

**PM-10 CERTIFIED STREET SWEEPER APPLICATION  
CMAQ Funding Available for Federal Fiscal Year 2013**

**General Instructions:**

This form is to be used to request federal Congestion Mitigation and Air Quality (CMAQ) funding available through the Maricopa Association of Governments (MAG) for

This application form includes: Part A - Contact Information, Part B - Cost and Funding Information, Part C - Methodology, Part D - Supplemental Information, Part E -

**Deadlines and Transmittal Instructions:**

also to be submitted electronically. Detailed transmittal instructions are located in the excel tab - Transmittal Inst. and Schedule.

If member agencies need additional information or have questions, they should contact Dean Giles, Teri Kennedy, or Stephen Tate at (602) 254-6300; or contact them

<mailto:dgiles@azmag.gov>

<mailto:tkennedy@azmag.gov>

<mailto:state@azmag.gov>

**All information is required.**

**PART A - CONTACT INFORMATION**

**Contact Information**

1. Agency Name (Please select one)	Maricopa County
2. Name:	Scott Johnson
3. Phone:	602-506-5421
4. E-Mail:	scottjohnson@mail.maricopa.gov
5. Mailing Address:	2919 West Durango Street
	Phoenix, Ariz. 85043

**PART B - FUNDING INFORMATION**

6. Please attach a detailed price summary for the proposed equipment from the vendor. Additional costs for optional equipment beyond the specifications necessary for compliance with Rule 1186-certification are not eligible for reimbursement	Please attach the detailed price summary when submitting and transmitting application.	
7. Funding Information	<b>Amount</b>	
(a) Total Cost of Sweeper	<b>\$228,493</b>	
(b) Total Cost Eligible for Reimbursement ( See Attachment 1 for list of Rule 1186 Sweepers)	<b>\$228,493</b>	
(c) Costs not eligible for reimbursement. The Local Agency is responsible for these costs. = 7a - 7b ( See Attachment 2 for list of example ineligible equipment for CMAQ reimbursement )	<b>\$0</b>	
8. Reimbursement Information	<b>Amount</b>	<b>Share of Eligible Cost (See #7)</b>
(a) Federal Share of Total Cost Eligible for Reimbursement (Cannot be more than 94.3% of Total Eligible Cost for Reimbursement as listed in 7b) = 7b * 94.3%	<b>\$215,469</b>	<b>94.3%</b>
(b) Local Share of Total Cost Eligible for Reimbursement (Cannot be less than 5.7% of Total Cost Eligible for Reimbursement as listed in #7b) = 7b * 5.7%	<b>\$13,024</b>	<b>5.70%</b>
9. Project Funding Based on Information from #7 & #8	<b>Federal Share = 8a</b>	<b>Total Cost of Sweeper</b>
	<b>\$215,469</b>	<b>\$228,493</b>

**PART C: METHODOLOGY INFORMATION**

Information in Part C is used to calculate a CMAQ cost effectiveness score for the requested street sweeper.

10. The requested PM-10 certified street sweeper will (Select Yes or No for all that apply):	
(a) Replace a noncertified street sweeper	No
(b) Expand service area	No
(c) Increase sweeping frequency	No
(d) Replace an older certified street sweeper (The older certified sweeper being replaced should be at least 8 years old)	Yes

