

MARICOPA ASSOCIATION OF GOVERNMENTS

INFORMATION SUMMARY... for your review

DATE:

August 19, 2014

SUBJECT:

MAG Federally Funded, PM-10 Street Sweeper Policy Revision

SUMMARY:

On October 11, 2011, the MAG Street Committee requested a review of eligibility criteria for the replacement of PM-10 certified street sweepers that are funded with the Congestion Mitigation and Air Quality Improvement (CMAQ) funds allocated to the MAG Region. The current policy for replacing sweepers uses an eight-year useful life as the replacement criteria. Due to many agencies maximizing their equipment by sweeping larger areas, or by increasing the frequency of sweeping, the MAG Street Committee requested MAG staff to consider additional eligibility requirements which would allow funding the replacement of a PM-10 certified street sweeper with less than eight years of service, as the current policy requires.

MAG staff researched and worked with the Federal Highway Administration and the Arizona Department of Transportation (ADOT) Equipment Services on developing a proposal to modify the PM-10 Street Sweeper policy on useful life. On June 10, 2014, the MAG Street Committee recommended a proposed change to the policy which would allow the replacement of a PM-10 certified street sweeper with less than eight years of service by including total hours of service and total miles as criteria. The change to the policy will continue to meet the intent of the CMAQ program and reduce the level of PM-10 pollution in the MAG region.

Background

Table 1 shows a comparison of useful life policy criteria as currently used by MAG, the Arizona Department of Transportation (ADOT), and the California Department of Transportation (Caltrans).

Table 1
Comparison of Street Sweeper Useful Life Policies

| Useful life | Current MAG policy | ADOT | Caltrans |
|-------------|--------------------|---------------|----------|
| Years | 8 years | 10 years | 10 years |
| Hours | N/A | 9,000 hours | N/A |
| Miles | N/A | 100,000 miles | N/A |

For estimating capital costs and depreciation of street sweepers, an eight-year useful life was used for the MAG region (Most Stringent PM-10 Control Measure Analysis, May 1998).

The California Air Resources Board uses a 10-year useful life as part of calculations to determine the air quality benefits from replacing a conventional street sweeper with a Rule 1186 certified sweeper (Methods to Find the Cost-Effectiveness of Funding Air Quality Projects, dated May 2005).

Current Policy

PM-10 certified street sweepers are eligible for purchase with CMAQ funds if they replace an existing unit that has not been certified by South Coast Rule 1186, replace a Rule 1186 certified unit that is at least

eight years old, increase the frequency of sweeping, expand the area that is swept, or a combination of these functions. (Page 40 of Methodologies for Evaluating Congestion Mitigation and Air Quality Improvement Projects, September 30, 2011. Reviewed by the MAG Air Quality Technical Advisory Committee, December 2010)

Methodology

To determine an appropriate number of miles and hours of service for replacement based on current utilization of street sweepers within the MAG region, a rounded average of two estimates of the 75th percentile total miles and hours of service on an annual and eight-year basis has been calculated and shown in Table 2.

As part of the application submittal for CMAQ funding for PM-10 certified street sweepers, the applying agency provides sweeping cycle length in days, lane miles to be swept per cycle, and the number of hours in service of the sweeper that is being replaced. The information found in funded Fiscal Year 2014 applications for street sweeper replacements was used to estimate a 75th percentile number of annual miles and hours of service for street sweepers currently being used in the MAG region. Additionally, a Sierra Auction list of retired MAG region street sweepers and their age in years, along with recorded miles and hours of service provided a second estimate of the 75th percentile number of annual miles and hours of service for sweepers in the MAG region.

