terminated without further order.
14. **HIPAA Business Associate Addendum** - The West Virginia State Government HIPAA Business Associate Addendum (BAA), approved by the Attorney General, and available online at the Purchasing Division's web site (<http://www.state.wv.us/admin/purchase/vrc/hipaa.htm>) 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.

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**INSTRUCTIONS TO BIDDERS**

1. Use the quotation forms provided by the Purchasing Division.
2. **SPECIFICATIONS:** Items offered must be in compliance with the specifications. Any deviation from the specifications must be clearly indicated by the bidder. Alternates offered by the bidder as **EQUAL** to the specifications must be clearly defined. A bidder offering an alternate should attach complete specifications and literature to the bid. The Purchasing Division may waive minor deviations to specifications.
3. Complete all sections of the quotation form.
4. Unit prices shall prevail in cases of discrepancy.
5. All quotations are considered F.O.B. destination unless alternate shipping terms are clearly identified in the quotation.
6. **BID SUBMISSION:** All quotations must be delivered by the bidder to the office listed below prior to the date and time of the bid opening. Failure of the bidder to deliver the quotations on time will result in bid disqualifications.

**SIGNED BID TO:**

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



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**304-558-2402**

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**SILVER SPRING MD 20910**

**DIVISION OF HIGHWAYS**  
**EQUIPMENT DIVISION**  
**ROUTE 33**  
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BID OPENING DATE: **05/07/2008** BID OPENING TIME **01:30PM**

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
<p><b>LIFE OF CONTRACT: THIS CONTRACT BECOMES EFFECTIVE ON ..... AND EXTENDS FOR A PERIOD OF ONE (1) YEAR OR UNTIL SUCH "REASONABLE TIME" THEREAFTER AS IS NECESSARY TO OBTAIN A NEW CONTRACT OR RENEW THE ORIGINAL CONTRACT. THE "REASONABLE TIME" PERIOD SHALL NOT EXCEED TWELVE (12) MONTHS. DURING THIS "REASONABLE TIME" THE VENDOR MAY TERMINATE THIS CONTRACT FOR ANY REASON UPON GIVING THE DIRECTOR OF PURCHASING THIRTY (30) DAYS WRITTEN NOTICE.</b></p> <p><b>UNLESS SPECIFIC PROVISIONS ARE STIPULATED IN THIS CONTRACT DOCUMENT, THE TERMS, CONDITIONS, AND PRICING SET HEREIN ARE FIRM FOR THE LIFE OF THE CONTRACT.</b></p> <p><b>RENEWAL: THIS CONTRACT MAY BE RENEWED UPON THE MUTUAL WRITTEN CONSENT OF THE SPENDING UNIT AND VENDOR, SUBMITTED TO THE DIRECTOR OF PURCHASING THIRTY (30) DAYS PRIOR TO THE EXPIRATION DATE. SUCH RENEWAL SHALL BE IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE ORIGINAL CONTRACT AND SHALL BE LIMITED TO TWO (2) ONE (1) YEAR PERIODS.</b></p> <p><b>CANCELLATION: THE DIRECTOR OF PURCHASING RESERVES THE RIGHT TO CANCEL THIS CONTRACT IMMEDIATELY UPON WRITTEN NOTICE TO THE VENDOR IF THE COMMODITIES AND/OR SERVICES SUPPLIED ARE OF AN INFERIOR QUALITY OR DO NOT CONFORM WITH THE SPECIFICATIONS OF THE BID AND CONTRACT HEREIN.</b></p> <p><b>OPEN MARKET CLAUSE: THE DIRECTOR OF PURCHASING MAY AUTHORIZE A SPENDING UNIT TO PURCHASE ON THE OPEN MARKET, WITHOUT THE FILING OF A REQUISITION OR COST ESTIMATE, ITEMS SPECIFIED ON THIS CONTRACT FOR IMMEDIATE DELIVERY IN EMERGENCIES DUE TO UNFORESEEN CAUSES (INCLUDING BUT NOT LIMITED TO DELAYS IN TRANSPORTATION OR AN UNANTICIPATED INCREASE IN THE VOLUME OF WORK).</b></p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE *[Signature]* TELEPHONE **800-423-8903** DATE **5/27/08**

TITLE **Sales Manager** FEIN **521190648** ADDRESS CHANGES TO BE NOTED ABOVE

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



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04/02/2008				

BID OPENING DATE: 05/07/2008 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
<p>QUANTITIES: QUANTITIES LISTED IN THE REQUISITION ARE APPROXIMATIONS ONLY, BASED ON ESTIMATES SUPPLIES BY THE STATE SPENDING UNIT. IT IS UNDERSTOOD AND AGREED THAT THE CONTRACT SHALL COVER THE QUANTITIES ACTUALLY ORDERED FOR DELIVERY DURING THE TERM OF CONTRACT, WHETHER MORE OR LESS THAN THE QUANTITIES SHOWN.</p> <p>ORDERING PROCEDURE: SPENDING UNIT(S) SHALL ISSUE A WRITTEN EQUIPMENT CONTRACT ORDER (FORM NUMBER WV-35) FOR COMMODITIES COVERED BY THIS CONTRACT. THE ORIGINAL WV-35 MUST BE SENT TO THE PURCHASING DIVISION OF THE DEPARTMENT OF ADMINISTRATION. AFTER APPROVAL AND ENCUMBRANCE, ONE COPY OF THE PURCHASE ORDER WILL BE RETURNED TO THE SPENDING UNIT AND ONE COPY FORWARDED TO THE VENDOR AS AUTHORIZATION FOR SHIPMENT. NO ORDER IS VALID UNLESS APPROVED AND ENCUMBERED BY THE PURCHASING DIVISION.</p> <p>BANKRUPTCY: IN THE EVENT THE VENDOR/CONTRACTOR FILES FOR BANKRUPTCY PROTECTION, THIS CONTRACT IS AUTOMATICALLY NULL AND VOID, AND IS TERMINATED WITHOUT FURTHER ORDER.</p> <p>REV. 9/98</p> <p>EXHIBIT 6</p> <p>PRICE ADJUSTMENT PROVISION:          THE STATE OF WEST VIRGINIA WILL CONSIDER BIDS THAT CONTAIN PROVISIONS FOR PRICE ADJUSTMENTS PRIOR TO THE ORIGINAL EXPIRATION OF THE CONTRACT, PROVIDED THAT SUCH PRICE ADJUSTMENT COVERS BOTH UPWARD AND DOWNWARD MOVEMENT OF THE COMMODITY PRICE, AND THAT ADJUSTMENT IS BASED ON THE "PASS THROUGH" INCREASE OR DECREASE OF</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE	TELEPHONE	DATE
<i>[Signature]</i>	800-423-8903	5/27/08
TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE
Sales Manager	521190648	

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<p>RAW MATERIALS AND/OR LABOR, WHICH MAKE UP ALL OR A SUBSTANTIAL PART OF A PRODUCT. ADJUSTMENTS ARE TO BE BASED UPON AN ACTUAL DOLLAR FIGURE, NOT A PERCENTAGE. ALL PRICE ADJUSTMENT REQUESTS MUST BE SUBSTANTIATED IN A MANNER ACCEPTABLE TO THE DIRECTOR PURCHASING, E.G. GOVERNMENTAL BENCH MARKS, GENERAL MARKET INCREASE, PUBLISHED PRICE LISTS. SUCH REQUESTS FOR AND INCREASE SHOULD BE RECEIVED IN WRITING BY THE DIRECTOR OF PURCHASING AT LEAST 30 DAYS IN ADVANCE OF THE EFFECTIVE DATE OF THE INCREASE. ANY TIME THE VENDOR REQUESTS A PRICE ADJUSTMENT, THE PURCHASING DIVISION MAY EITHER ACCEPT THE PRICE ADJUSTMENT AND AMEND THE CONTRACT ACCORDINGLY OR REJECT THE ADJUSTMENT IN ITS ENTIRETY AND CANCEL THE CONTRACT.</p> <p>EXHIBIT 4</p> <p>LOCAL GOVERNMENT BODIES: UNLESS THE VENDOR INDICATES IN THE BID HIS REFUSAL TO EXTEND THE PRICES, TERMS, AND CONDITIONS OF THE BID TO COUNTY, SCHOOL, MUNICIPAL AND OTHER LOCAL GOVERNMENT BODIES, THE BID SHALL EXTEND TO POLITICAL SUBDIVISIONS OF THE STATE OF WEST VIRGINIA. IF THE VENDOR DOES NOT WISH TO EXTEND THE PRICES, TERMS, AND CONDITIONS OF THE BID TO ALL POLITICAL SUBDIVISIONS OF THE STATE, THE VENDOR MUST CLEARLY INDICATE SUCH REFUSAL IN HIS BID. SUCH REFUSAL SHALL NOT PREJUDICE THE AWARD OF THIS CONTRACT IN ANY MANNER.</p> <p>REV. 3/88</p> <p>EXHIBIT 10</p> <p style="text-align: right;">REQUISITION NO.: 708EC012</p>						

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SIGNATURE <i>[Signature]</i>	TELEPHONE 800.423-8903	DATE 5/27/08	
TITLE <i>Sales Manager</i>	FEIN 521190648	ADDRESS CHANGES TO BE NOTED ABOVE	

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PAGE
5

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VENDOR

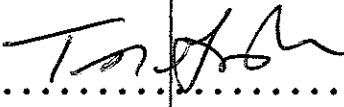
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LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
ADDENDUM ACKNOWLEDGEMENT						
I HEREBY ACKNOWLEDGE RECEIPT OF THE FOLLOWING CHECKED ADDENDUM(S) AND HAVE MADE THE NECESSARY REVISIONS TO MY PROPOSAL, PLANS AND/OR SPECIFICATION, ETC.						
ADDENDUM NO.'S:						
NO. 1 ... <i>TOP</i> ...						
NO. 2 ... <i>2</i> ...						
NO. 3 ... <i>3</i> ...						
NO. 4 .....						
NO. 5 .....						
I UNDERSTAND THAT FAILURE TO CONFIRM THE RECEIPT OF THE ADDENDUM(S) MAY BE CAUSE FOR REJECTION OF BIDS.						
VENDOR MUST CLEARLY 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.						
 ..... SIGNATURE <i>Atlantic Machinery Inc.</i> ..... COMPANY						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS			
SIGNATURE <i>Tom Johnson</i>	TELEPHONE 800-423-8903	DATE 5/27/08	
TITLE <i>Sales Manager</i>	FEIN 521190648	ADDRESS CHANGES TO BE NOTED ABOVE	

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**6**

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**MICHAEL AUSTIN**  
**304-558-2402**

SILVER SPRING

\*712113101 800-423-8903  
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				..... 5/27/08 ..... DATE		

REV. 11/96

**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).

A. APPLICATION IS MADE FOR 2.5% 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 HEAD-QUARTERS OR PRINCIPAL PLACE OF BUSINESS CONTINUOUSLY I 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 CORPORATION NONRESIDENT VENDOR WHICH HAS AN AFFILIATE OR SUBSIDIARY WHICH EMPLOYS A MINIMUM OF ONE HUNDRED STATE RESIDENTS AND WHICH

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>T. Smith</i>	TELEPHONE <b>800-423-8903</b>	DATE <b>5/27/08</b>
TITLE <i>Sales Manager</i>	FEIN <b>521190648</b>	ADDRESS CHANGES TO BE NOTED ABOVE

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MAY 2008

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<p>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.</p> <p>B. APPLICATION IS MADE FOR 2.5% PREFERENCE FOR THE REASON CHECKED:</p> <p>( ) 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;</p> <p>OR</p> <p>( ) 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 BIDDERS' 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.</p> <p>BIDDER UNDERSTANDS IF THE SECRETARY OF TAX &amp; 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) RESCIND THE CONTRACT OR PURCHASE ORDER ISSUED; 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</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>T. J. ...</i>	TELEPHONE 800-423-8903	DATE 5/21/08
TITLE Sales Manager	FEIN 521190648	ADDRESS CHANGES TO BE NOTED ABOVE

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





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<p>CONTRACT OR PURCHASE ORDER.</p> <p>BY SUBMISSION OF THIS CERTIFICATE, BIDDER AGREES TO DISCLOSE ANY REASONABLY REQUESTED INFORMATION TO THE PURCHASING DIVISION AND AUTHORIZES THE DEPARTMENT OF TAX AND 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.</p> <p>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.</p> <p>BIDDER: <u>Atlantic Machinery Inc</u></p> <p>DATE: <u>5/27/08</u></p> <p>SIGNED: <u>[Signature]</u></p> <p>TITLE: <u>Sales Manager</u></p> <p>* CHECK ANY COMBINATION OF PREFERENCE CONSIDERATION(S) IN EITHER "A" OR "B", OR BOTH "A" AND "B" WHICH YOU ARE ENTITLED TO RECEIVE. YOU MAY REQUEST UP TO THE MAXIMUM 5% PREFERENCE FOR BOTH "A" AND "B".</p>						

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SIGNATURE	TELEPHONE	DATE	
<u>[Signature]</u>	800-423-8903	5/27/08	
TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE	
<u>Sales Manager</u>	521190648		

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PROPERTY

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SHIP TO

DIVISION OF HIGHWAYS  
 EQUIPMENT DIVISION  
 ROUTE 33  
 BRUSHY FORK ROAD  
 BUCKHANNON, WV  
 26201 304-472-1750

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
04/02/2008				

BID OPENING DATE: 05/07/2008 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
<p>(REV. 12/00)</p> <p><b>NOTICE</b></p> <p><b>A SIGNED BID MUST BE SUBMITTED TO:</b></p> <p>DEPARTMENT OF ADMINISTRATION            PURCHASING DIVISION            BUILDING 15            2019 WASHINGTON STREET, EAST            CHARLESTON, WV 25305-0130</p> <p>THE BID SHOULD CONTAIN THIS INFORMATION ON THE FACE OF THE ENVELOPE OR THE BID MAY NOT BE CONSIDERED:</p> <p>SEALED BID</p> <p>BUYER: 33</p> <p>RFQ. NO.: 708EC012</p> <p>BID OPENING DATE: 05/07/2008</p> <p>BID OPENING TIME: 1:30 PM</p> <p>PLEASE PROVIDE A FAX NUMBER IN CASE IT IS NECESSARY TO CONTACT YOU REGARDING YOUR BID:            301-585-7681</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS			
SIGNATURE <i>Ta...</i>	TELEPHONE 800-423-8903	DATE 5/27/08	
TITLE <i>Sales Manager</i>	FEIN 521190648	ADDRESS CHANGES TO BE NOTED ABOVE	

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



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

# Request for Quotation

RFQ NUMBER  
**708EC012**

PAGE  
**10**

ADDRESS CORRESPONDENCE TO ATTENTION OF:  
**MICHAEL AUSTIN**  
**304-558-2402**

VENDOR

\*712113101      800-423-8903  
**ATLANTIC MACHINERY INC**  
**2702 GARFIELD AVENUE**  
  
**SILVER SPRING MD 20910**

BUYER

**DIVISION OF HIGHWAYS**  
**EQUIPMENT DIVISION**  
**ROUTE 33**  
**BRUSHY FORK ROAD**  
**BUCKHANNON, WV**  
**26201**      **304-472-1750**

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
<b>04/02/2008</b>				

BID OPENING DATE: **05/07/2008**      BID OPENING TIME **01:30PM**

LINE	QUANTITY	UOP	CAT NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
CONTACT PERSON (PLEASE PRINT CLEARLY):						
----- <i>Trevor Cadner, III</i> -----						
***** THIS IS THE END OF RFQ 708EC012 ***** TOTAL:						<b>\$ 176,937.00</b>

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>[Signature]</i>	TELEPHONE <b>800-423-8903</b>	DATE <b>5/27/08</b>
TITLE <i>Sales Manager</i>	FEIN <b>521190648</b>	ADDRESS CHANGES TO BE NOTED ABOVE

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

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
EQUIPMENT DIVISION

PROCUREMENT SPECIFICATIONS  
NO. 044-1-B

OPEN END CONTRACT  
TRUCK MOUNTED REGENERATIVE AIR STREET SWEEPER

1.0 PURPOSE

It is the purpose of these specifications to describe a Truck Mounted 6-Wheel Regenerative Air Street Sweeper (hereinafter referred to as a "street sweeper" or a "unit") to be purchased for use by the West Virginia Division of Highways (DOH) on an Open End Contract basis.

2.0 BIDDING PROCEDURES

**The current purchasing procedures regarding bidding as established by the Department of Administration, Purchasing Division, shall apply.** Failure to submit the "Request for Quotation" forms, complete in its entirety and according to directions indicated, may subject the bidder to disqualification. **Each bid submitted shall also be accompanied by a Bidder's Evaluation Report completed in detail.** Addendums in order, along with exception sheets, should be with Bidder's Evaluation Report. **FAILURE TO SUBMIT THE BIDDER'S EVALUATION REPORT, COMPLETE IN ITS ENTIRETY, MAY RESULT IN AUTOMATIC DISQUALIFICATION.**

3.0 SPECIFICATIONS

The specifications named herein, mandatory and non-mandatory, establish the acceptable level of quality only and are not intended to reflect a preference or favor any particular brand or vendor.

3.1 EXCEPTIONS TO NON-MANDATORY SPECIFICATIONS

Exception to a non-mandatory unit specification may be made by the bidder, providing the exception is not available from the manufacturer. **Any such exception must be noted on the bidder's evaluation report and should be accompanied by supporting documentation/literature from the manufacturer. Any exception must be indicated on a separate attachment to the bidder's evaluation report and labeled as "Exception to Specifications".** The state reserves the right to determine whether the stated exception does or does not reduce the quality and performance of the unit. Failure to provide information for any exceptions may be grounds for rejection of the bid. The state reserves the right to waive minor irregularities in bids or specifications in accordance with §148-1-4(f) of the WV Legislative Rules and Regulations.

### 3.2 MANDATORY SPECIFICATIONS

**All specifications preceded by "shall, will, and/or must" or are stated as a "minimum and/or maximum" are mandatory. Any bid failing to meet any mandatory item shall be immediately disqualified.** Failure to respond in the appropriate evaluation section may also be grounds for immediate disqualification at the discretion of the State.

A mandatory pre-bid conference is scheduled for this equipment purchase as stated in the RFQ. Vendors having products with variations or exceptions in specified mandatory items are expected to address any such variations or exceptions during the pre-bid conference. **The State shall review and consider any such variation or exception, and may at its sole discretion, issue an addendum to change mandatory specifications deemed to be in the State's best interest. Bids from any vendor failing to attend the mandatory pre-bid shall be disqualified. Bids containing any variation or exception to a mandatory specification that was not addressed during the pre-bid conference and accepted by the issuance of an Addendum shall be disqualified.**

### 4.0 REPRESENTATIVE UNIT FOR TEST

**The successful vendor must (if specified) provide DOH one (1) completed representative unit to be observed and evaluated on each order to insure compliance with specification. If requested, the time period for testing and evaluation shall be seven (7) working days following receipt of the unit. DOH will incur no obligation for deterioration of surfaces, finishes, seals, and mechanical or electrical parts on the unit resulting from operation and testing within the limits of these specifications; nor will DOH incur obligation for damage to the unit resulting from failure to meet specifications when due care and attention is given by DOH and testing is done within the limits of these specifications. Failure of the pilot unit to satisfactorily meet specifications as bid shall be cause for cancellation of the purchase order, and return of the delivered unit along with all associated equipment to the vendor at the vendor's expense.**

### 4.1 CONDITION OF UNIT(S) UPON DELIVERY

**All units must arrive at the prescribed delivery point having been completely preserviced with oil, lubricants, and coolant.** All prescribed precautions pertaining to first operations and break-in of the unit are to be posted conspicuously on the unit for ready observance by the operator.