11. For the requested sweeper, please provide the information for roadway types in the table below for: (a) Sweeping cycle length (measured in days between sweepings) (b) Lane miles to be swept per cycle (c) Average weekday traffic per lane being swept (d) If values were entered in the "Other" column, please specify what "Other" means:	<b>Arterial Street</b>	<b>Collector Street</b>	<b>Other</b>
	14	56	56
	117	205	1
	3594	676	188
Park roads			
12. If "expand service area" was "yes" in question #10, please provide the following information for the roadway types in the table below: - Previously unswept lane miles to be swept by the new sweeper:  If values were entered in the "Other" column, please specify what "Other" means:	<b>Arterial Street</b>	<b>Collector Street</b>	<b>Other</b>
13. If "increase sweeping frequency" was "yes" in question #10, please provide the following information for the roadway types in the table below: - Previous cycle length (measured in days between sweepings):  If values were entered in the "Other" column, please specify what "Other" means:	<b>Arterial Street</b>	<b>Collector Street</b>	<b>Other</b>
14. If "replace an older PM-10 certified street sweeper" was "yes" in question #10, please provide information in the following boxes: <b>(Please note that older</b> (a) Number of hours in service of the sweeper that is being replaced (b) The month and year that the older certified sweeper was put into service (e.g. 4/2001) (c) An estimate of the percent of time the older sweeper was out of service in the past year due to repairs and maintenance issues (d) Please explain why the older sweeper was out of service.	5530		
	3/26/2008		
	26		
	Mechanical issues.		
15. Will the requested certified street sweeper be used to sweep streets within 4 miles of a PM-10 monitor? If yes, please specify which monitor. <a href="#">Link to MAG webpage for PM-10 Map</a>	Various		
<b>Part D - SUPPLEMENTAL INFORMATION:</b>			
16. Have local resources been committed for additional staff or equipment to support the PM-10 certified street sweeper? (Please select Yes or No)  If yes, please provide details (e.g., number, type and cost of employees, equipment, and maintenance).	No		
17. Please indicate in what geographical area(s) the requested certified street sweeper will operate (e.g., Glendale Ave. to Thomas Rd.; 19th Ave. to Central Ave).	County owned and maintained roads.		
18. Provide a map of the area to be swept by the proposed sweeper.	Please attach a PDF when submitting and transmitting application.		
19. Please indicate if your agency would be willing to provide MAG with additional information on the requested PM-10 certified street sweeper. (Please select Yes or No)	Yes		
20. Please indicate the total number of sweepers currently owned and operated by your agency for sweeping streets: (a) PM-10 certified: (b) Noncertified:	7		
	0		
21. Does the requested sweeper satisfy a commitment made by your agency in the 2007 MAG Five Percent Plan for PM-10? Please check your agency's resolution in which commitments for PM-10 measures were made for this Plan. If you have any questions, please call Dean Giles, (602) 254-6300.(Please select Yes or No)			

**PART E - SIGNATURE PAGE**

**As the jurisdiction's manager/administrator or designated representative, I certify that the information contained in this application is accurate and complete**

Signature:

Name: John B. Hauskins, P.E.