**Table 2
Street Sweeper Replacement Evaluation Criteria**

| | 75th Percentile Total Miles of Service (1 Year) | 75th Percentile Total Miles of Service (8 Years) | 75th Percentile Total Hours of Service (1 Year) | 75th Percentile Total Miles of Service (8 Years) |
|--|--|---|--|---|
| 2013 Funded Street Sweeper Replacements | 15,841 miles | 126,728 miles | 1,876 hours | 15,004 hours |
| Sierra Auction Retired Street Sweeper List | 7,914 miles | 63,312 miles | 1,137 hours | 9,096 hours |
| Rounded Average | 12,000 miles | 96,000 miles | 1,500 hours | 12,000 hours |

Proposed Change to Policy

PM-10 certified street sweepers are eligible for purchase with CMAQ funds if they replace an existing unit that has not been certified by South Coast Rule 1186, replace an older Rule 1186 certified unit, increase the frequency of sweeping, expand the area that is swept, or a combination of these functions. For replacement of an older Rule 1186 certified unit, the unit must be at least eight years old or have recorded 12,000 hours or 96,000 miles of operation.

PUBLIC INPUT:

None has been received.

PROS & CONS:

PROS: Approval of this action will update the street sweeper useful life policy to include hours or miles swept or eight years of age, allowing for earlier replacement of equipment while still meeting the goal to reduce the level of PM-10 pollution in the MAG region.

CONS: Approval of this proposal may increase the frequency in which sweepers are eligible to be replaced. The Federal Highway Administration provides CMAQ funding for the PM-10 certified street sweepers and funding is limited and is contingent upon continued federal support.

TECHNICAL & POLICY IMPLICATIONS:

TECHNICAL: Some sweeper models may not automatically calculate and record the hours of sweeping (use) and would not be eligible for these specific criteria in order to qualify for replacement.

POLICY: Agencies will need to report to MAG on the hours (if available), miles and years of current PM-10 sweepers at the time of requesting replacement during the application process.

ACTION NEEDED:

Approval to revise the MAG policies for determining eligibility for replacement (useful life) of certified PM-10 Street Sweepers.

Revised Policy: PM-10 certified street sweepers are eligible for purchase with Congestion Mitigation and Air Quality Improvement (CMAQ) funds if they replace an existing unit that has not been certified by South Coast Rule 1186, replace an older Rule 1186 certified unit, increase the frequency of sweeping, expand the area that is swept, or a combination of these functions. For replacement of an older Rule 1186 certified unit, the unit must be at least eight years old or have recorded 12,000 hours or 96,000 miles of operation.

PRIOR COMMITTEE ACTIONS:

On August 6, 2014, the MAG Management Committee recommended approval to revise the MAG policies for determining eligibility for replacement (useful life) of certified PM-10 Street Sweepers.

MEMBERS ATTENDING

- | | |
|--|--|
| Christopher Brady, Mesa, Chair | Darryl Crossman, Litchfield Park |
| Rick Buss, Gila Bend, Vice Chair | Gregory Rose, City of Maricopa |
| # Matt Busby for George Hoffman, Apache Junction | * Jim Bacon, Paradise Valley |
| * David Fitzhugh, Avondale | Carl Swenson, Peoria |
| # George Diaz for Stephen Cleveland, Buckeye | Ed Zuercher, Phoenix |
| * Gary Neiss, Carefree | # Louis Andersen for Greg Stanley, Pinal County |
| * Peter Jankowski, Cave Creek | John Kross, Queen Creek |
| Patrice Kraus for Rich Dlugas, Chandler | * Bryan Meyers, Salt River Pima-Maricopa Indian Community |
| Dr. Spencer Isom, El Mirage | * Fritz Behring, Scottsdale |
| Charles Montoya, Florence | Michael Celaya for Bob Wingenroth, Surprise |
| Alfonso Rodriguez for Phil Dorchester, Fort McDowell Yavapai Nation | Andrew Ching, Tempe |
| Ken Buchanan, Fountain Hills | # Chris Hagen for Reyes Medrano, Tolleson |
| * Tina Notah, Gila River Indian Community | Joshua Wright, Wickenburg |
| Patrick Banger, Gilbert | Jeanne Blackman, Youngtown |
| Brent Stoddard for Brenda S. Fischer, Glendale | Floyd Roehrich for John Halikowski, ADOT |
| Brian Dalke, Goodyear | John Hauskins for Tom Manos, Maricopa County |
| Rosemary Arellano, Guadalupe | Wulf Grote for Steve Banta, Valley Metro/RPTA |

* Those members neither present nor represented by proxy.
Participated by telephone conference call. + Participated by videoconference call.