### 4.2 DELIVERY

Delivery point of the completely assembled representative unit will be the DOH, Equipment Division, Route 33 at Brushy Fork Road, Buckhannon, West Virginia (26201).

The vendor is responsible for guaranteeing delivery of the completed units within the time specified and agreed to by the State. Delivery is preferred within 90 days after receipt of purchase agreement. The vendor is responsible for establishing and coordinating delivery terms with allied manufacturers or suppliers. **Delivery terms shall**

be stated in the bid and the State reserves the right to accept or negotiate such terms. Failure to reach an agreement may result in rejection of the bid. **The successful bidder shall provide their manufacturer's confirmation of the order to the WVDOH contact person within seven (7) working days after receiving the approved purchase order.**

**A completed pilot model for inspection must be provided within 60 calendar days after receipt of the purchase agreement by the successful vendor.**

Delivery is an integral part of this specification and failure to comply will be cause to initiate a D.O.T. Administrative Form WV-82, Vendor Performance Form. The WV-82 Form will provide a means of officially notifying the Purchasing Division and the vendor of unsatisfactory performance; such as late deliveries, poor service, inadequate parts supplies, etc.

The decision to initiate subject Form will be at the sole discretion of the D.O.H. Commissioner's established Equipment Review Board.

Issuance of the WV-82 Vendor Complaint Form on unsatisfactory delivery against any vendor will be cause to refuse to consider similar items from those vendors on future Request For Quotations.

(NOTE: Delivery time could be altered due to labor strikes, severe inclement weather conditions, etc.)

## 5.0 AWARD CRITERIA

5.1 DOH will recommend the award in accordance with the RFQ evaluation criteria described in the requisition. **The award shall be made to the lowest unit cost vendor that meets or exceeds the specifications.**

DOH reserves the right to place multiple orders in any quantity.

## 6.0 SPECIFICATIONS AND GUIDELINES - GENERAL

### 6.1 IDENTIFICATION OF THE UNIT BEING PROPOSED

**The bidder must identify the unit by manufacturer, model, series, and year of manufacture, in the bid to enable identification by DOH in the manufacturer's specifications of the proposed unit.** The bidder will submit complete descriptive literature of the proposed unit, to establish that the bid is the manufacturer's most current model, including latest engineering improvements, which have been, or will imminently be, regularly advertised and sold on the open market. The unit specified herein and offered to be manufactured after January 1, 2008 and be clearly identified and marked with date of manufacture.

### 6.2 OPERATING AND SERVICE MANUALS AND PARTS LISTS

**An operator's manual must be included with each unit upon delivery. A "line sheet" (if applicable) and Equipment Preventative Maintenance Questionnaire (as shown in X6.2 of the Bidder's Evaluation Report) must be with pilot unit upon**

**delivery.** In addition, there must be 12 service, shop, or maintenance manuals; ten (10) to be distributed to the Districts and two (2) for the Equipment Division. Also, there must be 14 parts manuals; ten (10) to be distributed to the Districts and four (4) for Equipment Division use. CD ROM is preferred in lieu of parts or service manuals.

\* **NOTE: MANUALS SHALL BE DELIVERED UPON COMPLETION OF DELIVERY OF TOTAL UNITS. FAILURE TO DO SO WILL DELAY PAYMENT.**

### 6.3 TRAINING:

Manufacturers and/or dealers will be required to stage a thorough seminar on the subjects of Preventative Maintenance, Operator and Mechanic Training. **In order to keep the operators and mechanics updated, the successful vendor shall conduct training with each purchase order against this open end contract.** Training is preferred within 2 working days after delivery of the pilot unit on the individual purchase order.

**Manufacturers and/or dealers shall be required to furnish the Training Academy with one (1) Operator's Manual to be shipped direct to WVDOH Training Academy, Post Office Box 610, Buckhannon, West Virginia 26201 prior to delivery of the pilot.**

The seminar to be held at the W. Va. Division of Highways, Equipment Division, Buckhannon, West Virginia.

### 6.4 PREVENTIVE MAINTENANCE AND OPERATOR PROCEDURES:

**Manufacturers and/or dealers will be required to submit to the Equipment Division, in addition to the operating and service manuals, booklets and pamphlets explaining the Preventive Maintenance and Operator Procedures to be used by the operators of this equipment, and must include such things as daily prestart inspection procedure, service schedule, and routine maintenance required, safety precautions, etc.**

**The successful vendor shall furnish all training aids; i.e., videos, projectors, etc. required in conducting the training.**

### 6.5 WARRANTY AND SERVICE POLICY

The Manufacturers warranty or service policy is to apply to the unit. Such warranty or service policy is to be recognized at any authorized unit dealer, representing manufacturer of proposed unit throughout the State of West Virginia. The applicable warranty or service policy will not be contingent upon obtaining routine service, lubrication, and servicing of the unit from factory authorized agencies. It will be the responsibility of the bidder to have available labor to repair or replace any defective replacement parts, components and materials, and to have available those replacement parts, components, and/or materials found to be defective during the terms of the warranty period. The bidder should state the labor rates, locations where parts will be stocked, availability of parts, and discounts offered for parts, when terms of the warranty offer a pro-rated cost for parts and labor. In addition, the successful bidder should offer field work to repair or replace defective parts, components, and materials found to be defective during the terms of the warranty and should provide mechanic's travel rates,

mileage charges, field mechanic rates, and any surcharge for miscellaneous items, if applicable, for field work during the warranty period. Submit to Division of Highways any technical or engineering improvements during the term of the warranty. **The unit must be accompanied upon delivery by the unit's manufacturer's executed warranty or service policy.**

**A mandatory minimum two (2) year bumper to bumper basic parts and labor warranty is required for this unit.**

**THE "WARRANTY AND SERVICE POLICY QUESTIONNAIRE" ATTACHED IN THE BIDDER'S EVALUATION REPORT MUST BE COMPLETED IN ITS ENTIRETY BY THE SUCCESSFUL BIDDER OR MANUFACTURER PRIOR TO DELIVERY OF THE PILOT MODEL. (SEE SECTION X6.5 OF BIDDER'S EVALUATION REPORT).**

#### 6.6 EVALUATION COMMITTEE REQUIREMENTS

Detailed component specifications, product literature, component models, required for specification compliance determination by the Evaluation Committee should be provided with each bid. Any information supplied that is contrary to/or conflicting with the specifications and/or attached Bidders Evaluation Report may be sufficient cause for rejection of bid.

#### 6.7 UNSPECIFIED ACCESSORIES & FEATURES

**All parts, equipment, accessories, material, design and performance characteristics not specified herein, but which are necessary to provide a complete unit, must be furnished with each unit and required to conform to strength, quality of material, and quality of workmanship to those which are advertised and provided to the market in general by the unit industry.**

**All parts and accessories advertised and regularly supplied as standard shall be included, except those which would represent duplication of these specified, and except those which, by specification, are not to be furnished. All standard safety features, required by Federal and State Law, shall be included.**

#### 7.0 SPECIFICATIONS OF THE QUOTED UNIT ARE AS FOLLOWS:

##### SPECIFICATIONS – CAB AND CHASSIS

7.1 GVW plate rating: 31,000 - 33,000 Lbs.

7.2 Cab to Axle dimensions: The distance from centerline of the rear axle to the rear of the sweeper without the wandering hose shall not exceed 52 inches

7.3 Wheelbase: Shall not exceed 160 inches



- 7.4 Frame: The manufacturer shall provide a frame that meets or exceeds all Federal requirements for GVWR.**
- 7.4.1 Frame steel: 80,000 PSI minimum**
- 7.5 Cab: Maximum visibility, forward line of sight from the chassis front bumper to the point on the ground visible to the operator shall not exceed 14 feet for an ASE 98th percentile size operator.**
- 7.5.1 Steering shall be full power with dual operator controls, steering system shall have two (2) independent steering columns connected by a cross shaft**
- 7.5.2 Interior of cab shall have acoustical insulation for low operating noise, automotive type trim, and center sweeper console**
- 7.5.3 Unit to be equipped with cruise control feature (fully electronic)
- 7.5.4 Cab door locks, both doors (with key only)
- 7.5.5 Dual Sun visors
- 7.5.6 Cab shall have auxiliary 12v power outlet**
- 7.5.7 Seats: Dual air ride bostrom cloth covered seats fully adjustable
- 7.5.7.1 Seat belts: 3 point lap and shoulder type
- 7.5.8 Floor Mats: Rubber floor mats throughout cab area with non-absorbent backing under the mats
- 7.5.9 Turn Signals: Manufacturers heavy duty, self cancelling type with hazard warning Switch
- 7.5.10 AC, Heater, and Defroster: Fresh air type, heaviest duty
- 7.5.11 Cab shall have full flow through ventilation for optional temperature control and operator comfort**
- 7.5.12 Windshield Wipers and Washers: 2 speed with washer with intermittent feature at both driving positions. **Windshield washer reservoir capacity one (1) gallon minimum**
- 7.5.13 Instruments: Manufacturer's gauges both left and right operation with visual audible, and programmable warning to inform driver when operating conditions are exceeded shall include:**
- 7.5.13.1 Chassis left and right side operator instrument panel shall be chassis OEM, full vision illuminated with tachometer, speedometer, odometer, trip odometer, fuel gauge, water temperature gauge, air pressure gauge, volt gauge, oil pressure, and transmission temperature gauges**

- 7.5.13.2 Chassis engine instruments shall include warning light and chime for low oil pressure and high coolant temperature, low oil pressure and low air pressure to warn the operator of a potential problem before any damage to the engine occurs.**
- 7.5.13.2.1 Console shall have left/right primary drivers switch**
- 7.5.13.3 Chassis engine shall have hourmeter**
- 7.5.14 Rearview Mirrors: Dual, West Coast Type, with 8 inch convex spot mirror for easy viewing of the side broom during sweeping, of rust resistant material and mounting brackets
- 7.5.14.1 Mirrors: Fender mounted stainless steel 8 inch convex mirrors shall be provided to increase operator visibility.**
- 7.5.15 Glass: To be manufacturers tinted safety glass; front side, and rear. **Side glass shall have defogger**
- 7.5.16 Radio: Manufacturers standard AM/FM stereo with seek and scan features
- 7.5.17 Air conditioning: Manufacturers fresh air type heaviest duty (Ref. 7.5.10)
- 7.5.18 Front mudflaps to be manufacturers standard for unit bid
- 7.5.19 Emergency triangle warning kit, with hold down (KD 610-464S, KD Lamp Co. or equal) stowed (fastened) in the cab. (Check with DOH before mounting)
- 7.5.20 Accessories not indicated above but are included in the manufacturer's standard cab shall be provided**
- 7.5.21 Successful vendor shall provide WVDOH with complete list of all filters required for normal maintenance on proposed unit**
- 7.6 Engine:
- 7.6.1 Diesel Engine: Shall be 175 HP minimum @ approximately 2200 RPM**
- 7.6.2 Engine shall be equipped with a dual stage dry-type air cleaner, spin on fuel filter, and full flow oil filter**
- 7.6.3 In engine block heater 1250 W, (approximate)
- 7.6.4 A single exhaust pipe with muffler that will meet all Federal noise abatement requirements. Heat shield on vertical exhaust**
- 7.7 Cooling System:
- 7.7.1 The cooling system to be capable of maintaining engine temperature within the manufacturer's recommended range during continuous operation

- 7.7.2 Radiator fan shall be viscous drive type
- 7.7.3 The system shall be filled with extended life OAT (organic acid technology) permanent type antifreeze rated to a -30° F minimum
- 7.8 Fuel Tanks:
  - 7.8.1 Capacity: 1 – 50 gallon fuel tank shall be shared by both engines and shall be easily accessible without raising or shifting any components (Inside cab fuel gauge shall be supplied, sight tube not acceptable)
- 7.9 Electrical System:
  - 7.9.1 Type: 12 volt negative ground system with manufacturer's radio interference Suppression
  - 7.9.2 Batteries:
    - 7.9.2.1 Shall be in an enclosed accessible environment for ease of service
    - 7.9.2.2 Cold Crank AMPS: 1500 AMPS minimum
  - 7.9.3 Alternator Capacity: 130 AMPS minimum brushless with internal regulator
  - 7.9.4 Lighting: Shall conform to the West Virginia Motor Vehicle Code
- 7.10 Transmission: Allison Series 2500 (or equal) 5-speed with overdrive
- 7.11 Rear Axle: Shall be two (2) 8 speed with ratios of 5.29 to 5.86/7.21 to 8.17:1 for proper sweeping and transport speeds
  - 7.11.1 Rated Capacity: 21,000 Lbs.
  - 7.11.2 Rear Spring Capacity: 23,000 Lbs. with multi leaf auxiliary springs
  - 7.11.3 Rear axle differential, transmission, and front wheel lubrication reservoirs shall be filled with synthetic type lubrication and provided with magnetic drain plugs where applicable
  - 7.11.4 Unit to be equipped with manufacturers heavy duty rear shock absorbers (if required)
- 7.12 Front Axle:
  - 7.12.1 Capacity: 12,000 lbs. minimum I-beam type
  - 7.12.2 Front Spring Capacity: 12,000 lbs.
  - 7.12.3 Manufacturers heavy duty shock absorbers/and stabilizer bar

- 7.13 Brakes should be:
- 7.13.1 Type: Full air with manufacturers ABS through a 4 channel full vehicle wheel control system in compliance with the most current FMVSS requirements
- 7.13.2 Compressor: 13.2 CFM minimum**
- 7.13.3 Parking Brake: Spring set, air release actuating rear axle service brakes. Instrument panel control.
- 7.13.4 Air dryer with heater Bendix Westinghouse AD-9 or equal
- 7.13.5 Manufacturer's standard air tanks for service brakes; auxiliary tank for parking brake
- 7.13.6 Low air pressure warning light and buzzer
- 7.13.7 Brakes shall meet or exceed all current Federal and State FMVSS requirements.**
- 7.13.8 Brake dust covers to be installed on all wheels
- 7.14 Tires and Wheels for safety and to allow emergency interchange of tires at a job site/ front and rear (tires/rims) shall be interchangeable**
- 7.14.1 Wheel, Front and Rear: 22.5 x 8.25 10 hole hub piloted steel disc type, to accommodate specified tire size
- 7.14.2 Tires:
- 7.14.2.1 Front and Rear: 11R22.5G; 14 ply. The rear axle shall have dual tires for load capacity (singles not acceptable)**
- 7.15 Unit shall include all other features considered as manufacturers standard equipment if not specifically addressed above**
- 7.16 Paint: Manufacturers standard
- 7.16.1 The Department reserves the right to view larger paint samples after award of contract.
- 7.16.2 In order to test the adhesive quality of the paint, the DOH may, at its option, require that the vendor measure adhesion by the criteria set forth in ASTM D3359-74, Method B. A rating of less than 4 on this test would be deemed unacceptable.
- 7.17 Vendor must certify that the unit offered will meet or exceed the "Occupational Safety and Health Act of 1970" and subsequent amendments.**
- 7.18 Advertising: No visible decals or nameplates or painted on names representing the manufacturer or model number or trademark should appear on the exterior of the unit. Logos created through the stamping or casting process of manufacture are acceptable.

7.19 Preventive Maintenance and Operator's Training School

**7.19.1 Manufacturers and/or dealers will be required to stage a thorough seminar on the subjects Preventive Maintenance and Operator Training. The seminar should be held at the Equipment Division, Buckhannon, W. Va.**

7.19.2 In addition to the operating and service manuals, booklets and pamphlets explaining the Preventive Maintenance and Operator Training procedures to be used by the operators of this equipment, include such things as daily pre-start, inspection procedure, service schedule and routine maintenance required, safety precautions, etc.

**7.19.3 The successful vendor shall conduct training of the completed unit.**

**Bidder shall attach a copy of the proposed program with his bid, state the time required to perform the program and briefly describe his program.**

8.0 SPECIFICATIONS OF SWEEPER MODULE

New Regenerative Air Street Sweeper having a 6-wheeled, truck chassis with dual diesel engines, sweeper controls and switches, 8.0 cubic yard hopper, automatic transmission, 220 gallon water tank, left and right side broom with variable down pressure controlled from the cab.