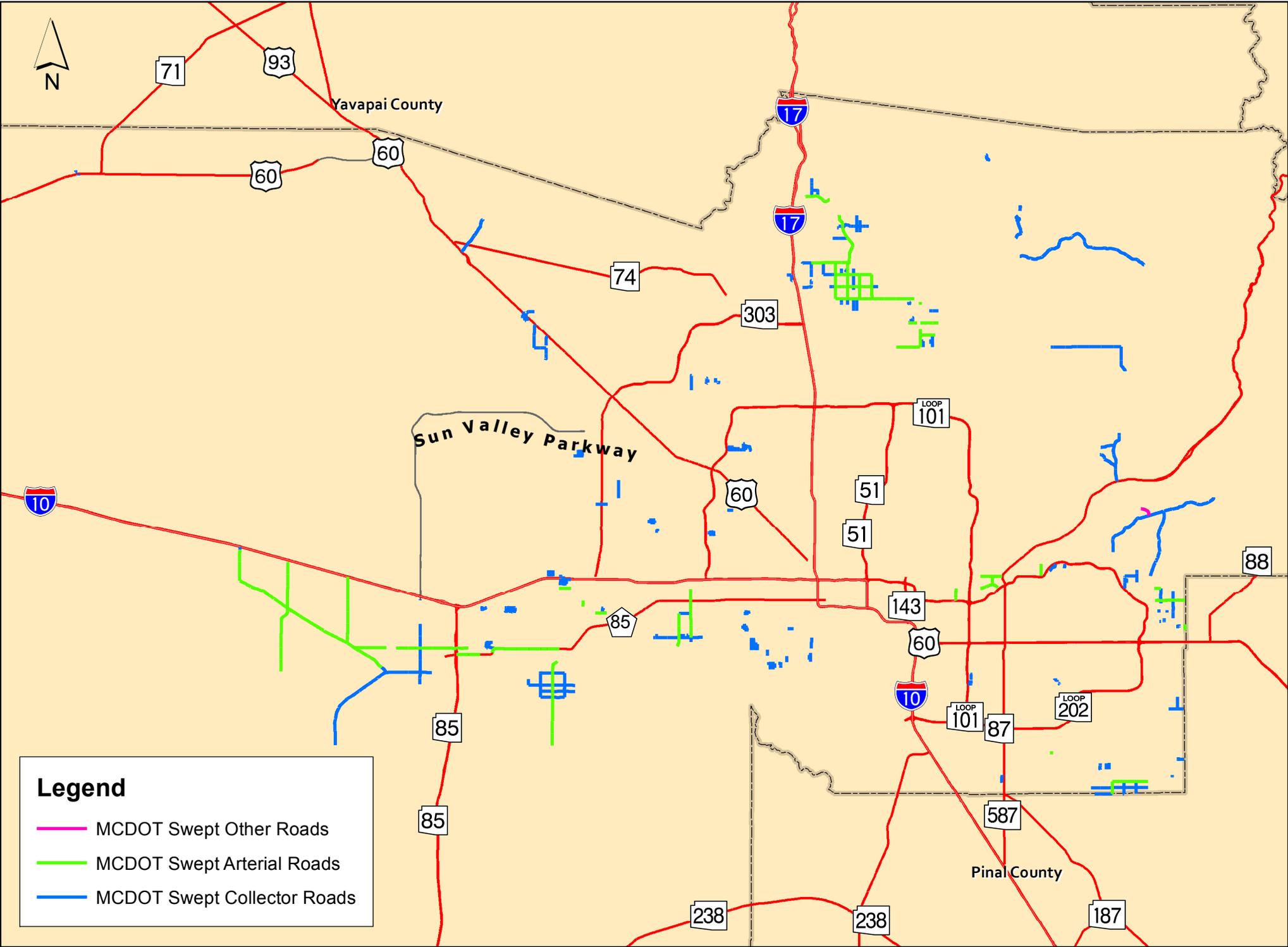
Title: Director, Maricopa County Department of Transportation

Date: 9/19/2012

**PART F - CHECK LIST (OPTIONAL)**

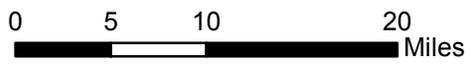
This check list is optional, but is included to facilitate applicant review and verification that all required fields in the form have been completed

Part A - Fields 1- 5 are complete	No	
Part B - Fields 6-9 are complete	No	
Part C - Fields 10-14 are complete	No	
Part D - Fields 15-21 are complete	No	



**Legend**

- MCDOT Swept Other Roads
- MCDOT Swept Arterial Roads
- MCDOT Swept Collector Roads



1 inch equals 10 miles

# SCHWARZE M6000

**Mechanical Broom Sweeper**

Field Proven  
Productive  
High Dump



The NEW  
Canbus Control  
System  
standard with  
all Schwarze  
M6000 models



# SCHWARZE INDUSTRIES

## M6000

### MECHANICAL BROOM SWEEPER



The NEW Canbus Control System



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 M6000 line is steadily earning a reputation as the premier heavy duty mechanical broom sweeper in the American marketplace. With our recent introduction of our CANbus Control System the M6000 has taken another huge leap that will further solidify its presence in both the municipal and contractor marketplace.

This brochure describes the single (SE) and twin engine (TE) M6000 models that are mounted onto conventional chassis or cab-over chassis. The versatile Schwarze M6000 series sweepers also offer many of the design innovations that have become

the Schwarze hallmark. On the M6000TE, a dependable Deutz diesel engine operates all sweeping functions, while the M6000SE sweeper functions are powered by the chassis engine via an Allison World Transmission. The M6000SE and TE may be mounted on standard production conventional chassis. The M6000TE is also available in a cab-over version (TECO). All available chassis models have a well-deserved reputation as being durable, comfortable machines to own and operate.