On July 31, 2014, the Transportation Review Committee recommended approval to revise the MAG policies for determining eligibility for replacement (useful life) of certified PM-10 Street Sweepers.

MEMBERS ATTENDING

- Avondale: David Fitzhugh, Chair
- Phoenix: Rick Naimark, Vice Chair
- ADOT: Brent Cain for Floyd Roehrich
- Buckeye: Scott Lowe
- * Cave Creek: Ian Cordwell
- Chandler: Mike Mah for Dan Cook
- El Mirage: Jorge Gastelum
- * Fountain Hills: Randy Harrel
- Gila Bend: Ernie Rubi
- Gila River: Tim Oliver*
- Gilbert: Kristin Myers for Leah Hubbard
- Glendale: Bob Darr for Debbie Albert
- Goodyear: Cato Esquivel
- Litchfield Park: Woody Scoutten
- * Maricopa (City): Paul Jepson
- Maricopa County: John Hauskins
- Mesa: Scott Butler
- * Paradise Valley: Jim Shano
- Peoria: Dan Nissen for Andrew Granger
- Queen Creek: Mohamed Youssef
- Scottsdale: Paul Basha*
- # *Surprise: Mike Gent for Dick McKinley*
- Tempe: Shelly Seyler
- Valley Metro: John Farry
- * Wickenburg: Vince Lorefice
- Youngtown: Grant Anderson*

EX-OFFICIO MEMBERS ATTENDING

- * Street Committee: Dana Owsiany, Phoenix
- * ITS Committee: Catherine Hollow, Tempe
- * FHWA: Thomas Deitering for Ed Stillings
- Bicycle/Pedestrian Committee: Denise Lacey, Maricopa County
- * Transportation Safety Committee: Renate Ehm, City of Mesa

* Neither present nor represented by proxy.
Attended by teleconference.

+Attended by videoconference.

At the June 10, 2014, meeting, the MAG Street Committee recommended approval of the policy change.

MEMBERS ATTENDING

- Dana Owsiany, Phoenix, Chair Woman
- Bahram Dariush for Steve Beasley, ADOT
- Emil Schmid, Apache Junction
- # Charles Andrews, Avondale
- * Jose Heredia, Buckeye
- Dan Cook, Chandler
- Chris Hauser, El Mirage
- @ Aryan Lirange, FHWA
- # Morris Taylor for Wayne Costa, Florence
- Tim Oliver, Gila River Indian Community
- Tom Condit, Gilbert
- Purab Adabala for Bob Darr, Glendale
- # Luke Albert for Hugh Bigalk, Goodyear
- # Thomas Chlebanowski for Darryl Crossman, Litchfield Park
- Bill Fay, City of Maricopa
- Laurie Kattreh for Jack M. Lorbeer, Maricopa County
- Maria Angelica Deeb, Mesa
- * James Shano, Paradise Valley
- Scott Bender, Pinal County
- Ben Wilson, Peoria
- Janet Martin, Queen Creek
- Jennifer Jack for Elaine Cabrera, Salt River Pima-Maricopa Indian Community
- * Phil Kercher, Scottsdale
- Suneel Garg, Surprise
- Isaac Chivera, Tempe
- * Jason Earp, Tolleson
- * Grant Anderson, Youngtown

* Those members neither present nor represented by proxy.
Participated by telephone conference call. + Participated by videoconference call.
@ Non-voting

CONTACT PERSON:

Teri Kennedy, or Stephen Tate, (602) 254-6300