8.1 Water Tank:

**8.1.1 Tank capacity shall be 220 gallon of water minimum**

8.2 Sweeper Engine:

**8.2.1 Diesel – Must be Tier 3 Emission compliant, 4 cylinder turbocharged, 276 CID John Deere 4045T or equal**

**8.2.2 Horsepower: Minimum 115 HP @ 2500 RPM, minimum torque 291 lb. ft. @ 1400 RPM**

8.2.3 Engine should be wet sleeved

**8.2.4 Unit shall have dual element dry type air cleaner with restriction indicator**

**8.2.5 Engine coolant shall be extended life OAT (organic acid technology) permanent type antifreeze protected to -30° F**

**8.2.6 Sweeper engine shall drive the blower fan by a heavy duty five (5) "V" groove power belt**

**8.2.7 Sweeper engine shall be in an enclosure for sound attenuation, enclosure to include doors for access to serviceable items or tilt hopper**

8.3 Blower:

**8.3.1 Blower shall be rated at a minimum 17,000 CFM by an independent test facility (documentation shall be attached)**

- 8.3.2 **Operation speed of the fan shall be minimum 2,000 RPM**
- 8.3.3 **Blower shall be of the closed or open face turbine type, minimum nine (9) vans, 31 3/8 inch diameter**
- 8.3.4 Blower to be constructed of abrasion resistant steel
- 8.3.5 Blower housing to be constructed of 10 gauge steel and lined with Linafex or 3/8 inch corded rubber shall not be part of the hopper
- 8.3.6 **Blower housing shall have an inspection door (air exhaust opening)**
- 8.3.7 Blower to be mounted and supported on both sides by heavy duty greasable bearing
- 8.3.8 **Bearings shall be greasable from ground level, without tilting the hopper**
- 8.4 Pick Up Head:
  - 8.4.1 **The pick up head shall be spring balanced**
  - 8.4.2 Pick up head to be all steel construction with upper and lower chambers
  - 8.4.3 **Minimum 87 inches wide**
  - 8.4.4 **Minimum 30 inches high**
  - 8.4.5 **Minimum total area 2610 square inches**
  - 8.4.6 **Minimum 14 inch diameter pressure hose between blower outlet with the pickup head (urethane transition hose not acceptable)**
  - 8.4.7 **Minimum 12 3/4 inch diameter suction hose with quick disconnect**
  - 8.4.8 **In cab electric operated pressure relief valve/vacuum enhancer/leaf bleeder for optimum leaf and light debris sweeping, shall be supplied on pressure side**
  - 8.4.9 **Front and rear debris curtains shall be removable without removing the pick up head from the unit**
  - 8.4.10 Sweeping Path:
    - 8.4.10.1 **Pick up head only – minimum 87 inches**
    - 8.4.10.2 **One (1) side broom and pick up head – minimum 110 inches**
    - 8.4.10.3 **Two (2) side broom and pick up head – minimum 142 inches**
  - 8.4.11 **Pick up head shall be equipped with side mounted adjustable steel runners with carbide inserts. Minimum width 1 1/8 inches**

- 8.4.12 **Raise and lower of pick up head shall be done hydraulically by a rocker switch on the control panel inside the cab**
- 8.4.13 **A center broom in the rear or front of the pick up head shall be supplied, to be controlled by rocker switch in cab**
  - 8.4.13.1 **Center broom shall be hydraulic driven**
  - 8.4.13.2 **Center broom minimum 66 inches long**
  - 8.4.13.3 **Center broom minimum 10 inches in diameter**

8.5 **Side Brooms:**

- 8.5.1 **Right and left broom shall be a free floating trailing arm design with inward motion safety to prevent damage when sweeping and encountering fixed obstacles**
- 8.5.2 **Trailing arm shall be of parallelogram design**
- 8.5.3 **Brooms shall be minimum 42 inches diameter**
- 8.5.4 **Brooms shall be hydraulically driven**
- 8.5.5 **Brooms must be pneumatically or hydraulically raised, lowered, and suspended**
- 8.5.6 **Broom down pressure must be pneumatically controlled from the cab by operator or automatic by load and speed sensing hydraulics**
- 8.5.7 **Broom hydraulic motor drive must have minimum 6045 in/lbs. of torque**
- 8.5.8 **Side brooms to have greaseless pivot pins and/or grease zero**
- 8.5.9 **Transport hook shall hold side broom assemblies in storage position or hydraulic lock in system**
- 8.5.10 **Rocker switches in cab are used to control side broom**
- 8.5.11 **Side broom retraction while sweeping to provide scrubbing action must be controlled from the operator seat**
- 8.5.12 **Right side broom shall tilt inward and outward from cab while sweeping by means of electrically controlled linear actuator**

8.6 **Hopper:**

- 8.6.1 **Volumetric capacity – minimum 7.3 cubic yards**
- 8.6.2 **Construction – minimum 10 gauge steel sides, minimum 3/16 inch floor**

- 8.6.3 **Weight actuated full load indicator must be mounted in the cab on control panel**
- 8.6.4 **Dump angle minimum 50°**
- 8.6.5 **Dump angle shall be achieved by use of 2 stage telescopic cylinder or dual hydraulic cylinders**
- 8.6.6 **Floor angle minimum 3°**
- 8.6.7 **Abrasion resistant “scoop” style steel deflector shall be located at the suction inlet to direct material to the center of hopper**
- 8.6.8 **Hopper rear door must be hinged at the top of the door and opened by hydraulic Cylinder**
- 8.6.9 **Hopper rear door opening minimum 90° angle**
- 8.6.10 **Right hand side (passenger side) of hopper shall have hydraulic valve levers to operate hydraulic cylinder movement**
- 8.6.11 **Hopper rear door must have internal door prop**
- 8.6.12 **Hopper rear door to have automatic lock mechanism for tight fit**
- 8.6.13 **Hopper rear door seal must be water resistant reinforced**
- 8.6.14 **Hopper screens shall be hinged for easily cleaning and inspection**
- 8.6.15 **Total hopper screen area minimum 3,000 square inches**
- 8.6.16 **Hopper screen material minimum 11 gauge steel**
- 8.6.17 **A minimum eight (8) inch inside diameter by 9.5 foot long hydraulic wandering hose located at rear of unit for cleaning catch basins shall be provided**
- 8.6.18 **An eight (8) inch diameter by four (4) foot long catch basin nozzle with water injection and quick clamp shall be provided. An additional eight (8) inch diameter by four (4) foot aluminum extension with quick clamps shall be provided.**
- 8.6.19 **Push button finger tip hydraulic control on the nozzle handles to raise and lower nozzle to be supplied**
- 8.6.20 **Rear auxiliary engine must have throttle control**
- 8.6.21 **Hopper hose must be heavy duty rubber (Plastic hoses not acceptable)**
- 8.6.22 **In addition to the standard outside dumping controls, in cab controls shall be provided**



- 8.6.23 Right side (curb side) of hopper shall have inspection door**
- 8.6.24 For easy access to inspection door, an additional step and rear handle mounted on rear bumper and right rear side of hopper to be provided or access doors on each side of hopper
- 8.6.25 Rear of sweeper must have bumper to protect against underride obstacles and shall be designed as to not allow dumping debris on top of said bumper**
- 8.6.26 Protection to the hopper against corrosion and wear and to facilitate the removal of debris when dumping shall be provided**
- 8.6.27 Bare steels including stainless steels are not acceptable
- 8.6.28 Protection system shall provide protection such that the hopper will be warranted for life of sweeper. The liner shall be Life Liner or approved equal.**
- 8.7 Dust Separator:
- 8.7.1 Dirt separation from the air stream must be accomplished by means of a labyrinth style dust separator installed at air return outlet of the hopper or a circular, cyclonic multi pass.**
- 8.7.2 Separator to be designed as to not allow plugging with regular debris
- 8.7.3 Dust separator shall have easy access for cleaning of the separator interior and Inspection**
- 8.7.4 Dust separator to have self opening door made of abrasion resistant steel to allow automatic discharge of debris when tilting hopper
- 8.8 Spray Water System:
- 8.8.1 Tank total capacity – 220 gallons
- 8.8.2 Construction – Rust proof polyethylene
- 8.8.3 Tank shall be removable type, sharing no common wall with hopper**
- 8.8.4 Tank must not raise during hopper dumping**
- 8.8.5 Fill hose minimum 16 foot 8 inches with NST coupling with strainer must be supplied**
- 8.8.6 Water level gauge will be control console mounted within the cab
- 8.8.7 Water lines must be color coded
- 8.8.8 Ball valve in filter inlet shall be provided to prevent water loss while cleaning filter**

- 8.8.9 Filter must be easy to access and clean without tipping hopper
- 8.8.10 All water piping must be external to operator cab (No lines within cab)
- 8.8.11 Minimum three (3) spray nozzles at each side broom for dust control to be provided
- 8.8.12 Spray nozzles shall be mounted on pivoting brackets
- 8.8.13 Inside the pick up head shall have minimum five (5) easily removable water spray nozzles
- 8.8.14 Suction hose must have minimum two (2) easily removable spray nozzles
- 8.8.15 Water flow to pick up head, suction hose, side brooms shall be by two (2) electric 12 volt, diaphragm type pumps or electric roller pump, belt driven cat triplex
- 8.8.16 Diaphragm type pumps must provide minimum six (6) GPM @ 30 PSI combined, roller style pump with up to 100 psi, or Cat Triplex style pump with up to 55 psi
- 8.8.17 Each pump must have two (2) flow rates controlled by the operator within cab or controlled with on/off switch and single flow rate
- 8.8.18 An additional spray bar mounted under the front bumper with cab controls shall be provided for extreme sweeping conditions.
- 8.8.19 Water spray line to the center broom shall be provided for increased dust suppression.
- 8.8.20 Quick disconnect for high pressure wash down must be easily accessible on right side of sweeper
- 8.9 Hydraulic System:
  - 8.9.1 Hydraulic Pump – gear driven (belt or PTO driven not acceptable)
  - 8.9.2 Hydraulic Pump Output – minimum 7.7 GPM @ 2500 RPM
  - 8.9.3 Reservoir Capacity – minimum 23 gallons
  - 8.9.4 Tank shall have exterior sight gauge
  - 8.9.5 Reservoir should be located within the enclosed auxiliary engine compartment
  - 8.9.6 All hydraulic circuits must have quick disconnect pressure check ports
  - 8.9.7 All high pressure fittings must be “o” ring face seal type or JIC type

- 8.9.8 **All hydraulic filters, air or fluid shall be manufacturers standard**
- 8.9.9 **Electric/hydraulic auxiliary pump shall be supplied to raise/lower the hopper, open/close hopper rear door without running auxiliary engine**
- 8.10 Pneumatic System (if required):
  - 8.10.1 **A PR4 type pressure protector for the chassis air system must be provided to protect system when pressures drop below 85 PSI**
  - 8.10.2 **Sweeper air components shall have separator air tank**
  - 8.10.3 **All pneumatic cylinders shall be rated to 150 PSI and have a separate rod seal and wiper to prevent contamination entering the cylinder**
  - 8.10.4 Each cylinder to be controlled by a single, two (2) position, solenoid valve mounted on a manifold with common input and exhaust
  - 8.10.5 **A poly carbonate bowl type filter shall be used to filter out contamination of the air System**
- 8.11 Electrical System:
  - 8.11.1 **Sweeper electrical system must be separate of the chassis electrical system**
  - 8.11.2 **Sweeper engine battery – (1) 925 CCA minimum, 12 volt battery or share with truck chassis**
  - 8.11.3 **Sweeper engine alternator – minimum 95 AMP**
  - 8.11.4 **Sweeper shall have OSHA approved back up alarm**
  - 8.11.5 Sweeper lighting to include rear identification lights, side broom, and rear clearance Lights
  - 8.11.6 **Sweeper warning lights shall include hopper up and hopper full load**
  - 8.11.7 **Sweeper wiring harnesses must be color coded and function stamped every six (6) inches**
  - 8.11.8 **All electrical circuits shall be protected by manual re-settable circuit breakers**
  - 8.11.9 Manufacturers recommended LED arrowboard rear mounted to be provided
- 8.12 Controls:
  - 8.12.1 All sweeper controls to be mounted on a stationary central console that allows for use from either right or left positions
  - 8.12.2 Controls to include all sweep, spray water, and lighting functions

8.12.3 Conventional rocker switches are to be used to control sweep, spray water, and lighting functions

**8.12.4 Controls for auxiliary engine ignition and throttle, side broom down pressure, and manual reset circuit breakers shall be located in the control console**

8.13 Instruments:

8.13.1 Sweeper engine instruments to include:

8.13.1.1 Tachometer

8.13.1.2 Hour meter

8.13.1.3 Oil pressure

8.13.1.4 Fuel

8.13.1.5 Voltage

8.13.1.6 Coolant temperature

8.13.1.7 Air intake restriction indicator

8.13.1.8 Raised hopper indicator

8.13.1.9 Full hopper indicator

8.14 Accessories:

**8.14.1 A 2 1/2 lb. fire extinguisher must be provided**

**8.14.2 A hydrant wrench for fire hydrant to fill water shall be provided**

**8.14.3 A rear mounted flood light with cab control shall be provided**

**8.14.4 A sweep resume feature must be provided. It must include automatic pickup of side brooms and pickup head and return to idle when sweep resume control is activated or when truck transmission is put in reverse, and return to previous sweeping positions when transmission is taken out of reverse or sweep resume control is returned to sweeping position.**

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
EQUIPMENT DIVISION

BIDDER'S EVALUATION REPORT

PROCUREMENT SPECIFICATIONS FOR OPEN END CONTRACT  
NO. 044-1-B

OPEN END CONTRACT  
TRUCK MOUNTED REGENERATIVE AIR STREET SWEEPER

NOTE TO BIDDER: Procurement Specification No. 044-1-B, Paragraph 2.0 recommends the completion and submittal of this Report with your bid. Purpose of this Report is to enable the West Virginia Division of Highways Evaluation Committee to make full and fair evaluation of the bid. Addendums in order, along with a summary of exception as a separate attachment, should be with Bidder's Evaluation Report. FAILURE TO SUBMIT THIS REPORT, COMPLETE IN ITS ENTIRETY, MAY SUBJECT THE BIDDER TO DISQUALIFICATION.

Reference Requisition No.: 708 EC 012

Bidder's Name: Atlantiz Machinery, Inc.

Address: 2702 Garfield Ave., Silver Spring, MD 20910

Telephone Number: 800.423.8903.

Years Bidder has been registered to do business with the State of West Virginia: 2 YRS.

Years Company has been an authorized dealer for proposed unit: 12 YRS.

X3.2 Have you complied with all mandatory specifications?  YES  NO

X4.2 DELIVERY:

X4.2.1 Delivery date of completed representative unit: 45-90 Calendar Days After  
Receipt of Purchase Agreement

X4.2.2 Delivery date of balance of completed units: 45-90 Calendar Days After Receipt of  
Purchase Agreement

**NOTE: Vendors can complete the Bid Schedule at Purchasing's Web Site**  
**[www.state.wv.us/admin/purchase](http://www.state.wv.us/admin/purchase)**

X5.0 AWARD CRITERIA;

X5.1 Price for each unit: \_\_\_\_\_

X6.0 SPECIFICATIONS - GENERAL

X6.1 Manufacturer, model, series, and date of manufacture of proposed unit:

*Schwarze Model A7000 on a BMC T7500 chassis*

Is descriptive literature, fully describing proposed unit attached to your bid?  YES  NO

If not, why? \_\_\_\_\_

X6.2 Will the required number of service manuals, and complete parts list be delivered to the Equipment Division at Buckhannon upon completion of delivery of total units?

*14 total*

YES  NO

Will the required Equipment Preventive Maintenance Form (Section X6.2 of Bidders Evaluation Report) be provided upon inspection of the pilot unit?  YES  NO

X6.2  
2-10-00

**EQUIPMENT PREVENTATIVE MAINTENANCE QUESTIONNAIRE**

THIS FORM MUST BE COMPLETED IN ITS ENTIRETY BY SUCCESSFUL BIDDER OR MANUFACTURER'S TECHNICAL REPRESENTATIVE PRIOR TO DELIVERY OF PILOT MODEL TO THE WVDOH.

DESCRIPTION: \_\_\_\_\_ MAKE: \_\_\_\_\_

MODEL: \_\_\_\_\_ YEAR: \_\_\_\_\_ PURCHASE AMOUNT: \_\_\_\_\_

ENGINE: MAKE: \_\_\_\_\_ MODEL: \_\_\_\_\_ FUEL TYPE: \_\_\_\_\_

HORSEPOWER: \_\_\_\_\_ CYLINDER: \_\_\_\_\_ ENGINE SERIAL: \_\_\_\_\_

COOLING SYSTEM CAPACITY: \_\_\_\_\_

BELTS: DESCRIPTION: \_\_\_\_\_ PART NUMBERS: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

GVW: \_\_\_\_\_ AXLE CAPACITY:FRONT: \_\_\_\_\_ REAR: \_\_\_\_\_

TIRES: FRONT MAKE & SIZE: \_\_\_\_\_

REAR MAKE & SIZE: \_\_\_\_\_

DIMENSIONS OF UNIT: LENGTH: \_\_\_\_\_ WIDTH: \_\_\_\_\_ LENGTH: \_\_\_\_\_

VENDOR CONTACT PERSON: \_\_\_\_\_ PHONE: \_\_\_\_\_

**PARTS:**

BATTERY MAKE: \_\_\_\_\_ MODEL: \_\_\_\_\_ CCA: \_\_\_\_\_

TOP OR SIDE POST: \_\_\_\_\_ DIMENSIONS: LENGTH \_\_\_\_\_ WIDTH \_\_\_\_\_ HEIGHT \_\_\_\_\_

SPARK PLUGS OR FUEL INJECTORS MAKE: \_\_\_\_\_ PART # \_\_\_\_\_

FUEL PUMP OR INJECTION PUMP MAKE: \_\_\_\_\_ MODEL: \_\_\_\_\_

ALTERNATOR MAKE: \_\_\_\_\_ PART #: \_\_\_\_\_

STARTER MAKE: \_\_\_\_\_ PART #: \_\_\_\_\_

TURBO CHARGER MAKE: \_\_\_\_\_ PART #: \_\_\_\_\_

TRANS. MAKE: \_\_\_\_\_ MODEL: \_\_\_\_\_ AUTO/MANUAL: \_\_\_\_\_

HYDRAULIC PUMP MAKE: \_\_\_\_\_ MODEL: \_\_\_\_\_

FILTERS MAKE PART NO. LUBRICANT MANUFACTURER TYPE

OIL \_\_\_\_\_  
AIR INNER \_\_\_\_\_  
AIR OUTER \_\_\_\_\_  
FUEL PRIMARY \_\_\_\_\_  
FUEL SECONDARY \_\_\_\_\_  
COOLANT \_\_\_\_\_  
HYDRAULIC \_\_\_\_\_  
OTHER \_\_\_\_\_

ENGINE \_\_\_\_\_  
TRANSMISSION \_\_\_\_\_  
POWER STEERING \_\_\_\_\_  
HYDRAULIC \_\_\_\_\_  
DIFFERENTIALS \_\_\_\_\_  
BRAKE FLUID \_\_\_\_\_  
COOLANT \_\_\_\_\_  
OTHER \_\_\_\_\_

X6.3 TRAINING:

Will training seminar be conducted on Preventive Maintenance, Operator and Mechanic Training  YES \_\_\_ NO

Will you conduct training with each purchase order against this open end contract?  YES \_\_\_ NO

Will training be conducted within 2 working days from the delivery of the pilot unit on the individual purchase order?  YES \_\_\_ NO

If NO, explain time frame \_\_\_\_\_

Will an Operator's Manual be furnished directly to Training Academy prior to the delivery of the pilot?  YES \_\_\_ NO

X6.4 If you are the successful vendor, will you furnish all training aids, i.e., videos, projectors, required in conducting the training?  YES \_\_\_ NO

X6.4.1 Will all manuals, booklets, etc. explaining preventive maintenance, operator procedures, and service schedule be delivered with each unit?  YES \_\_\_ NO  
If NO, explain \_\_\_\_\_

X6.5 WARRANTY AND SERVICE POLICY

Will the warranty and service you provide comply with all areas as stated in Section 6.5 of specifications  YES \_\_\_ NO

Is warranty literature attached?  YES \_\_\_ NO

Is a minimum two (2) year bumper to bumper basic parts and labor warranty included?  YES \_\_\_ NO

Describe: See attached form, includes two years both  
Schwarz and GMC chassis



X6.5 WARRANTY AND SERVICE POLICY QUESTIONNAIRE

**THIS FORM MUST BE COMPLETED IN ITS ENTIRETY AND SUBMITTED WITH YOUR BID.**

(If additional lines are needed, make copies of form.)

1. Define the terms of the standard warranty. If not offered, so state. (Attach copy)

2 year warranty, see attached form.

2. Define warranty service to be performed at DOH facilities and warranty service to be performed at manufacturer's representative facility. List name and location of manufacturer's representative.

Local GMC dealer for GMC chassis. Mobile service vans for Schwarze sweeper. Dealer location: Atlanta Machinery, Inc. 2702 Gortfield Ave, Silver Spring MD 20910.

3. List locations for parts inventories that are within the State of West Virginia. Also, list availability levels, if known.

None. Stock \$250,000.00 at our Silver Spring, MD office/shop.