The M6000 model sports a number of Schwarze-only innovations designed to increase productivity and reduce downtime.

#### General

Wheelbase	SE and TE - 138" (3,505 mm) TECO - 142" (3,606 mm)
Length	SE and TE 273" (6,934 mm) TECO - 269" (6,833 mm)
Travel Width	96" (2,438mm)
Sweeping Width	120" (3,408 mm) (brooms extended)
Overall Height	113" (2,870 mm)
GVWR	33,000 lbs. (14,969 kgs)

#### Gutter Brooms

Location	Behind Cab
Diameter	44" (1,118 mm) Optional 49" (1,245 mm)
Type	5 segment; plastic, disposable
Speed	Variable (optional)
Flex	Free-floating with air suspension
Drive	Full hydraulic
Adjustments	In-cab remote for tilt (optional)
Bristles	26" (660mm) wire
Center Deflector	Raises and lowers automatically

SCHWARZE M6000 MECHANICAL BROOM

SPECIFICATIONS



This includes our new CANbus Control System. This new control system has allowed Schwarze Industries, Inc. to reduce the number of hydraulic hoses and electrical wiring by over 50%, when compared to our previous design. This new control system provides the operator more visibility as to the operational characteristics of the unit, while also providing on-board diagnostics of the machine for maintenance purposes. While this control system is new to the sweeping industry, this is a field proven system currently in use by many large equipment manufacturers world wide that provide equipment for use in the most extreme conditions.

In addition to its M6000 mechanical broom sweeper models, Schwarze Industries, Inc. also offers a complete line of air sweepers. These range from the 4.3 cu. yd. model A4000, which requires no CDL to operate, 8.4 cu. yd. A7000, 5.8 cu.yd. A8000 high dump, to the 9.6 cu. yd. A9000 Schwarze plus the DXR dustless/waterless regenerative air sweeper for use in the most extreme dust conditions when water utilization is limited by weather or application. Schwarze is also America's leading manufacturer of sweepers designed for parking area applications.

**Rule 1186 AQMD Certified**

The Schwarze model M6000 mechanical broom 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.

**Main Broom**

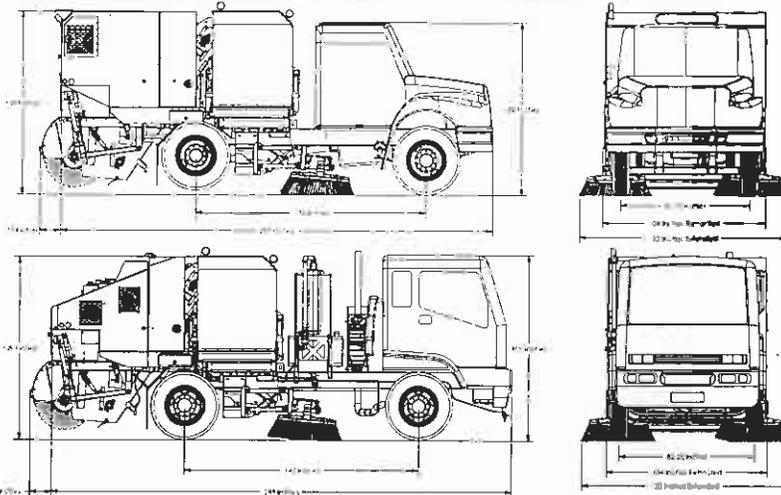
Diameter	36" (914mm)
Length	58" (1,473mm)
Bristles	Replaceable
Lift Control	In-cab hydraulic lift
Drive	Chain drive via hydraulic motor
Mounting	Full floating
Speed	Variable (optional)
Bearings	Self-aligning
Dirt Shoes	Carbide; 2" (51 mm) wide
Support	Air Suspension

**Debris Hopper**

Volumetric Capacity	5.0 cu. yds. (3.82 m3)
Lift Capacity	14,000 lbs. (6350 kg)
Dumping	Scissor-lift
Dump Height (Variable)	16" (406 mm) to 138" (3,505 mm)