4. During the term of warranty, list the guarantee discount to manufacturer's published list price for parts that bidder will sell the parts to owner. No discount

- A. Terms: Net 30      Manufacturer's published list price less: 0 % discount
- B. Terms: Net 60      Manufacturer's published list price less: 0 % discount
- C. Terms: Net 90      Manufacturer's published list price less: 0 % discount

5. During the term of warranty, will all manufacturers or engineering improvements be submitted to Division of Highways?  YES  NO

6. During the term of warranty, list the guaranteed rates charged for repair to the unit.

A. Shop Rate      \$ 95.00 per mechanic hour

B. Travel Time Charge      \$ 47.50 per mechanic hour  
(Specify if one-way)      \_\_\_\_\_; port to port \_\_\_\_\_

C. Mileage Charge      \$ 6.00 per vehicle mile  
(Specify if one-way)      \_\_\_\_\_; port to port \_\_\_\_\_

D. Field Mechanic Rate      \$ 95.00 per mechanic hour

E. Specify period of time that prices are in effect: 60 days

F. Surcharge for miscellaneous items: 2 %

## X6.6 EVALUATION COMMITTEE REQUIREMENTS

Is all component specifications, product literature, component models provided for Evaluation Committee bid determination?  YES  NO

**X6.7 Will all parts, equipment, accessories, material, design and performance characteristics not specified herein, but which are necessary to provide a complete unit, be furnished with the unit and conform in strength, quality of material, and quality of workmanship to those which are advertised and provided to the market in general by the unit industry?**

YES  NO

**X6.7.1 Are all parts and accessories adequate and regularly supplied as standard to be included except those which may be duplications of specifications herein, and except these by specification are not to be furnished?**

YES  NO

**X6.7.2 Are all standard safety features that are required by Federal and State statutes of law included?**

YES  NO

## X7.0 SPECIFICATIONS OF THE QUOTED UNIT

The bidder should complete the following schedule in order for the Division to compare the actual bid unit to the specifications. Should the bidder except a requirement, then such exception may be only on the basis that such feature is not offered by the manufacturer. The Division will have the sole discretion as to whether the bidder's substitution meets the requirements of the specifications.

### SPECIFICATIONS – CAB AND CHASSIS

Manufacturer: BMC Model: T7500

**X7.1 GVW Plate Rating:** 33,000 Lbs.

**X7.2 Cab to Axle dimensions: Distance from centerline of the rear axle to the rear of the sweeper without the wandering hose** 52 inches

**X7.3 Wheelbase:** 162 inches

**X7.4 Frame: Does the frame meet or exceed all Federal requirements for GVWR**  
 YES  NO

**X7.4.1 Frame steel:** 120,000 psi

**X7.5 Cab: Maximum visibility, forward line of sight from the chassis front bumper to the point on the ground visible to the operator** 10 feet for an ASE 98<sup>th</sup> percentile size operator

- X7.5.1 Is steering full power with dual operator controls  YES  NO
- Does steering have two (2) independent steering columns connected by a cross shaft  
*2 columns with 2 sectors*  YES  NO
- X7.5.2 Does interior of cab have acoustical insulation for low operating noise, automotive type trim, and center sweeper console  YES  NO
- X7.5.3 Is unit equipped with cruise control feature (fully electronic)  YES  NO
- X7.5.4 Cab door locks, both doors (with key only)  YES  NO
- X7.5.5 Dual sun visors  YES  NO
- X7.5.6 Does cab have auxiliary 12v power outlet  YES  NO
- X7.5.7 Seats: Dual air ride bostrom cloth covered seats fully adjustable  YES  NO
- X7.5.7.1 Seat belts: 3 point lap and shoulder type  YES  NO
- X7.5.8 Floor Mats: Rubber floor mats throughout cab area with non-absorbent backing under mats  YES  NO
- X7.5.9 Turn Signals: Manufacturers heavy duty, self cancelling type with hazard warning switch  YES  NO
- X7.5.10 AC, heater, and defroster: Fresh air type, heaviest duty  YES  NO
- X7.5.11 Does cab have full flow through ventilation for optional temperature control and operator comfort  YES  NO
- X7.5.12 Windshield wipers and washers: 2 speed with washer with intermittent feature at both driving positions  YES  NO
- Windshield washer reservoir capacity 1 gallon
- X7.5.13 Instruments: Manufacturers gauges both left and right operation with visual, audible, and programmable warning to inform driver when operating conditions are exceeded  YES  NO
- X7.5.13.1 Chassis left and right side operator instrument panel chassis OEM, full vision illuminated with tachometer, speedometer, odometer, trip odometer, fuel gauge, water temperature gauge, air pressure gauge, volt gauge, oil pressure, and transmission temperature gauges  YES  NO
- X7.5.13.2 Does engine instruments include warning light and chime for low oil pressure and high coolant temperature, low oil pressure and low air pressure to warn the operator of a potential problem before any damage to the engine occurs  YES  NO
- X7.5.13.2.1 Does console have left/right primary drivers switch  YES  NO

X7.5.13.3 Does chassis engine have hourmeter  YES  NO

X7.5.14 Rearview mirrors: Dual, west coast type, with 8 inch convex spot mirror for easy viewing of the side broom during sweeping, of rust resistant material and mounting brackets  YES  NO

X7.5.14.1 Mirrors: Fender mounted stainless steel 8 inch convex mirrors provided to increase operator visibility  YES  NO  
*No fenders on BMC T7500 chassis*

X7.5.15 Glass: Manufacturers tinted safety glass; front side, and rear  YES  NO

Does side glass have defogger  YES  NO

X7.5.16 Radio: Manufacturers standard AM/FM stereo with seek and scan feature  YES  NO

X7.5.17 Air conditioning: Manufacturers fresh air type heaviest duty  YES  NO

X7.5.18 Front mudflaps are manufacturers standard for unit bid  YES  NO

X7.5.19 Emergency triangle warning kit, with hold down stowed in the cab  YES  NO

Manufacturer and Part No. Schwarze

X7.5.20 Accessories included in the manufacturers standard cab but not addressed:  
Fire extinguisher

X7.5.21 If you are successful vendor, will you provide WVDOH with complete list of all filters required for normal maintenance on unit  YES  NO

X7.6 Engine:

X7.6.1 Diesel engine: 215 HP @ 2200 RPM

X7.6.2 Is engine equipped with a dual stage dry type air cleaner, spin on fuel filter, and full flow oil filter  YES  NO

X7.6.3 In engine block heater: 1100 watt

X7.6.4 A single exhaust pipe with muffler that meets all Federal noise abatement requirement  YES  NO

Heat shield on vertical exhaust  YES  NO

X7.7 Cooling System:

X7.7.1 Cooling system is capable of maintaining engine temperature within the manufacturer's recommended range during continuous operation  YES  NO

- X7.7.2 Radiator fan is viscous drive type  YES  NO
- X7.7.3 The system is filled with Environmental antifreeze  
rated to a -30°F minimum  YES  NO
- X7.8 Fuel Tanks:
- X7.8.1 Capacity: One (1) 50 gallon fuel tank shared by both engines and easily accessible without raising or shifting any components  YES  NO
- Inside cab fuel gauge supplied  YES  NO
- X7.9 Electrical System:
- X7.9.1 Type: 12 volt negative ground system with manufacturer's radio interference suppression  YES  NO
- X7.9.2 Batteries:
- X7.9.2.1 Are in an enclosed accessible environment for ease of service  YES  NO
- X7.9.2.2 Cold Crank Amps: 1300 AMPS
- X7.9.3 Alternator Capacity: 135 AMPS brushless with internal regulator  YES  NO
- X7.9.4 Lighting: Does it conform to the West Virginia Motor Vehicle Code  YES  NO
- X7.10 Transmission: Allison 2500 RDS 5 speed with overdrive  YES  NO
- X7.11 Rear Axle: Is it two (2) 8 speed with ratios of 5.29 to 5.86/7.21 to 8.17:1 for proper sweeping and transport speeds  YES  NO
- X7.11.1 Rated Capacity: 21000 Lbs.
- X7.11.2 Rear Spring Capacity: 23000 Lbs. with multi leaf auxiliary springs  YES  NO
- X7.11.3 Rear axle differential, transmission, and front wheel lubrication reservoirs are filled with synthetic type lubrication and provided with magnetic drain plugs where applicable  YES  NO
- X7.11.4 Is unit equipped with manufacturers heavy duty rear shock absorbers  YES  NO  
Are they required  YES  NO
- X7.12 Front Axle:
- X7.12.1 Capacity: 12000 lbs. I beam type
- X7.12.2 Front spring capacity: 12000 lbs.
- X7.12.3 Manufacturers heavy duty shock absorbers/and stabilizer bar  YES  NO

- X7.13 Brakes:
- X7.13.1 Type: Are they full air with manufacturers ABS through a 4 channel full vehicle wheel control system in compliance with the most current FMVSS requirements  YES  NO
- X7.13.2 Compressor: 12.9 CFM
- X7.13.3 Parking brake: Spring set, air release actuating rear axle service brakes  YES  NO  
Instrument panel control  YES  NO
- X7.13.4 Air dryer with heater: Bendix AD-IS
- X7.13.5 Manufacturers standard air tanks for service brakes; auxiliary tank for parking brake  YES  NO
- X7.13.6 Low air pressure warning light and buzzer  YES  NO
- X7.13.7 Do brakes meet or exceed all current Federal and State FMVSS requirements  YES  NO
- X7.13.8 Brake dust covers installed on all wheels  YES  NO
- X7.14 Tires and wheels for safety and allows emergency interchange of tires at a job site/front and rear (tires/rims) are interchangeable  YES  NO
- X7.14.1 Wheel, front and rear: 11R22.5  
10 hole hub piloted steel disc type to accommodate specified tire size  YES  NO
- X7.14.2 Tires:
- X7.14.2.1 Front and Rear: 11R22.5G; 14 ply  YES  NO  
Does the rear axle have dual tires for load capacity  YES  NO
- X7.15 Other features considered as manufacturers standard equipment but not addressed:  
\_\_\_\_\_  
\_\_\_\_\_
- X7.16 Paint: Manufacturers standard  YES  NO
- X7.16.1 Will you furnish the Department a larger paint sample after award of contract if needed  YES  NO
- X7.16.2 If required, will you measure adhesion by the criteria set forth in ASTM D3359-74 Method B  YES  NO

X7.17 Does unit meet or exceed the "Occupational Safety and Health Act of 1970" and subsequent amendments  YES  NO

X7.18 Does the unit meet the advertising guidelines  YES  NO

X7.19 Preventive Maintenance and Operator's Training School:

X7.19.1 Will manufacturer and/or dealer stage a thorough seminar on Preventive Maintenance and Operator Training  YES  NO

X7.19.2 Will operating and service manuals, booklets and pamphlets explaining procedures be supplied  YES  NO

X7.19.3 If you are successful vendor, will you conduct training of the completed unit  YES  NO

Have you attached a copy of the proposed program with your bid  YES  NO

X8.0 SPECIFICATIONS OF SWEEPER MODULE

Does New Regenerative Air Street Sweeper have a 6 wheeled, truck chassis with dual diesel engines, sweeper controls and switches, 8.0 cubic yard hopper, automatic transmission, 220 gallon water tank, left and right side broom with variable down pressure controlled from cab

YES  NO

Manufacturer: Schwane Model: A7000

X8.1 Water Tank:

X8.1.1 Tank capacity 250 gallon of water

X8.2 Sweeper Engine:

X8.2.1 Diesel - Is it a Tier 3 Emission compliant, 4 cylinder turbocharged, 276 CID  YES  NO

Manufacturer and Model: John Deere 4045T

X8.2.2 Horsepower: 115 HP @ 2400 RPM ; torque 291 lb ft @ 1400 RPM

X8.2.3 Is engine wet sleeved  YES  NO

X8.2.4 Does unit have element dry type air cleaner with restriction indicator  YES  no

X8.2.5 Engine coolant is Environmental with a protection to -30°F  YES  NO

X8.2.6 Does the sweeper engine drive the blower fan by a heavy duty five (5) "V" groove power belt  YES  NO

X8.2.7 Is sweeper engine in an enclosure for sound attenuation, enclosure to include doors for access to serviceable items or tilt hopper  YES  NO

X8.3 Blower:

X8.3.1 Blower is rated at 17,067 CFM by an independent test facility  YES  NO  
Have you attached the documentation  YES  NO

X8.3.2 Operation speed of the fan 3000 RPM

X8.3.3 Is blower of the closed  or open  face turbine type  YES  NO  
Number of vans 10 diameter 32 3/4

X8.3.4 Blower constructed of abrasion resistant steel  YES  NO

X8.3.5 Blower housing constructed of 10 gauge steel and lined with Linaflex or 3/8 inch corded rubber  YES  NO  
Is part of the hopper  YES  NO

X8.3.6 Does blower housing have an inspection door (air exhaust opening)  YES  NO

X8.3.7 Is blower mounted and supported on both sides by heavy duty greasable bearing  YES  NO

X8.3.8 Are bearings greasable from ground level without tilting the hopper  YES  NO

X8.4 Pick Up Head:

X8.4.1 Is pick up head spring balanced  YES  NO

X8.4.2 Is pick up head all steel construction with upper and lower chambers  YES  NO

X8.4.3 Width: 90 inches

X8.4.4 High: 36 inches

X8.4.5 Total area: 3240 square inches

X8.4.6 Diameter pressure hose between blower outlet with pickup head 14 inch

Is transition hose urethane  YES  NO *wire reinforced molded rubber*

X8.4.7 Diameter suction hose with quick disconnect 14 inch



X8.4.8 In cab electric operated pressure relief valve/vacuum enhancer/leaf bleeder for optimum leaf and light debris sweeping supplied on pressure side  YES  NO

X8.4.9 Is front and rear debris curtain removable without removing the pick up head from unit  YES  NO

X8.4.10 Sweeping Path:

X8.4.10.1 Pick up head only 90 inches

X8.4.10.2 One (1) side broom and pick up head 117 inches

X8.4.10.3 Two (2) side broom and pick up head 144 inches

X8.4.11 Is pick up head equipped with side mounted adjustable steel runners with carbide inserts  YES  NO  
Width: 90 inches

X8.4.12 Is raise and lower of pick up head done hydraulically by a rocker switch on control panel inside the cab  YES  NO

X8.4.13 Is a center broom in the rear or front of pick up head supplied  YES  NO  
And controlled by rocker switch in cab  YES  NO

X8.4.13.1 Is center broom hydraulic driven  YES  NO

X8.4.13.2 Center broom \_\_\_\_\_ inches long

X8.4.13.3 Center broom \_\_\_\_\_ inches in diameter

*> bidding 6EO, scrub in front of vacuum head.*

X8.5 Side Brooms:

X8.5.1 Right and left broom are of a free floating trailing arm design with inward motion safety to prevent damage when sweeping and encountering fixed obstacles  YES  NO

X8.5.2 Training arm is of parallelogram design  YES  NO

X8.5.3 Diameter of brooms 44 inches

X8.5.4 Are brooms hydraulically driven  YES  NO

X8.5.5 Are brooms pneumatically \_\_\_ or hydraulically  raised, lowered, and suspended  YES  NO

X8.5.6 Is broom down pressure pneumatically controlled from the cab by operator \_\_\_ or automatic by load and speed sensing hydraulics

X8.5.7 Broom hydraulic motor drive 18.3 in/lbs. of torque

- X8.5.8 Side brooms have greaseless pivot pins and/or grease zero  YES  NO
- X8.5.9 Does transport hook hold side broom assemblies in storage position  or hydraulic lock in system
- X8.5.10 Are rocker switches in cab used to control side broom  YES  NO
- X8.5.11 Is side broom retraction while sweeping to provide scrubbing action controlled from the operator seat  YES  NO
- X8.5.12 Does right broom tilt inward and outward from cab while sweeping by means of electrically controlled linear actuator  YES  NO
- X8.6 Hopper:
- X8.6.1 Volumetric capacity 8.4 cubic yards
- X8.6.2 Construction: 10 gauge steel sides, 3/16" inch floor
- X8.6.3 Is weight actuated full load indicator mounted in the cab on control panel  YES  NO
- X8.6.4 Dump angle 53 °
- X8.6.5 Dump angle achieved by use of 2 stage telescopic cylinder or dual hydraulic cylinders  YES  NO
- X8.6.6 Floor angle 3 °
- X8.6.7 Abrasion resistant "scoop" style steel deflector located at the suction inlet to direct material to the center of hopper  YES  NO
- X8.6.8 Hopper rear door hinged at the top of the door and opened by hydraulic cylinder  YES  NO
- X8.6.9 Hopper rear door opening 90 ° angle
- X8.6.10 Right hand side (passenger side) of hopper has hydraulic valve levers to operate hydraulic cylinder movement  YES  NO
- X8.6.11 Hopper rear door has internal door prop  YES  NO
- X8.6.12 Hopper rear door has automatic lock mechanism for tight fit  YES  NO
- X8.6.13 Hopper rear door seal is water resistant reinforced  YES  NO
- X8.6.14 Are hopper screens hinged for easily cleaning and inspection  YES  NO
- X8.6.15 Total hopper screen area 9166 square inches

- X8.6.16 Hopper screen material 10 gauge steel
- X8.6.17 8 inch inside diameter by 10 foot long hydraulic wandering hose located at rear of unit for cleaning catch basins is provided  YES  NO
- X8.6.18 An 8 inch diameter by 4 foot long catch basin nozzle with water injection and quick clamp is provided  YES  NO
- An additional 8 inch diameter by 4 foot aluminum extension with quick clamps is provided  YES  NO
- X8.6.19 Is a push button finger tip hydraulic control on the nozzle handles to raise and lower nozzle provided  YES  NO
- X8.6.20 Does rear auxiliary engine have throttle control  YES  NO
- X8.6.21 Is hopper hose heavy duty rubber  YES  NO
- X8.6.22 In addition to standard outside dumping controls, are in-cab controls provided  YES  NO
- X8.6.23 Does right side (curb side) of hopper have inspection door  YES  NO
- X8.6.24 For easy access to inspection door, is an additional step and rear handle mounted on rear bumper and right rear side of hopper provided or access doors on each side of hopper  YES  NO
- X8.6.25 Does rear of sweeper have bumper to protect against underride obstacles and designed as to not allow dumping debris on top of said bumper  YES  NO
- X8.6.26 Is there protection to the hopper against corrosion and wear and to facilitate the removal of debris when dumping provided  YES  NO
- X8.6.27 Have you used any bare steels including stainless steels  YES  NO
- X8.6.28 Does protection system provide protection such that the hopper will be warranted for life of sweeper  YES  NO
- Manufacturer of liner: Rhino Linings - per attached letter

X8.7 Dust Separator:

- X8.7.1 Is dirt separation from the air stream accomplished by means of a labyrinth style dust separator installed at air return outlet of the hopper or a circular, cyclonic multi pass separator  YES  NO
- X8.7.2 Is separator designed as to not allow plugging with regular debris  YES  NO

- X8.7.3 Does dust separator have easy access for cleaning of the separator interior and inspection  YES  NO
- X8.7.4 Does dust separator have self opening door made of abrasion resistant steel to allow automatic discharge of debris when tilting hopper  YES  NO
- X8.8 Spray Water System:
- X8.8.1 Tank total capacity 250 gallons
- X8.8.2 Construction : Poly
- X8.8.3 Is tank removable type, sharing no common wall with hopper  YES  NO
- X8.8.4 Does tank not raise during hopper dumping  YES  NO
- X8.8.5 Fill hose 2 1/2" + 20' with NST coupling with strainer is supplied  YES  NO
- X8.8.6 Is water level gauge control console mounted within the cab  YES  NO
- X8.8.7 Are water lines color coded  YES  NO
- X8.8.8 Is ball valve in filter inlet provided to prevent water loss while cleaning filter  YES  NO
- X8.8.9 Is filter easy to access and clean without tipping hopper  YES  NO
- X8.8.10 Is all water piping external to operator cab  YES  NO
- X8.8.11 3 spray nozzles at each side broom for dust control provided  YES  NO
- X8.8.12 Are spray nozzles mounted on pivoting brackets  YES  NO
- X8.8.13 Inside the pick up head has 5 easily removable water spray nozzles  YES  NO
- X8.8.14 Suction hose has 2 easily removable spray nozzles  YES  NO
- X8.8.15 Is water flow to pick up head, suction hose, side brooms by twp (2) electric 12 volt, diaphragm type pumps or electric roller pump, belt driven cat triplex  YES  NO
- X8.8.16 Diaphragm type pumps provide 4.5 GPM @ 45 PSI combined  YES  NO, roller style Pump with up to \_\_\_\_\_ psi \_\_\_\_\_ YES \_\_\_\_\_ NO \_\_\_\_\_ or Cat Triplex style pump with up to \_\_\_\_\_ psi \_\_\_\_\_ YES \_\_\_\_\_ NO

- X8.8.17 Does each pump have two (2) flow rates controlled by the operator within cab  YES  NO  
 OR  
 Controlled with on/off switch and single flow rate  YES  NO
- X8.8.18 Is an additional spray bar mounted under the front bumper with cab controls provided for extreme sweeping conditions  YES  NO
- X8.8.19 Is water spray line to the center broom provided for increased dust suppression  YES  NO
- X8.8.20 Is quick disconnect for high pressure wash down easily accessible on right side of sweeper  YES  NO  
*see addendums*
- X8.9 Hydraulic System:
- X8.9.1 Hydraulic pump – gear driven  YES  NO
- X8.9.2 Hydraulic pump output 13 GPM @ 2000 RPM
- X8.9.3 Reservoir capacity: 25 gallons
- X8.9.4 Does tank have exterior sight gauge  YES  NO
- X8.9.5 Is reservoir located within the enclosed auxiliary engine compartment  YES  NO
- X8.9.6 Do all hydraulic circuits have quick disconnect pressure check ports  YES  NO
- X8.9.7 Are all high pressure fittings “o” ring face seal type or JIC type  YES  NO
- X8.9.8 Are all hydraulic filters, air or fluid manufacturers standard  YES  NO
- X8.9.9 Electric/hydraulic auxiliary pump supplied to raise/lower the hopper, open/close hopper rear door without running auxiliary engine  YES  NO
- X8.10 Pneumatic System:  
 Is it required  YES  NO
- X8.10.1 Is a PR4 type pressure protector for the chassis air system provided to protect system when pressures drop below 85 PSI  YES  NO
- X8.10.2 Do sweeper air components have separator air tank  YES  NO
- X8.10.3 Are all pneumatic cylinders rated to 150 psi and have a separate rod seal and wiper to prevent contamination entering the cylinder  YES  NO

- X8.10.4 Is each cylinder controlled by a single, two (2) position, solenoid valve mounted on a manifold with common input and exhaust  YES  NO
- X8.10.5 Is a poly carbonate bowl type filter used to filter out contamination of the air system  YES  NO
- X8.11 Electrical System:
- X8.11.1 Is sweeper electrical system separate of the chassis electrical system  YES  NO
- X8.11.2 Sweeper engine battery: number \_\_\_\_\_ CCA 12 volt battery  YES  NO or share with truck chassis  YES  NO
- X8.11.3 Sweeper engine alternator 100 amp
- X8.11.4 Does sweeper have OSHA approved back up alarm  YES  NO
- X8.11.5 Does sweeper lighting include rear identification lights, side broom, and rear clearance lights  YES -  NO
- X8.11.6 Do sweeper warning lights include hopper up and hopper full load  YES  NO
- X8.11.7 Is sweeper wiring harnesses color coded and function stamped every six (6) inches  YES -  NO
- X8.11.8 Are all electrical circuits protected by manual re-settable circuit breakers  YES  NO
- X8.11.9 Manufacturers recommended LED arrowboard rear mounted is provided  YES  NO
- X8.12 Controls:
- X8.12.1 All sweeper controls are mounted on a stationary central console that allows for use from either right or left positions  YES  NO
- X8.12.2 Controls include all sweep, spray water, and lighting functions  YES  NO
- X8.12.3 Are conventional rocker switches used to control sweep, spray water, and lighting functions  YES  NO
- X8.12.4 Are controls for auxiliary engine ignition and throttle, side broom down pressure, and manual reset circuit breakers located in the control console  YES  NO

## X8.13 Instruments:

## X8.13.1 Sweeper engine instruments:

- X8.13.1.1 Tachometer  YES \_\_\_ NO
- X8.13.1.2 Hourmeter  YES \_\_\_ NO
- X8.13.1.3 Oil pressure  YES - \_\_\_ NO
- X8.13.1.4 Fuel  YES \_\_\_ NO
- X8.13.1.5 Voltage  YES \_\_\_ NO
- X8.13.1.6 Coolant temperature  YES \_\_\_ NO
- X8.13.1.7 Air intake restriction indicator  YES \_\_\_ NO
- X8.13.1.8 Raised hopper indicator  YES \_\_\_ NO
- X8.13.1.9 Full hopper indicator  YES \_\_\_ NO

## X8.14 Accessories:

- X8.14.1 A 2 1/2 lb. fire extinguisher is provided  YES \_\_\_ NO
- X8.14.2 A hydrant wrench for fire hydrant to fill water is provided  YES \_\_\_ NO
- X8.14.3 A rear mounted flood light with cab control is provided  YES \_\_\_ NO
- X8.14.4 A sweep resume feature is provided  YES \_\_\_ NO

**Does it include automatic pickup of side brooms and pickup head and return to idle when sweep resume control is activated or when truck transmission is put in reverse, and return to previous sweeping positions when transmission is taken out of reverse or sweep resume control is returned to sweeping position**  YES \_\_\_ NO

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 exceed 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.

**LICENSING:** Vendors 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 agencies or political subdivision. Furthermore, the vendor must provide all necessary releases to obtain information to enable the Director or spending unit to verify that the vendor is licensed and in good standing with the above entities.

**CONFIDENTIALITY:** The vendor agrees that he or she 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. Vendors should visit [www.state.wv.us/admin/purchase/privacy](http://www.state.wv.us/admin/purchase/privacy) for the Notice of Agency Confidentiality Policies.

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

Vendor's Name: Attate Mahony Inc  
Authorized Signature: [Signature] Date: 5/27/08





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

# Request for Quotation

RFQ NUMBER  
 708EC012

PAGE  
 1

ADDRESS CORRESPONDENCE TO ATTENTION OF:  
 MICHAEL AUSTIN  
 304-558-2402

S U P P L I E R

\*712113101 800-423-8903  
 ATLANTIC MACHINERY INC  
 2702 GARFIELD AVENUE  
 SILVER SPRING MD 20910

S H I P T O

DIVISION OF HIGHWAYS  
 EQUIPMENT DIVISION  
 ROUTE 33  
 BRUSHY FORK ROAD  
 BUCKHANNON, WV  
 26201 304-472-1750

DATE PRINTED 05/19/2008	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
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BID OPENING DATE: 05/28/2008 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
ADDENDUM NO. 3						
CHANGES TO THE SPECIFICATIONS PER THE ATTACHED.						
BID OPENING DATE REMAINS 05/28/08 AT 1:30 P.M.						
NO OTHER CHANGES.						
0001	1	EA		765-77	\$176,937.00	\$176,937.00
				AIR STREET SWEEPER		
***** THIS IS THE END OF RFQ 708EC012 ***** TOTAL:						\$176,937.00

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>[Signature]</i>	TELEPHONE 800-423-8903	DATE 5/27/08
TITLE Sales Manager	FEIN 521190648	ADDRESS CHANGES TO BE NOTED ABOVE

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

**GENERAL TERMS & CONDITIONS  
REQUEST FOR QUOTATION (RFQ) AND REQUEST FOR PROPOSAL (RFP)**

1. Awards will be made in the best interest of the State of West Virginia.
2. The State may accept or reject in part, or in whole, any bid.
3. All quotations are governed by the *West Virginia Code* and the *Legislative Rules* of the Purchasing Division.
4. Prior to any award, the apparent successful vendor must be properly registered with the Purchasing Division and have paid the required \$125.00 registration fee.
5. All services performed or goods delivered under State Purchase Orders/Contracts are to be continued for the term of the Purchase Order/Contract, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise available for these services or goods, this Purchase Order/Contract becomes void and of no effect after June 30.
6. Payment may only be made after the delivery and acceptance of goods or services.
7. Interest may be paid for late payment in accordance with the *West Virginia Code*.
8. Vendor preference will be granted upon written request in accordance with the *West Virginia Code*.
9. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
10. The Director of Purchasing may cancel any Purchase Order/Contract upon 30 days written notice to the seller.
11. The laws of the State of West Virginia and the *Legislative Rules* of the Purchasing Division shall govern all rights and duties under the Contract, including without limitation the validity of this Purchase Order/Contract.
12. Any reference to automatic renewal is hereby deleted. The Contract may be renewed only upon mutual written agreement of the parties.
13. **BANKRUPTCY:** In the event the vendor/contractor files for bankruptcy protection, this Contract may be deemed null and void, and terminated without further order.
14. **HIPAA Business Associate Addendum** - The West Virginia State Government HIPAA Business Associate Addendum (BAA), approved by the Attorney General, and available online at the Purchasing Division's web site (<http://www.state.wv.us/admin/purchase/vrc/hipaa.htm>) 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.

---

**INSTRUCTIONS TO BIDDERS**

1. Use the quotation forms provided by the Purchasing Division.
2. **SPECIFICATIONS:** Items offered must be in compliance with the specifications. Any deviation from the specifications must be clearly indicated by the bidder. Alternates offered by the bidder as **EQUAL** to the specifications must be clearly defined. A bidder offering an alternate should attach complete specifications and literature to the bid. The Purchasing Division may waive minor deviations to specifications.
3. Complete all sections of the quotation form.
4. Unit prices shall prevail in cases of discrepancy.
5. All quotations are considered F.O.B. destination unless alternate shipping terms are clearly identified in the quotation.
6. **BID SUBMISSION:** All quotations must be delivered by the bidder to the office listed below prior to the date and time of the bid opening. Failure of the bidder to deliver the quotations on time will result in bid disqualifications.

**SIGNED BID TO:**

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

## TRUCK MOUNTED REGENERATIVE AIR STREET SWEEPER

708EC012  
ADDENDUM #3

(AFTER DISCUSSION WITH MANAGEMENT ON THE ISSUES OF CONCERN OF ALL FOUR (4) VENDORS PRESENT AT THE PREBID MEETING, ATTACHED IS THE ADDENDUM)

## CHANGES TO SPECIFICATIONS:

*LEAVE AS WRITTEN:*

4.0 REPRESENTATIVE UNIT FOR TEST

## FROM:

6.2 OPERATING AND SERVICE MANUALS AND PARTS LISTS  
(LAST PARAGRAPH - LAST SENTENCE ONLY)

CD ROM is preferred in lieu of parts or service manuals

## TO:

6.2 OPERATING AND SERVICE MANUALS AND PARTS LISTS  
(LAST PARAGRAPH - LAST SENTENCE ONLY)

CD ROM for truck and sweeper is preferred in lieu of parts or service manuals

*LEAVE AS WRITTEN:*

6.5 WARRANTY AND SERVICE POLICY

## FROM:

7.0 SPECIFICATIONS OF THE QUOTED UNIT ARE AS FOLLOWS:

SPECIFICATIONS - CAB AND CHASSIS

## TO:

7.0 SPECIFICATIONS OF THE QUOTED UNIT ARE AS FOLLOWS:

SPECIFICATIONS - CAB AND CHASSIS (CAB OVER TRUCK DESIGN IS PREFERRED)

**LEAVE AS WRITTEN:**

**7.2 Cab to Axle dimensions: The distance from centerline of the rear axle to the rear of the sweeper without the wandering hose shall not exceed 52 inches.**

**LEAVE AS WRITTEN:**

**7.4.1 Frame steel: 80,000 PSI minimum**

**LEAVE AS WRITTEN:**

**7.5 Cab: Maximum visibility, forward line of sight from the chassis front bumper to the point on the ground visible to the operator shall not exceed 14 feet for an ASE 98<sup>th</sup> percentile size operator.**

**LEAVE AS WRITTEN:**

**7.5.18 Front mudflaps to be manufacturers standard for unit bid.**

**FROM:**

**7.6 ENGINE:**

**TO:**

**7.6 ENGINE:  
(FUTURE ENGINE EMISSION REQUIREMENTS CAN BE CHANGED WITH JUSTIFICATION)**

**LEAVE AS WRITTEN:**

**7.6.1 Diesel Engine: Shall be 175 HP minimum @ approximately 2200 RPM**

**LEAVE AS WRITTEN:**

**7.10 Transmission: Allison Series 2500 (or equal) 5-speed with overdrive**

**FROM:**

**7.11 Rear Axle: Shall be two (2) 8 speed with ratios of 5.29 to 5.86/7.21 to 8.17:1 for proper sweeping and transport speeds**

**TO:**

**7.11 Rear Axle: Shall be two (2) speed with ratios of 5.29 to 5.86/7.21 to 8.17:1 for proper sweeping and transport speeds**

*LEAVE AS WRITTEN:*

7.11.4 Unit to be equipped with manufacturers heavy duty shock absorbers (if required).

*LEAVE AS WRITTEN:*

7.12.1 Capacity: 12,000 lbs. minimum I-beam type

*LEAVE AS WRITTEN:*

7.12.2 Front Spring Capacity: 12,000 lbs.

**ADD:**

7.20 Truck shall have temporary license and inspection sticker.

*LEAVE AS WRITTEN:*

## 8.0 SPECIFICATIONS OF SWEEPER MODULE

New Regenerative Air Street Sweeper having a 6-wheeled, truck chassis with dual diesel engines, sweeper controls and switches, 8.0 cubic yard hopper, automatic transmission, 220 gallon water tank, left and right side broom with variable down pressure controlled from the cab.

*LEAVE AS WRITTEN:*

8.2.2 Horsepower: Minimum 115 HP @ 2500 RPM, minimum torque 291 lb. ft. @ 1400 RPM

## FROM:

8.2.6 Sweeper engine shall drive the blower fan by a heavy duty five (5) "V" groove power belt

## TO:

8.2.6 Sweeper engine shall drive the blower fan by a heavy duty five (5) "V" groove power belt or by gear box drive

*LEAVE AS WRITTEN:*

8.2.7 Sweeper engine shall be in an enclosure for sound attenuation, enclosure to include doors for access to serviceable items or tilt hopper.

**LEAVE AS WRITTEN:**

**8.3.3 Blower shall be of the closed or open face turbine type, minimum nine (9) vanes, 31 3/8 inch diameter**

**LEAVE AS WRITTEN:**

**8.3.4 Blower to be constructed of abrasion resistant steel.**

**LEAVE AS WRITTEN:**

**8.3.5 Blower housing to be constructed of 10 gauge steel and lined with Linafex or 3/8 inch corded rubber shall not be part of the hopper**

**LEAVE AS WRITTEN:**

**8.3.6 Blower housing shall have an inspection door (air exhaust opening).**

**LEAVE AS WRITTEN:**

**8.3.7 Blower to be mounted and supported on both sides by heavy duty greasable bearing.**

**LEAVE AS WRITTEN:**

**8.3.8 Bearings shall be greasable from ground level, without tilting the hopper.**

**FROM:**

**8.4.4 Minimum 30 inches high**

**TO:**

**8.4.4 Minimum 30 inches front to back**

**LEAVE AS WRITTEN:**

**8.4.8 In cab electric operated pressure relief valve/vacuum enhancer/leaf bleeder for optimum leaf and light debris sweeping, shall be supplied on pressure side.**

FROM:

**8.4.13 A center broom in the rear or front of the pick up head shall be supplied, to be controlled by rocker switch in cab**

TO:

**8.4.13 A center broom in the rear or front of the pick up head shall be supplied, to be controlled by rocker switch in cab unless gutter brooms move in from both sides to sweep directly in front of regan head.**

FROM:

**8.5.1 Right and left shall be a free floating trailing arm design with inward motion safety to prevent damage when sweeping and encountering fixed obstacles**

TO:

**8.5.1 Right and left shall be a free floating trailing arm design for free floating forward facing digger style design to prevent damage when sweeping and encountering fixed obstacles**

FROM:

**8.5.9 Transport hook shall hold side broom assemblies in storage position or hydraulic lock in system**

TO:

**8.5.9 Transport hook shall hold side broom assemblies in storage position or hydraulic lock in system or pneumatic lock system**

FROM:

**8.5.12 Right side broom shall tilt inward and outward from cab while sweeping by means of electrically controlled linear actuator**

TO:

**8.5.12 Right side broom shall tilt inward and outward from cab while sweeping by means of electrically controlled linear actuator or by means of a hydraulic cylinder**

---

***LEAVE AS WRITTEN:***

**8.6.4 Dump angle minimum 50°**

***LEAVE AS WRITTEN:***

**8.6.5 Dump angle shall be achieved by use of 2 stage telescopic cylinder or dual hydraulic cylinders**

**LEAVE AS WRITTEN:**

**8.6.7 Abrasion resistant "scoop" style steel deflector shall be located at the suction inlet to direct material to the center of hopper.**

**LEAVE AS WRITTEN:**

**8.6.9 Hopper rear door opening minimum 90° angle**

**FROM:**

**8.6.10 Right hand side (passenger side) of hopper shall have hydraulic valve levers to operate hydraulic cylinder movement**

**TO:**

**8.6.10 Right hand side (passenger side) or left hand side of hopper shall have hydraulic valve levers or switches to operate hydraulic cylinder movement**

**FROM:**

**8.6.11 Hopper rear door must have internal door prop**

**TO:**

**8.6.11 Hopper rear door must have internal or external door prop**

**LEAVE AS WRITTEN:**

**8.6.18 An eight (8) inch diameter by four (4) foot long catch basin nozzle with water injection and quick clamp shall be provided. An additional eight (8) inch diameter by four (4) foot aluminum extension with quick clamps shall be provided.**

**FROM:**

**8.6.19 Push button finger tip hydraulic control on the nozzle handles to raise and lower nozzle to be supplied**

**TO:**

**8.6.19 Push button finger tip hydraulic or pneumatic control on the nozzle handles to raise and lower nozzle to be supplied**



FROM:

**8.6.21 Hopper hose must be heavy duty rubber (Plastic hoses not acceptable)**

TO:

**8.6.21 Hopper hose must be woven heavy duty rubber minimum .375 inches thick (Plastic hoses not acceptable)**

2  
3/8"

*LEAVE AS WRITTEN:*

**8.6.23 Right side (curb side) of hopper shall have inspection door**

*LEAVE AS WRITTEN:*

**8.6.25 Rear of sweeper must have bumper to protect against underride obstacles and shall be designed as to not allow dumping debris on top of said bumper.**

*LEAVE AS WRITTEN:*

**8.6.27 Bare steels including stainless steels are not acceptable**

FROM:

**8.6.28 Protection system shall provide protection such that the hopper will be warranted for life of sweeper. The liner shall be Life Liner or approved equal.**

TO:

**8.6.28 Protection system shall provide protection such that the hopper will be warranted for life of sweeper. The liner shall be Life Liner or Rhino Hard Liner with written lifetime warranty or approved equal.**

*LEAVE AS WRITTEN:*

**8.7.4 Dust separator to have self opening door made of abrasion resistant steel to allow automatic discharge of debris when tilting hopper.**

*LEAVE AS WRITTEN:*

**8.8.7 Water lines must be color coded**

2

*LEAVE AS WRITTEN:*

**8.8.11 Minimum three (3) spray nozzles at each side broom for dust control to be provided.**

3?