# SCHWARZE M6000 MECHANICAL BROOM

## SPECIFICATIONS



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

### Conveyor / Elevator

Conveyor	Squeegee with replaceable flights
Conveyor Chain	Precision, heavy duty, constant-radius roller chain
Bearings	Self-aligning, triple-sealed and shielded
Bottom Speed	Bolt-on; replaceable Forward and Reverse (optional variable speed forward)
Flexibility	Flexes for large object passage
Adjustment Drive	3-way positive Hydraulic; forward and reverse
Conveyor / Hopper / Connection	Positive seal to eliminate debris spillage
Suspension Lift Control	Air cylinders
Conveyor Jam Warning	In-cab hydraulic Console-mounted (optional)
Cleaning	Built-in flushing system

### Water System

Capacity of Tank	Single engine conventional - 350 gallons (1325L) Twin engine conventional - 200 gallons (1230L) Twin engine cab-over - 350 gallons (1325L)
Construction Filter	Polyethylene 4" (102 mm) air gap fill; tubular protected fill receptacle

### Fill Hose

25' with 2.5" NST hydrant coupling  
Bolt-on, removable Electric  
In-cab, independent control; 7 nozzles located across front bumper, 3 nozzles at each gutter broom, and 5 nozzles across the main broom elevator (optional)  
Front, gutter broom, pickup broom  
Fine-mesh screen

### Spray Nozzles

### Filter

### Fuel System

Fuel Tank Location 56 gallons (212 L)  
Rear compartment on SE and TE, side of frame rail on TECO

### Hydraulic System

Pump Variable Displacement  
Reservoir 35 gallons (133L), mounted above pump  
Oil Cooler Electric; 120,000 BTU  
Valves Electro-mechanical; 12-volt DC  
Protection Controls Filtration In-cab; all electric 10-micron

### Electrical System

Voltage 12 volt  
Alternator SE and TE - 160 AMP  
TECO - 130 AMP  
Protection Re-settable circuit breakers

### Paint

One coat of sealer/primer and two coats of DuPont Imron 5000 polyurethane white color

### Warranty

The Schwarze M6000 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 warranty of the chassis or auxiliary engine manufacturer, if so equipped shall apply.

### Sweeper Engine (TE and TECO Only)

Auxiliary for twin engine M6000TE and TECO

Make Type Deutz Tier III 4-cylinder in-line diesel  
Displacement 221 in<sup>3</sup> (3,62 L)  
Stroke 5.0" (125 mm)  
Bore 3.8" (96 mm)  
Compression Ratio 18 : 1  
Horsepower 75HP (56 kw)  
@ 2600 rpm  
Torque 184 (l. lb) (250 Nm)  
@ 1600 rpm

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



**BALAR EQUIPMENT**

11023 N. 22ND AVE.  
P.O. BOX 83118  
PHOENIX, AZ 85029

**QUOTATION**

Quote Number: 912215  
Quote Date: Sep 19, 2012  
Page: 1

Voice: 602-944-1933  
Fax: 602-944-9687

Quoted To:
MARICOPA COUNTY EQUIPMENT 3325 W. DURANGO PHOENIX, AZ 85009

MARICOPA COUNTY EQUIPMENT  
3325 W. DURANGO  
PHOENIX, AZ 85009

Customer ID	Good Thru	Payment Terms	Sales Rep
MARICOPA-1	10/19/12	Net 10 Days	JB

Quantity	Item	Description	Unit Price	Amount
1.00	SCH-M6000SE SN	**See Maricopa County Purchase Order #PG11740010127 for unit purchased on 7/29/2011. This quote includes 5% increase for budgetary purposes. SCHWARZE M6000SE STREET SWEEPER; SINGLE ENGINE, RIGHT HIGH DUMP UNIT	209,051.00	209,051.00
			Subtotal	209,051.00
			Sales Tax	19,441.74
			Freight	
			<b>TOTAL</b>	<b>228,492.74</b>