**LEAVE AS WRITTEN:**

**8.8.13** Inside the pick up head shall have minimum five (5) easily removable water spray nozzles.

**LEAVE AS WRITTEN:**

**8.8.14** Suction hose must have minimum two (2) easily removable spray nozzles

**FROM:**

**8.8.15** Water flow to pick up head, suction hose, side brooms shall be by two (2) electric 12 volt, diaphragm type pumps or electric roller pump, belt driven cat triplex.

**TO:**

**8.8.15** Diaphragm or roller style pump must be provided for standard dust suppression.

**DELETE:**

**8.8.16** Diaphragm type pumps must provide minimum six (6) GPM @ 30 PSI combined, roller style pump with up to 100 psi, or Cat Triplex style pump with up to 55 psi

**LEAVE AS WRITTEN:**

**8.8.18** An additional spray bar mounted under the front bumper with cab controls shall be provided for extreme sweeping conditions.

**LEAVE AS WRITTEN:**

**8.8.19** Water spray line to the center broom shall be provided for increased dust suppression.

**DELETE:**

**8.8.20** Quick disconnect for high pressure wash down must be easily accessible on right side of sweeper

**LEAVE AS WRITTEN:**

**8.9.5** Reservoir should be located within the enclosed auxiliary engine compartment.

FROM:

**8.10.2 Sweeper air components shall have separator air tank**

TO:

**8.10.2 Sweeper air components shall have separator air tank (if needed)**

*LEAVE AS WRITTEN:*

**8.11.7 Sweeper wiring harnesses must be color coded and function stamped every six (6) inches**

*LEAVE AS WRITTEN:*

**8.11.9 Manufacturers recommended LED arrowboard rear mounted to be provided**

*LEAVE AS WRITTEN:*

**8.12.4 Controls for auxiliary engine ignition and throttle, side broom down pressure, and manual reset circuit breakers shall be located in the control console.**

FROM:

**8.14.4 A sweep resume feature must be provided. It must include automatic pickup of side brooms and pickup head and return to idle when sweep resume control is activated or when truck transmission is put in reverse, and return to previous sweeping positions when transmission is taken out of reverse or sweep resume control is returned to sweeping position.**

TO:

**8.14.4 A sweep resume feature must be provided. It must include automatic pickup of side brooms and pickup head and return to idle when sweep resume control is activated or when truck transmission is put in reverse, and return to previous sweeping positions when transmission is taken out of reverse or sweep resume control is returned to sweeping position or sweeps in reverse vacuum head with automatic pick up of side brooms when truck is placed in reverse.**

**ADD:**

**8.14.5 Mounted tool box for tool storage a minimum 16 inches wide x 8 inches tall x 16 inches deep, lockable tool box, mounted curb side for safety.**

## TRUCK MOUNTED REGENERATIVE AIR STREET SWEEPER

708EC012  
ADDENDUM #3

(AFTER DISCUSSION WITH MANAGEMENT ON THE ISSUES OF CONCERN OF ALL FOUR (4) VENDORS PRESENT AT THE PREBID MEETING, ATTACHED IS THE ADDENDUM)

## CHANGES TO BIDDER'S EVALUATION REPORT:

ADD:

## X4.0 REPRESENTATIVE UNIT FOR TEST

Will you provide one (1) completed representative unit to be observed and evaluated on each order to insure compliance with specification  YES  NO

*Factory demonstrator unit on a Gmc chassis.*

ADD:

X6.2 OPERATING AND SERVICE MANUALS AND PARTS LISTS  
(LAST PARAGRAPH – LAST SENTENCE ONLY)

Will a CD Rom for truck and sweeper be furnished in lieu of parts or service manuals

YES  NO

LEAVE AS WRITTEN:

## X6.5 WARRANTY AND SERVICE POLICY

Will the warranty and service you provide comply with all areas as stated in Section 6.5 of specifications  YES  NO

Is warranty literature attached?

YES  NO

Is a minimum two (2) year bumper to bumper basic parts and labor warranty included?  YES  NO

Describe:

*Standard truck chassis warranty applies. Schwane unit, see attached sheet.*

FROM:

## X7.0 SPECIFICATIONS OF THE QUOTED UNIT

The bidder should complete the following schedule in order for the Division to compare the actual bid unit to the specifications. Should the bidder except a requirement, then such exception may be only on the basis that such feature is not offered by the manufacturer. The Division will have the sole discretion as to whether the bidder's substitution meets the requirements of the specifications.

## SPECIFICATIONS – CAB AND CHASSIS

Manufacturer: Gmc Model: T7500

TO:

## X7.0 SPECIFICATIONS OF THE QUOTED UNIT

The bidder should complete the following schedule in order for the Division to compare the actual bid unit to the specifications. Should the bidder except a requirement, then such exception may be only on the basis that such feature is not offered by the manufacturer. The Division will have the sole discretion as to whether the bidder's substitution meets the requirements of the specifications.

## SPECIFICATIONS – CAB AND CHASSIS

Manufacturer: Gmc Model: T7500

Is it the cab over truck design  YES  NO

**LEAVE AS WRITTEN:**

X7.2 Cab to Axle Dimensions: Distance from centerline of the rear axle to the rear of the sweeper without the wander hose 52 inches

**LEAVE AS WRITTEN:**

X7.4.1 Frame steel: 120,000 psi

**LEAVE AS WRITTEN:**

X7.5 Cab: Maximum visibility, forward line of sight from the chassis front bumper to the point on the ground visible to the operator 10 feet for an ASE 98<sup>th</sup> percentile size operator

Gmc does not have a published statement. "Not every driver is the same height."

LEAVE AS WRITTEN:

X7.5.18 Front mudflaps are manufacturers standard for unit bid  YES  NO

FROM:

X7.6 Engine:

TO:

X7.6 Engine:

Will you supply justification for changes to future engine emission requirements  YES  NO

LEAVE AS WRITTEN:

X7.6.1 Diesel engine: 215 HP @ 2200 RPM

LEAVE AS WRITTEN:

X7.10 Transmission: Allison 2500 ROS 5 speed with overdrive  YES  NO

FROM:

X7.11 Rear Axle: Is it two (2) 8 speed with ratios of 5.29 to 5.86/7.21 to 8.17:1 for proper sweeping and transport speeds  YES  NO

TO:

X7.11 Rear Axle: Is it two (2) speed with ratios of 5.29 to 5.86/7.21 to 8.17:1 for proper sweeping and transport speeds  YES  NO

LEAVE AS WRITTEN:

X7.11.4 Is unit equipped with manufacturers heavy duty rear shock absorbers  YES  NO  
Are they required  YES  NO

LEAVE AS WRITTEN:

X7.12.1 Capacity: 12,000 lbs. I beam type

LEAVE AS WRITTEN:

X7.12.2 Front spring capacity: 12,000 lbs.

ADD:

X7.20 Will you furnish temporary license and inspection sticker  YES  NO*LEAVE AS WRITTEN:*

X8:0 SPECIFICATIONS OF SWEEPER MODULE

Does New Regenerative Air Street Sweeper have a 6 wheeled, truck chassis with dual diesel engines, sweeper controls and switches, 8.0 cubic yard hopper, automatic transmission, 220 gallon water tank, left and right side broom with variable down pressure controlled from cab  YES  NO

Manufacturer: Schwaizer Model: A7000

*LEAVE AS WRITTEN:*X8.2.2 Horsepower: 115 HP @ 2500 RPM; torque 291 lb. ft @ 1400 RPM

FROM:

X8.2.6 Does the sweeper engine drive the blower fan by a heavy duty five (5) "V" groove power belt  YES  NO

TO:

X8.2.6 Does the sweeper engine drive the blower fan by a heavy duty five (5) "V" groove power belt  YES  NO or by gearbox drive  YES  NO*LEAVE AS WRITTEN:*X8.2.7 Is sweeper engine in an enclosure for sound attenuation, enclosure to include doors for access to serviceable items or tilt hopper  YES  NO*LEAVE AS WRITTEN:*X8.3.3 Is blower of the closed  or open  face turbine type  YES  NONumber of vanes 10 diameter 32 3/4 "*LEAVE AS WRITTEN:*X8.3.4 Blower constructed of abrasion resistant steel  YES  NO

**LEAVE AS WRITTEN:**

X8.3.5 Blower housing constructed of 10 gauge steel and lined with Linafex or 3/8 inch corded rubber  YES  NO

Is part of the hopper  YES  NO

**LEAVE AS WRITTEN:**

X8.3.6 Does blower housing have an inspection door (air exhaust opening)  YES  NO

**LEAVE AS WRITTEN:**

X8.3.7 Is blower mounted and supported on both sides by heavy duty greasable bearing  YES  NO

**LEAVE AS WRITTEN:**

X8.3.8 Are bearings greasable from ground level without tilting the hopper  YES  NO

**FROM:**

X8.4.4 High: 109 inches

**TO:**

X8.4.4 Front to back: 265 inches

**LEAVE AS WRITTEN:**

X8.4.8 In cab electric operated pressure relief valve/vacuum enhancer/leaf bleeder for optimum leaf and light debris sweeping supplied on pressure side  YES  NO



FROM:

X8.4.13 Is a center broom in the rear or front of pick up head supplied  YES  NO

And controlled by rocker switch in cab  YES  NO

TO:

X8.4.13 Is a center broom in the rear or front of pick up head supplied  YES  NO

And controlled by rocker switch in cab  YES  NO

Unless gutter brooms move in from both sides to sweep directly in front of regan head  YES  NO

*Gutter broom Geo quoted extension override.*

FROM:

X8.5.1 Right and left broom are of a free floating trailing arm design with inward motion safety to prevent damage when sweeping and encountering fixed obstacles  YES  NO

TO:

X8.5.1 Right and left broom are of a free floating trailing arm design for free floating forward facing digger style design to prevent damage when sweeping and encountering fixed obstacles  YES  NO

FROM:

X8.5.9 Does transport hook hold side broom assemblies in storage position  or hydraulic lock in system

TO:

X8.5.9 Does transport hook hold side broom assemblies in storage position  or Hydraulic lock in system  or pneumatic lock system

FROM:

X8.5.12 Does right broom tilt inward and outward from cab while sweeping by means of electrically controlled linear actuator  YES  NO

TO:

X8.5.12 Does right broom tilt inward and outward from cab while sweeping by means of electrically controlled linear actuator  YES  NO or by means of a hydraulic cylinder  YES  NO

*LEAVE AS WRITTEN:*

X8.6.4 Dump angle 56°

*LEAVE AS WRITTEN:*

X8.6.5 Dump angle achieved by use of 2 stage telescopic cylinder or dual hydraulic cylinders  YES  NO

*LEAVE AS WRITTEN:*

X8.6.7 Abrasion resistant "scoop" style steel deflector located at the suction inlet to direct material to the center of hopper  YES  NO

*LEAVE AS WRITTEN:*

X8.6.9 Hopper rear door opening 90° angle

FROM:

X8.6.10 Right hand side (passenger side) of hopper has hydraulic valve levers to operate hydraulic cylinder movement  YES  NO

TO:

X8.6.10 Right hand side (passenger side)  YES  NO OR  
left hand side  YES  NO  
of hopper has hydraulic valve levers  YES  NO OR  
switches  YES  NO  
to operate hydraulic cylinder movement  YES  NO

FROM:

X8.6.11 Hopper rear door has internal door prop  YES  NO

TO:

X8.6.11 Hopper rear door has internal  or external door prop

*LEAVE AS WRITTEN:*

X8.6.18 An 8 inch diameter by 4 foot long catch basin nozzle with water injection and quick clamp is provided  YES  NO

An additional 8 inch diameter by 4 foot aluminum extension with quick clamps is provided  YES  NO

## FROM:

X8.6.19 Is a push button finger tip hydraulic control on the nozzle handles to raise and lower nozzle provided  YES  NO

## TO:

X8.6.19 Is a push button finger tip hydraulic  or pneumatic control  on the nozzle handles to raise and lower nozzle to be supplied  YES  NO

## FROM:

X8.6.21 Is hopper hose heavy duty rubber  YES  NO

## TO:

X8.6.21 Is hopper hose woven heavy duty rubber  YES  NO

Thickness: 3/8 inches Kanaflex - 180AR

*LEAVE AS WRITTEN:*

X8.6.23 Does right side (curb side) of hopper have inspection door  YES  NO

*LEAVE AS WRITTEN:*

X8.6.25 Does rear of sweeper have bumper to protect against underride obstacles and designed as to not allow dumping debris on top of said bumper  YES  NO

*LEAVE AS WRITTEN:*

X8.6.27 Have you used any bare steels including stainless steels  YES  NO

**NO CHANGED REQUIRED:**

X8.6.28 Does protection system provide protection such that the hopper will be warranted for life of sweeper  YES  NO

Manufacturer of liner: Rhino Linings, Inc.

**LEAVE AS WRITTEN:**

X8.7.4 Does dust separator have self opening door made of abrasion resistant steel to allow automatic discharge of debris when tilting hopper  YES  NO

**LEAVE AS WRITTEN:**

X8.8.7 Are water lines color coded  YES  NO

**LEAVE AS WRITTEN:**

X8.8.11 3 spray nozzles at each side broom for dust control provided  YES  NO

**LEAVE AS WRITTEN:**

X8.8.13 Inside the pick up head has 5 easily removable water spray nozzles  YES  NO

**LEAVE AS WRITTEN:**

X8.8.14 Suction hose had 2 easily removable spray nozzles  YES  NO

**FROM:**

X8.8.15 Is water flow to pick up head, suction hose, side brooms by two (2) electric 12 volt, diaphragm type pumps or electric roller pump, belt driven cat triplex  YES  NO

**TO:**

X8.8.15 Is diaphragm or roller style pump provided for standard dust suppression  YES  NO

**DELETE:**

X8.8.16 Diaphragm type pumps provide 45 GPM @ 45 PSI combined  YES  NO  
 Roller style pump with up to \_\_\_ psi  YES  NO or  
 Cat Triplex style pump with up to \_\_\_ PSI  YES  NO

**LEAVE AS WRITTEN:**

X8.8.18 Is an additional spray bar mounted under the front bumper with cab controls provided for extreme sweeping conditions  YES  NO

**LEAVE AS WRITTEN:**

X8.8.19 Is water spray line to the center broom provided for increased dust suppression  YES  NO

**DELETE:**

X8.8.20 Is quick disconnect for high pressure wash down easily accessible on right side of sweeper  YES  NO

**LEAVE AS WRITTEN:**

X8.9.5 Is reservoir located within the enclosed auxiliary engine compartment  YES  NO

**FROM:**

X8.10.2 Do sweeper air components have separator air tank  YES  NO

**TO:**

X8.10.2 Do sweeper air components have separator air tank  YES  NO  
Is it needed  YES  NO

**LEAVE AS WRITTEN:**

X8.11.7 Is sweeper wiring harnesses color coded and function stamped every six (6) inches  YES  NO

**LEAVE AS WRITTEN:**

X8.11.9 Manufacturers recommended LED arrowboard rear mounted is provided  YES  NO

**LEAVE AS WRITTEN:**

X8.12.4 Are controls for auxiliary engine ignition and throttle, side broom down pressure, and manual reset circuit breakers located in the control console  YES  NO

**FROM:**

X8.14.4 A sweep resume feature is provided

 YES  NO

Does it include automatic pickup of side brooms and pickup head and return to idle when sweep resume control is activated or when truck transmission is put in reverse, and return to previous sweeping positions when transmission is taken out of reverse or sweep resume control is returned to sweeping position

 YES  NO**TO:**

X8.14.4 A sweep resume feature is provided

 YES  NO

Does it include automatic pickup of side brooms and pickup head and return to idle when sweep resume control is activated or when truck transmission is put in reverse, and return to previous sweeping positions when transmission is taken out of reverse or sweep resume control is returned to sweeping position or sweeps in reverse vacuum head with automatic pick up of side brooms when truck is placed in reverse

 YES  NO**ADD:**X8.14.5 Mounted tool box for tool storage 16 inches wide x 8 inches tall x16 inches deep, lockable tool box, mounted curb side for safety YES  NO

# SCHWARZE SWEEPER 12 MONTH LIMITED WARRANTY

Schwarze Industries, seller, provides warranty coverage to the original purchaser for all new equipment manufactured by Schwarze Industries, Inc. Schwarze-built sweepers are warranted to be free from defects in materials and/or workmanship under normal operating conditions, and when used in a proper application, for a period of twelve (12) consecutive months from the date placed into service, or twelve hundred (1200) hours of operation, whichever occurs first, provided all recommended maintenance is performed as scheduled.

## CUSTOMER COPY

Registered Owner Information

Name: \_\_\_\_\_ Date Placed in Service: \_\_\_\_\_  
 Address: \_\_\_\_\_ Chassis VIN #: \_\_\_\_\_  
 City: \_\_\_\_\_ Time or Hours, whichever comes first: \_\_\_\_\_  
 State: \_\_\_\_\_ Unit Model #: \_\_\_\_\_  
 Zip: \_\_\_\_\_ Serial #: \_\_\_\_\_

**WHAT WE WILL DO:** Seller's sole obligation with respect to this Warranty shall be to repair or replace, at Seller's sole option, at the Schwarze authorized Dealer nearest to the purchaser's location, any part, parts or workmanship which may prove to be defective during the Warranty Period. Warranty work shall be performed at Seller's expense. Seller's obligation shall not extend to any part, parts or workmanship which may prove to be defective during the Warranty Period, or to any damage caused by acts of God. This Warranty shall not apply to routine maintenance, repair and adjustments, or to the wear parts, including but not limited to the following:

- A-Series & S-Series Sweepers: flap, drive belt, hoses, broom bristles, seals, low arms, throttle cable, fan housing liner, door trim, filters, light bulbs, tires, water nozzles, spray tips, screens, springs, switches, batteries, mud flaps and mirrors.
- M-Series Sweepers: brooms, rubber sprockets, bearings, flaps, drive couplings, drag brush, caster wheels, light bulbs, tires, water nozzles, spray tips, belts, control cables, filters, switches, batteries, mud flaps and mirrors.

Except for the warranties stated herein, ALL OTHER WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE SHALL BE DISCLAIMED. THE INDEMNITY AND LIABILITY WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE OR CONSEQUENTIAL DAMAGES SUCH AS, BUT NOT LIMITED TO, DAMAGE OR LOSS OF PROFITS, SPECIAL DAMAGES, COSTS OF PURCHASE OR REPLACEMENT GOODS, OR CLAIMS OF CUSTOMERS OR OTHERS, SHALL BE DISCLAIMED. THE PURCHASER MUST NOTIFY THE SCHWARZE REMEDIES OF THE PURCHASER SET FORTH IN THIS WARRANTY. IF SUCH NOTIFICATION IS NOT RECEIVED, THE PURCHASER SHALL BE DEEMED TO HAVE ACCEPTED THE WARRANTY AS IS. THE PURCHASER'S REMEDIES SHALL BE LIMITED TO THE REMEDIES SET FORTH IN THIS WARRANTY. IF ANY EXCESSIVE DAMAGE TO THE GOODS IS CAUSED BY THE PURCHASER'S NEGLIGENCE, CARELESSNESS, UNAUTHORIZED REPAIR WORK, USE OF UNAUTHORIZED REPAIR PARTS OR ACCESSORIES NOT MANUFACTURED BY SCHWARZE, THE PURCHASER SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF SUCH PARTS OR ACCESSORIES. THE PURCHASER'S EXPENSE AND RISK OF LOSS DURING TRANSPORT, TO SELLER'S HUNTSVILLE, ALABAMA ADDRESS, OR TO THE NEAREST SCHWARZE INDUSTRIES, INC. AUTHORIZED DEALER, IN LIEU OF PRESENTING THE UNIT FOR SERVICE, PARTS COVERED UNDER THIS 12 MONTH WARRANTY WILL BE SHIPPED VIA AIR FREIGHT FOR NEXT-DAY DELIVERY, WHEN AVAILABLE. THOSE PARTS NOT SHIPPED ON AN EXPEDITED BASIS, OR WEIGHING MORE THAN 25 LBS., WILL BE SHIPPED BY SELLER'S NORMAL METHODS (U.S. GROUND, COMMON CARRIER). THE PURCHASER'S EXPENSE UNLESS PURCHASER SPECIFIES DIFFERENTLY, AND AGREES TO BE LIABLE FOR ANY ADDITIONAL SHIPPING AND FREIGHT CHARGES. ALL PARTS COVERED UNDER THIS WARRANTY C.O.D. UNLESS THE PURCHASER HAS PREVIOUSLY ESTABLISHED AN ACCOUNT WITH SCHWARZE AND PROVIDED THAT SUCH ACCOUNT IS NOT PAST DUE AND THAT THE PURCHASER HAS NOT EXCEEDED HIS/HER/HIS CREDIT LIMIT. WARRANTY CREDIT WILL BE AVAILABLE ONLY ON PARTS WHICH ARE RECEIVED BY SELLER WITHIN THIRTY (30) DAYS OF THE PURCHASER'S RECEIPT, AND IF THE REPLACEMENT OR REPAIRED PART IS RETURNED FREIGHT PREPAID, AND ONLY IF THE COMPONENT MANUFACTURER APPROVES IT FOR WARRANTY REPLACEMENT. IN NO CASE WILL CREDIT BE AVAILABLE FOR DEFECTIVE PARTS RECEIVED BY SELLER LATER THAN (30) DAYS AFTER SCHWARZE SHIPS THE REPLACEMENT PART.

**TRANSFER OF WARRANTY:** This Warranty is non-transferable without prior approval, in writing, by Schwarze Industries, Inc., 1055 Jordan Road, N.E., Huntsville, Alabama, 35811. To be considered, any Transfer request must include the following information:

- The vehicle identification number of the chassis.
- Model and serial number of the sweeper.
- Original purchaser's name and address.
- Name and address of the current registered owner. Name and address of the party to whom the Warranty is requested to be reassigned.

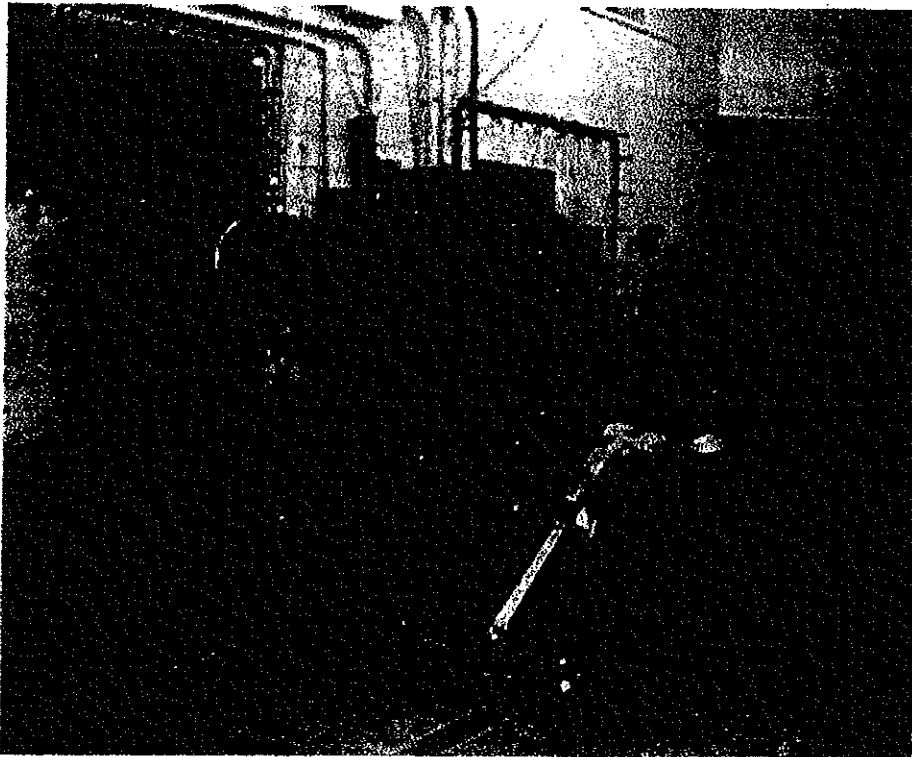
No employee or agent of Seller is authorized to alter or extend this Warranty or to assume any other liability on Seller's behalf. Any alterations or extensions shall not be valid or binding upon Schwarze. To get further help, notify the Schwarze Warranty Department by calling 1-800-879-7933, and identify yourself as a bearer of the Schwarze Sweeper 12 Month Limited Warranty.



# AIR MOVEMENT AND CONTROL ASSOCIATION INTERNATIONAL, INC.

30 West University Drive • Arlington Heights, Illinois 60004-1893  
Phone: (847) 394-0150 • Fax: (847) 253-0088 • E-mail: LAB@amca.org

## AMCA LABORATORY TEST NO. 16110-A1 Tested April 25, 2000



MVC-042F.JPG

AMCA Standard 210  
Air Performance Test  
Figure 12 Setup  
Installation Type B



Air Movement and Control Association International, Inc.  
Arlington Heights, Illinois, USA

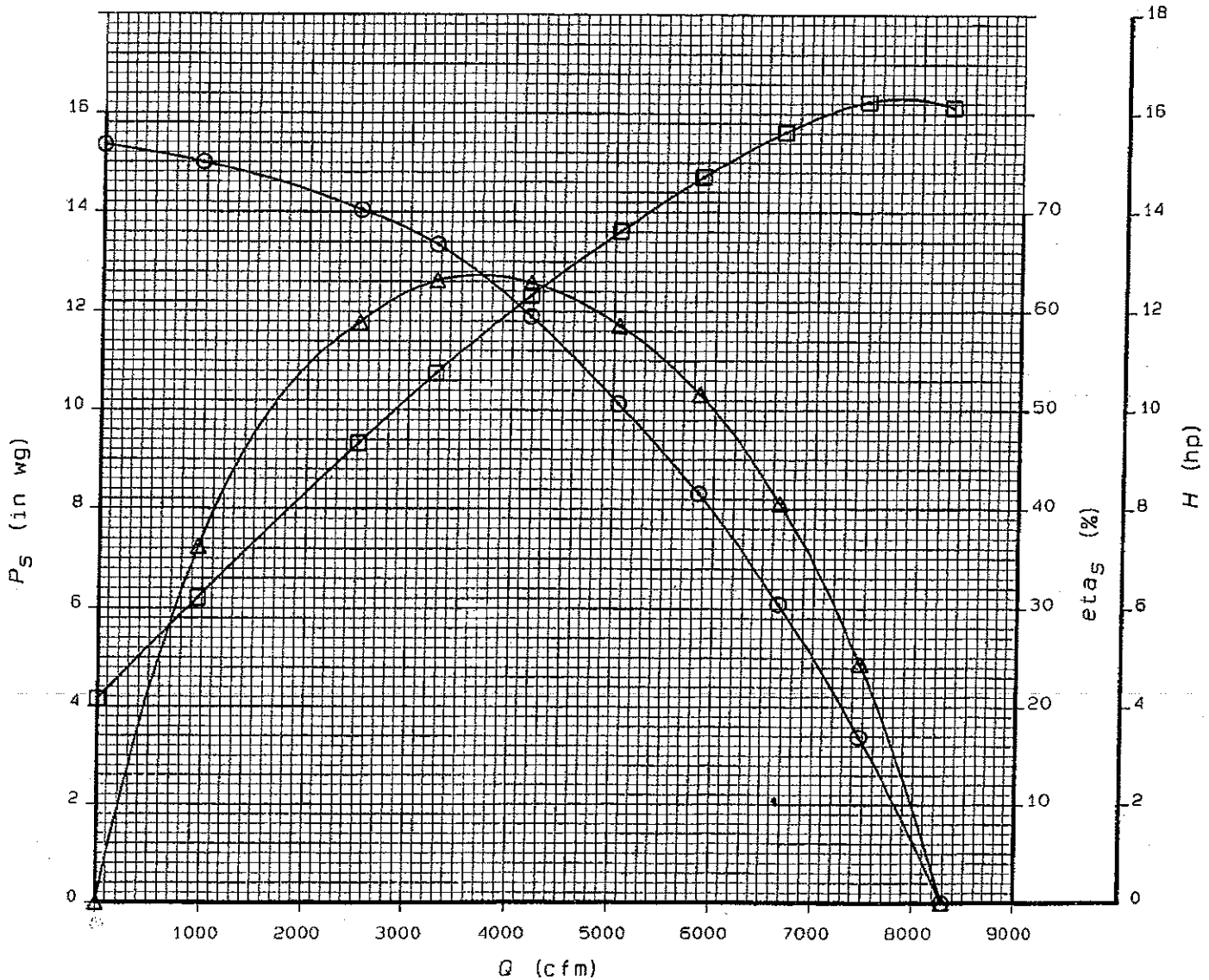
Test Number : 16110-A1  
Date of Test : 04/25/00  
Tested For : Schwarze Industries  
 $P_0$  : 29.29 in Hg

Unit : Centrifugal  
Manufacturer : Schwarze Industries  
Trade Name : A7000  
Model Number : A7WW  
Impeller Diameter : 33 in  
Inlet Area : 3.21 ft<sup>2</sup>  
Outlet Area : .939 ft<sup>2</sup>

Test Method per AMCA Standard 210-85, Figure 12, Installation Type B.  
Results at Standard Air, Speed = 1600 rpm.

LEGEND

- Fan Flow Rate,  $Q$
- ⊖ Fan Static Pressure,  $P_S$
- ⊞ Fan Power Input,  $H$
- △ Fan Static Efficiency,  $eta_S$



Air Movement and Control Association International, Inc.  
Arlington Heights, Illinois, USA

Test Unit :	Centrifugal	Test Number :	16110-A1
Manufacturer :	Schwarze Industries	Date of Test :	04/25/00
Trade Name :	A7000	Tested For :	Schwarze Industries
Model Number :	A7WW	Witness :	None
Impeller Diameter :	33 in	Technician :	JR
Inlet Area :	3.21 ft <sup>2</sup>	$P_{br}$ =	29.42 in Hg
Outlet Area :	.939 ft <sup>2</sup>	$t_{db}$ =	73 °F
		$P_b$ =	29.29 in Hg

Test method per AMCA Standard 210-85, figure 12 setup (Installation Type B).

Results at Test Conditions :

Det.	$\rho$ (lbm/ft <sup>3</sup> )	$N$ (rpm)	$P_t$ (in wg)	$P_v$ (in wg)	$P_s$ (in wg)	$Q$ (cfm)	$H$ (hp)	$K_p$	$\eta_{t_e}$ (%)	$\eta_{t_s}$ (%)
1	0.0729	1606	4.781	4.780	0.001	8319	15.848	0.9984	39.38	0.01
2	0.0728	1606	7.159	3.841	3.318	7491	15.948	0.9959	52.64	24.40
3	0.0728	1606	8.996	3.039	5.957	6683	15.341	0.9941	61.23	40.55
4	0.0728	1606	10.466	2.335	8.131	5875	14.436	0.9926	66.45	51.63
5	0.0728	1606	11.640	1.730	9.910	5067	13.364	0.9916	68.78	58.56
6	0.0728	1606	12.815	1.181	11.634	4196	12.091	0.9907	69.26	62.87
7	0.0728	1606	13.769	0.719	13.050	3278	10.549	0.9903	66.59	63.12
8	0.0729	1606	14.176	0.426	13.750	2521	9.165	0.9908	60.73	58.91
9	0.0730	1606	14.762	0.062	14.700	961	6.108	0.9961	36.35	36.20
10	0.0730	1606	15.050	0.000	15.050	0	4.086	1.0000	0.00	0.00

Results at Standard Air,  $N = 1600$  rpm:

Det.	$P_t$ (in wg)	$P_v$ (in wg)	$P_s$ (in wg)	$Q$ (cfm)	$H$ (hp)	$K_p$	$\eta_{t_e}$ (%)	$\eta_{t_s}$ (%)
1	4.882	4.881	0.001	8288	16.123	0.9984	39.38	0.01
2	7.318	3.926	3.392	7463	16.241	0.9959	52.64	24.40
3	9.194	3.106	6.089	6658	15.622	0.9941	61.23	40.55
4	10.701	2.387	8.314	5853	14.706	0.9926	66.45	51.63
5	11.902	1.768	10.133	5048	13.615	0.9916	68.78	58.56
6	13.107	1.208	11.899	4180	12.320	0.9907	69.26	62.87
7	14.083	0.735	13.348	3266	10.750	0.9903	66.59	63.12
8	14.476	0.435	14.041	2512	9.324	0.9908	60.73	58.91
9	15.063	0.063	15.000	957	6.209	0.9961	36.35	36.20
10	15.354	0.000	15.354	0	4.153	1.0000	0.00	0.00

Air Movement and Control Association International, Inc.  
Arlington Heights, Illinois, USA

Test Unit :	Centrifugal	Test Number : 16110-A1
Manufacturer :	Schwarze Industries	Date of Test: 04/25/00
Trade Name :	A7000	Tested For : Schwarze Industries
Model Number :	A7WW	Witness : None
Impeller Diameter :	33 in	Technician : JR
Inlet Area :	3.21 ft <sup>2</sup>	$p_{br}$ = 29.42 in Hg
Outlet Area :	.939 ft <sup>2</sup>	$t_{db}$ = 73 °F
		$p_b$ = 29.29 in Hg

Test method per AMCA Standard 210-85, figure 12 setup (Installation Type B).

Appurtenances : Tested with client supplied outlet duct installed.

Additional Comments : Contract Test.

---

Data at Test Conditions :

Large Chamber - AMCA Standard 210-85, figure 12 setup.

Det.	$t_{d0}$ (°F)	$t_{w0}$ (°F)	$t_{d2}$ (°F)	$t_{d5}$ (°F)	$P_{s5}$ (in wg)	$dP$ (in wg)	$t_{d7}$ (°F)	$P_{s7}$ (in wg)	T (lb-in)	Nozzle Combo
1	70.9	56.7	72.8	72.8	0.001	2.360	72.8	0.001	621.92	13
2	71.4	57.0	73.4	73.4	3.318	1.896	73.4	3.318	625.85	13
3	71.3	57.2	73.5	73.5	5.957	1.500	73.5	5.957	602.05	13
4	71.5	57.4	73.7	73.7	8.131	1.153	73.7	8.131	566.52	13
5	71.5	57.4	73.9	73.9	9.910	0.855	73.9	9.910	524.47	13
6	71.6	57.6	74.2	74.2	11.634	0.585	74.2	11.634	474.49	13
7	71.6	57.7	74.5	74.5	13.050	0.357	74.5	13.050	414.00	13
8	70.7	57.5	74.5	74.5	13.750	5.455	74.5	13.750	359.67	7
9	70.3	57.4	74.4	74.4	14.700	14.650	74.4	14.700	239.71	5
10	70.2	57.4	74.2	74.2	15.050	15.050	74.2	15.050	160.35	0

---

Nozzle	Open Nozzle Diameters (in)		
Combo			
13)	7.0	10.0	10.0
7)	7.0		
5)	1.6	3.0	

---

APPLICATION NO: 16110 DATE: 4/25/60 TECH.: JTC

The following instruments, calibrated as required per applicable AMCA Standards, were used for this test:

**SOUND**

✓	Instrument
	Dual Channel Real-time Frequency Analyzer Bruel & Kjaer Type 2133 (141)
	Condenser Microphone Cartridge (Random Incidence) Bruel & Kjaer Type 4192 (212)
	Microphone Preamplifier Bruel & Kjaer Type 2669 (206)
	Rotating Microphone Boom Bruel & Kjaer Type 3923 (144)
	Pistonphone for Acoustic Calibration Bruel & Kjaer Type 4220 (195)
	Double Screened Extension Cable (30m) Bruel & Kjaer Type AO 0029 (145)
	RSS Ilg Industries (213)
	Correction Barometer Bruel & Kjaer Type UZ001 (197)

**PRESSURE**

✓	Manometer
	Small Chamber 10 in. wg Meriam Inclined Model 40HA10 (103)
	Small Chamber 6 in. wg Meriam Inclined Model 40HA10 (104)
A	Large Chamber 10 in. wg Meriam Inclined Model 40HA10 (106)
A	Large Chamber 6 in. wg Meriam Inclined Model 40HA10 (105)
	Meriam U Type Model 10AA25WM 50 in. wg (107)
	Meriam U Type Model 10AA25WM 50 in. wg (108)
	Dwyer Inclined Model 246 (101)
	Dwyer Inclined Model 246 (102)
A	Meriam U Type 10AA25WM 24 in. wg (208)
✓	Transducer
A	Static & Total Pressure Data Metrics Barocel Model 590D (99) HP3497A, 44221A (114)
A	ΔP Data Metrics Barocel Model 590D (100) HP3497A, 44221A (114)
✓	Barometer
A	Princo Mercury Column Barometer (79)
✓	High Pressure Gauge
	Dual Front Pressure Gauge U.S. Gauge 150 psi (109)
	Dual Front Pressure Gauge U.S. Gauge 35 psi (110)
	ABM Model NB Pressure Gauge 30 psi (111)

**WATER FLOW RATE**

✓	Meters and Manifolds	
	Rainfall	Dwyer Flow Meter RMC 141 (186)
		Rainfall Manifold (188)
	Wetted Wall	Dwyer Flow Meter RMC 143 (187)
		Wetted Wall Manifold (189)
	Scale	Ohaus Model 1650 (190)

**ELECTRIC METERS**

✓	Meter
	Fluke 75 Multimeter (184)
	Fluke 75 Multimeter (185)
	Ohio Semitronics PTP - 709A Wattmeter (182)
	Ohio Semitronics W20K3A Wattmeter (183)

**AIR VELOCITY**

✓	Meter
	Kurz Model 443A (181)



Friday, May 23, 2008

Trevor Gardner III  
Atlantic Machinery, Inc.  
2702 Garfield Ave  
Silver Spring, MD 20910

Re: West Virginia DOT Hopper Liner

Dear Trevor:

The hopper liner that will be provided with the Schwarze Model A7000 Regenerative Air Street Sweeper for West Virginia DOT will be Rhino Hard Liner supplied by Rhino Linings.

This lining when applied, provides protection against abrasion and corrosion. The warranty in this application per Rhino Linings is for the life of the sweeper. This warranty has the following clauses that need to be adhered to maintain the lifetime warranty.

1. The Rhino Hard Liner must be inspected annually by a local Rhino dealer. This inspection is the responsibility of the end user and all reports of this inspection must be sent to Atlantic Machinery, Inc. and Schwarze Industries, Inc. on an annual basis.
2. Any repairs that are required after the yearly inspection will be handled at Rhino Linings at no-charge.
3. All transportation for the annual inspections will be the responsibility of the end user.

If you have any questions, please do not hesitate to call.

Sincerely,

Raymond Massey  
National Sales Manager

"New Ideas From The Company That's Sweeping The Earth"<sup>SM</sup>



December 7, 2007

Dear Distributor:

We are pleased to provide the dealer and customer service training schedule for 2008. Training is conducted over a four day period for the Schwarze Sweeper and Patcher product lines. The four day training period includes four separate sessions consisting of:

<b>Day 1 (2 hrs)</b>	<b>Introduction and Policy and Procedure</b>	
<b>Safety</b>	<b>Manuals</b>	<b>CD's</b>
<b>Key Contacts</b>	<a href="http://www.schwarze.com">www.schwarze.com</a>	<a href="http://www.schwarzeteam.com">www.schwarzeteam.com</a>
<b>2007 Warranty Policy</b>	<b>PDI Sheets</b>	<b>Set Up Sheets</b>

<b>Day 1 &amp; 2 (10 hrs)</b>	<b>M-Series Service/Maintenance (M5 M6)</b>	
<b>M6 Hydraulics</b>	<b>M6 Electrical</b>	<b>M6 Maintenance</b>
<b>M5 Hydraulics</b>	<b>M5 Electrical</b>	<b>M5 Maintenance</b>

<b>Day 3 (6 hrs)</b>	<b>A-Series Service/Maintenance (A4, A7, A8 &amp; A9)</b>	
<b>A4 Hydraulics</b>	<b>A4 Electrical</b>	<b>A4 Maintenance</b>
<b>A7/9 Hydraulics</b>	<b>A7/9 Electrical</b>	<b>A7/9 Maintenance</b>
<b>A8 Hydraulics</b>	<b>A8 Electrical</b>	<b>A8 Maintenance</b>

<b>Day 4 (4 hrs)</b>	<b>Patcher Series Service/Maintenance (RP005, SP010, SP550)</b>	
<b>RP005 Hydraulics</b>	<b>RP005 Electrical</b>	<b>RP005 Maintenance</b>
<b>SP010/550 Hydraulics</b>	<b>SP010/550 Electrical</b>	<b>SP010/550 Maintenance</b>

You are welcome to attend any or all of the product segments offered during the training periods however please remember yearly training is required\* for each SII dealer and branch to maintain current certification for each product they represent.

Wes Brant                      256-851-1235                      [wbrant@schwarze.com](mailto:wbrant@schwarze.com)

For Schwarze Industries Inc.

Wes Brant

Product Assurance Manager

\*Mandatory training as per the SII Distributor Service Center Evaluation

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Schwarze Industries, Inc. • 1055 Jordan Road • Huntsville, AL 35811 • 800-879-7933 • 256-851-1200 • Fax 256-851-1210  
Internet: <http://www.schwarze.com> • Email: [support@schwarze.com](mailto:support@schwarze.com)



### Factory Service Training Schedule 2008

DATE OF CLASS	PRODUCTS
January 22, 23, 24 & 25	A, M & Patcher Series
February 12, 13, 14 & 15	A, M & Patcher Series
March 18, 19, 20 & 21	A, M & Patcher Series
April 22, 23, 24, & 25	A, M & Patcher Series
May 20, 21, 22 & 23	A, M & Patcher Series
June 17, 18, 19 & 20	A, M & Patcher Series
July 22, 23, 24 & 25	A, M & Patcher Series
August 12, 13, 14 & 15	A, M & Patcher Series
September 23, 24, 25 & 26	A, M & Patcher Series
October 21, 22, 23 & 24	A, M & Patcher Series
November 18, 19, 20 & 21	A, M & Patcher Series
December 9, 10, 11 & 12	A, M & Patcher Series

Classes are held in the SII's training room starting at 8:00 AM with a 1 hour lunch break, finishing at 4:30 PM.

Attendees will receive a training participation certificate and a CD containing the training program presentation, a complete set of part manuals, hydraulic and electrical schematics.

**Early registration cutoff dates:**

**10 business days before class start date**

**Class size is limited to twelve (12) attendees per day.**

**Fees:**

Early registration	\$100.00
Registration	\$135.00
Non-dealers	\$150.00

Transportation, meals, and lodging paid by attendee.

Fax 256-851-1189 or e-mail [wbrant@schwarze.com](mailto:wbrant@schwarze.com) registration form no later than 2 business days before class start date.

If you should have any questions please contact:

Wes Brant	(Work)	256-851-1235
	(Cell)	256-683-0135
	(Fax)	256-851-1189
	(E-mail)	<a href="mailto:wbrant@schwarze.com">wbrant@schwarze.com</a>

Enclosures:           Registration Form  
                              Hotel Listing

## Schwarze Industries Service Training Registration Form

"New Ideas From The Company That's Sweeping The Earth"<sup>SM</sup>

Schwarze Industries, Inc. • 1055 Jordan Road • Huntsville, AL 35811 • 800-879-7933 • 256-851-1200 • Fax 256-851-1210  
Internet: <http://www.schwarze.com> • Email: [support@schwarze.com](mailto:support@schwarze.com)



Indicate Class Date from Attached Schedule: \_\_\_\_\_ Huntsville, Alabama

Attendee name:

Title:

Company:

Address:

Telephone:

Fax:

E-Mail:

ACCOMMODATIONS FOR ATTENDEES WITH SPECIAL NEEDS: For any special arrangement, such as enhanced audio amplification, specific dietary requirements, physically challenged, oral, or sign interpreters, please contact us at 256-851-1235.

REGISTRATION FEES: The registration fee includes all class sessions, materials, and daily lunch.

Early registration fee (postmarked by 10 business days prior to class start)	_____ @ \$100.00
Dealer registration fee (postmarked by 2 business days prior to class start)	_____ @ \$135.00
End user registration fee (postmarked by 2 business days prior to class start)	_____ @ \$150.00
<b>Total:</b>	<b>\$ _____</b>

Lodging, lodging reservations (see hotel listing following), transportation, and meal costs are the responsibility of the attendee.

Payment method:

\_\_\_\_\_ Check enclosed      \_\_\_\_\_ Institutional Purchase Order Attached

Credit Card: \_\_\_\_\_ Credit Card Number:

Visa MC Amex Discover      Expiration Date:

Name on Card:

RETURN COMPLETED FORM AND FEE TO:

Schwarze Industries Inc.  
External Training  
1055 Jordan Road Huntsville, AL 35811  
Fax: 256-851-1189  
E-mail: [wbrant@schwarze.com](mailto:wbrant@schwarze.com)

Schwarze Industries reserves the right to cancel a class due to low enrolment. We will make every effort not to cancel our classes, as we understand the inconvenience this may cause attendees and businesses.

**For Company Use Only**

AMOUNT PAID: \_\_\_\_\_ DATE: \_\_\_\_\_ Rec. by:

“New Ideas From The Company That’s Sweeping The Earth”<sup>SM</sup>

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Internet: <http://www.schwarze.com> • Email: [support@schwarze.com](mailto:support@schwarze.com)





LaQuinta Inn  
3141 University Drive  
Huntsville AL 35816  
256-533-0756  
Contact: Billie Bump  
\$39.00 estimated  
<http://www.lq.com/lq/index.jsp>

Holiday Inn Research Park  
5903 University Drive  
Huntsville AL 35816  
256-830-0600  
Contact: Michelle Bragg  
\$72.00 estimated  
<http://www.ichotelsgroup.com>

Select Hotel by Holiday Inn  
401 Williams Ave  
Huntsville AL 35801  
256-533-1400  
Contact: Diana Gallagher  
\$99.00 - \$ 109.00 estimated  
<http://www.ichotelsgroup.com>

Best Western Rocket City Inn  
6200 Torok Circle  
Huntsville AL 35806  
256-837-7412  
Contact: Mary Kingen  
\$69.00 estimated  
<http://www.bestwestern.com>

Calls should be placed directly to the person listed in Sales/Catering to get the preferred rate. These rates are not available thru central reservations (800 numbers or online.)

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Internet: <http://www.schwarze.com> • Email: [support@schwarze.com](mailto:support@schwarze.com)

# SCHWARZE A7000

**Regenerative Air Sweeper**

Versatile  
Exceptional Durability  
Powerful



**ATLANTIC**  
MACHINERY INC.

2702 Garfield Ave. • Silver Spring, Maryland 20910  
(301) 585-0800 FAX (301) 585-7681



# SCHWARZE INDUSTRIES A7000 SWEEPER

Versatile  
Exceptional Durability  
Powerful

Schwarze Industries is dedicated to using a Total Performance Teamwork concept to produce, maintain and market the finest power sweeping equipment in the world. All of our products are made with pride in the USA, and we offer a broad line, with more sweeper models to choose from than any other manufacturer in America.

The Schwarze model A7000 is a heavy duty, chassis-mounted, regenerative air sweeper with an 8.4 cubic yard hopper. Its basic design has had over 20 years of successful operation throughout the United States and around the world. As one of the largest, most powerful air sweepers in existence, the Schwarze A7000 is an ideal choice for use in a wide range of demanding municipal and contractor sweeping applications.

The A7000 blower system generates a high velocity air column over 17,000 CFM that is propelled into the top of the sweeping head through a 14-inch blast tube. The air is first pressurized in the upper chamber of the sweeping head and then

expelled into the head's lower chamber through the blast orifice. This high volume air blast loosens the debris from the pavement surface, then transports it across the width of the sweeping head and lifts it into the containment hopper via a 14-inch suction tube. This highly efficient system ensures that even hard-to-reach particles hidden within pavement cracks and irregularities are removed. This includes a significant amount of the 'PM-10 fines' known to contain a high percentage of heavy metals and other pollutants. That's why the A7000 has been certified as 'Rule 1186 Compliant' by the South Coast Air Quality Management District, one of southern California's leading state environmental agencies.

Hydraulic System		Auxiliary Hydraulic System	
Type	Dual output 2 section	Type	Gear type, driven by electric motor
Pump Capacity	6.5 gpm @1800RPM (24.6L / min.) per section for 13.0gpm total	Function	Raise/lower hopper, open/close hopper door, raise brooms and pickup head
Drive	Direct gear		
Maximum Pressure	2500psi (173 bar)		
Reservoir	25 gallons (94 liters)		
Filter	10 micron, spin on		
Protection	Pressure relief valve		
Controls	Electro-hydraulic		

SCHWARZE A7000

SPECIFICATIONS



### Standard Equipment

- Schwarze-Exclusive WhisperWheel<sup>SM</sup> Fan System
- Noise Reduction Shroud
- Sweeps-In-Reverse<sup>SM</sup> Sweeping System
- DC Auxiliary Hydraulic Pump
- Hopper-Mounted Amber Strobe Light with Limb Guard
- High Level Brake Light
- Amber Flashing Warning Lights
- Rear Flood Lights
- 3 Point Automatic Auxiliary Engine Shutdown System
- Washdown System
- Hydrant Wrench
- Fire Extinguisher
- Backup Alarm
- Resettable Circuit Breakers
- Road Flare Kit

To assure debris transfer with minimal fugitive dust escapement, double-belted curtains on the front and rear of the sweeping head contain the circulating air flow. This prevents dirty, debris-laden air from entering into the atmosphere as fugitive dust particles. The Schwarze A7000 picks up more of the micron-sized contaminants that accumulate on roads and streets. Recent studies emphasize the importance of removing these PM-10 'fines' due to the amount of non-point source pollutants that contribute to America's stormwater runoff stream. Using the regenerative air Schwarze A7000 sweeper results in a cleaner surface and a cleaner environment.

The model A7000 has several industry-leading features that position it at the head of its class. These include Schwarze's WhisperWheel<sup>SM</sup> fan system, which lets Schwarze air sweepers run over 70% quieter and with less fuel consumption. The A7000 is also available with the patented Mechani-Pneumatic Broom Assist Sweeping Head<sup>SM</sup> and Schwarze Sweeps-In-Reverse<sup>SM</sup>, allowing operation in both forward and reverse directions.

### Rule 1186 AQMD Certified

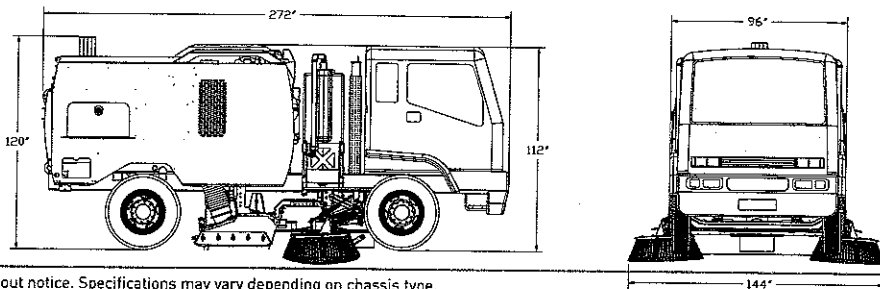
The Schwarze model A7000 sweeper has been designated by the South Coast Air Quality Management District as Rule 1186 Certified for its ability to pick up and contain small-micron material.

### Side Brooms

Type	Vertical steel digger
Location	Right, Left, forward of pickup head
Diameter	44" (1117.60 mm)
Drive	Hydraulic
Suspension	Torque-sensing spring
Wear Adjustment	Automatic
Pressure	Manual
Speed	Variable, non-reversing
Segments	5 each side, disposable
Tilt Angle Adjustment	Manual with optional in-cab controls

### Debris Hopper

Volumetric Capacity	8.4 cubic yards (6.4 cu. meters)
Useable Capacity	7.0 cubic yards (5.4 cu. meters)
Dump Angle	53 degrees
Floor Angle	3 degrees
Lifting	Twin hydraulic cylinders
Hopper Dump Door	Open/close/ lock hydraulically
Inspection Doors	1 on each side of hopper



Model shown with optional equipment. Design and specifications subject to change without notice. Specifications may vary depending on chassis type.

**Sweeping Path**

Pickup Head Only	90" (2,286mm)
Pickup Head and one gutter broom	117" (2,972mm)
Pickup Head and two gutter brooms	144" (3,658mm)

**Chassis**

Mounts on various chassis to meet requirements

**Sweeper Body**

Construction	Welded 10-gauge steel plate with 3/16 steel hopper floor
Safety Prop	Dual steel bars located under body

**Instrumentation**

Sweeper Engine	Tachometer, hourmeter, voltmeter, temperature gauge, oil pressure gauge
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**Standard Engine**

Model / Type	Tier III 4045T In line cylinder
Aspiration	Turbo-charged diesel
Manufacturer	John Deere
Displacement	275 cu. in. (4.5L)
Brake Horsepower	115HP (86KW) @ 2400 RPM
Torque	317ft-lb (430Nm) @1500RPM
Air Cleaner	Sy Klone centrifugal precleaner; dry type with dual safety elements and restriction indicator
Oil Filter	Full-flow / Spin on
Stroke	5.00" (127mm)
Bore	4.20" (106mm)
Compression Ratio	19.0 to 1
Safety Shutdown	Three-point automatic
Throttle Control	Electronic

**Electrical System**

Voltage	12 Volt
Sweeper Engine Alternator	65 Amperes

**Dust Control System**

Type	High Pressure / Low volume
Capacity	250 Gallon (946 L) (600 gallon on cab-over chassis)
Tank Construction	Polyethylene
Filter	200 mesh, cleanable
Fill Diameter	2.5" (63.5mm)
Fill Hose	25 foot (7620mm)
Controls	Electric; in-cab
Nozzles	2 on each broom 5 around suction head 2 inside suction nozzle 2 on front axle 2 inside hopper

**Blower System**

Type	Closed-face radial
Drive	Direct via 5 groove, banded power belt
Construction	Hardox Steel
Balance	1.5 grams on 2 sides
Diameter	32.75" (832mm)
Housing Lining	Bolt-in corded rubber
Mounting	2 regreaseable sealed bearings
Vacuum Enhancer	For heavy / light material

**Pickup Head**

Type	Dual chambered full-width blast orifice
Operating Direction	Forward and reverse
Suspension	Adjustable spring balanced
Length	90" (2,286mm)
Pressure Hose Diameter	14" (355.6mm)
Suction Hose Diameter	14" (355.6mm)
Hose Construction	3/8" (9.5mm) wire-reinforced molded rubber
Head Area	3,240 sq. in. (20,903cm <sup>2</sup> )

**Pickup Head cont.**

Controls	Hydraulic raise and lower
Skids	Double wide tungsten carbide
Construction	Abrasion-resistant steel inlet and outlet transitions

**Paint**

One coat of sealer / primer and two coats of Dupont Imron 5000 polyurethane in standard white color

**Optional Equipment**

- Patented\* Mechani-Pneumatic Powerhood<sup>SM</sup> [Broom Assist Head]
- Single or Dual Gutter Brooms
- In-Cab Tilt Control for Gutter Brooms
- Gutter Broom Extension Override<sup>SM</sup> (GEO<sup>SM</sup>) System
- Single or Twin Remote Cameras with In-Cab Video Monitor
- Dual Steering
- Sound Suppression System
- Cab-Mounted Barlight Beacon
- Safety Beacon with Limb Guard
- Spray Bar for Front Bumper, and Hopper
- Hopper Deluge<sup>SM</sup> (Hopper Washdown System)
- Extra 220-or 350-Gallon Polyethylene Water Tank [Cabover only]
- Hopper Drain System
- 8" Auxiliary Hand Hose
- 4 Point Protection<sup>SM</sup> (Stainless Steel Hopper Package)
- Magnet Bar
- Spare Tire and Wheel
- Special Paint for Sweeper and Chassis
- Hydraulic or Spring System for Hand Hose
- Other Options Available

**Warranty**

The A7000 regenerative air sweeper is guaranteed to be free from defects due to faulty materials and / or workmanship for a period of 12 months, or 1200 hours. Liability is limited to replacement of defective parts at factory or authorized dealer. The standard warranties of the chassis and sweeper engine manufacturer shall apply.

NOTE: Specifications are subject to change without notice

INFINITE POSSIBILITIES

National Headquarters:  
1055 Jordan Road N. E. • Huntsville, AL 35811  
PHONE (256) 851-1200 • FAX (256) 851-1105 • 1-800-879-7933 (toll free US and Canada)  
WEB: www.schwarze.com • EMAIL: support@schwarze.com

