Bay Area Air Quality Management District
Mobile Source Committee

December 2, 2015

Projects with Proposed Awards over $100,000

Damian Breen
Deputy Air Pollution Control Officer
Overview

• Background

• Proposed projects with awards over $100,000

• Recommendations
• Carl Moyer Program (CMP)
  ➢ Created in 1998 to reduce emissions from heavy-duty engines
  ➢ Voluntary program that funds surplus emission reductions

• Mobile Source Incentive Fund (MSIF)
  ➢ AB 923 allowed for additional $2 motor vehicle registration fee surcharge (12/04)
  ➢ CMP and LESBP projects eligible for MSIF funding

• Transportation Fund for Clean Air (TFCA)
  ➢ Funding provided by a $4 surcharge on motor vehicles
  ➢ Statutory authority for the TFCA and requirements of the program are set forth in California Health and Safety Code Sections 44241 and 44242
• On 2/18/15 District Board of Directors:
  - Approved participation in CMP Year 17
  - Authorized Executive Officer/APCO to execute contracts and amendments with grant awards up to $100,000

• CMP Project Recommendations over $100k:
  - 7 Projects to reduce emissions from 13 pieces of off-road equipment, and 2 marine engines
  - $1,987,152 in total awards
  - Emission reductions: Over 10.3 TPY of criteria pollutants
CMP and MSIF Funds
Awarded as of 11/20/15

Allocations Over $100k

Slide 5
CMP and MSIF Funds
Awarded since 2009

Allocations Over $100k
• Approvals by District Board of Directors:
  - Allocated $24.47 million in TFCA funding for eligible Air District-led and Regional Fund project categories, 5/6/15
  - Authorized Executive Officer/APCO to execute contracts and amendments with grant awards up to $100,000, 5/6/15
  - Adopted policies and evaluation criteria for the FYE 2016 TFCA funded projects on 5/6/15 and 7/29/15

• TFCA Project Recommendations over $100k:
  - One project to install 98 dual-port electric vehicle charging stations at a new parking garage with 3,000+ parking spaces that will serve multiple business complexes & the public
  - Proposed award of $338,546
  - Emission reductions: Over 0.21 TPY of criteria pollutants
TFCA Funds
by Project Category and by County
(Eligible projects evaluated between 7/1/15 and 11/20/15)

Figure 1: Funding Distributed by Project Category
- Rideshare 30%
- Shuttles 54%
- Plug-in Electric Vehicles and Charging Stations 16%

Figure 2: Funding Distributed by County
- Santa Clara 44%
- San Mateo 22%
- San Francisco 11%
- Contra Costa 4%
- Alameda 14%
- Solano 2%
- Sonoma 1%
- Marin 1%
- Napa 1%

Allocations Over $100k
Recommend the Board of Directors:

1. Approve CMP and TFCA projects with proposed grant awards over $100,000 as shown in Attachment 1; and

2. Authorize the Executive Officer/APCO to enter into agreements for the recommended projects.
Bay Area Air Quality Management District
Mobile Source Committee

December 2, 2015

Air Resources Board and Department of Finance Audit

Damian Breen
Deputy Air Pollution Control Officer
Overview

• Background
• Program review scope
• Summary of results
Air District administers several state-funded programs

California Health and Safety Code provides Air Resources Board (ARB) program oversight responsibilities

ARB conducts regular program reviews of district programs

ARB looks for compliance with:
- California Health and Safety Code
- ARB Program guidelines and advisories
- Program grant award and authorizations
- Local air district requirements

Department of Finance conducts fiscal compliance audit
Program review scope

- **Carl Moyer Program (CMP)**
  - Created in 1998 to reduce emissions from heavy-duty engines
  - Voluntary program that funds surplus emission reductions

- **Mobile Source Incentive Fund (MSIF)**
  - AB 923 allows for additional $2 motor vehicle registration fee surcharge (12/04)
  - MSIF funds used for CMP match were reviewed

- **Scope**
  - Fiscal years: 2009/10 – 2012/13
  - $43,576,225 in expenditures
  - Reduced emissions from 585 diesel engines
  - Retired 6,468 light-duty vehicles
• **Lower Emission School Bus Program (LESBP)**
  - Replacement and retrofit of diesel school buses and replacement of CNG tanks
  - The program review focused on funding provided by bonds authorized by Proposition 1B, a grant of federal Diesel Emission Reduction Act funds, and MSIF funds.

• **Scope**
  - Fiscal years: 2008/09 – 2012/13
  - $8,905,208 in state expenditures leveraged with $27,796,911 in MSIF funds
  - Retrofitted 502 diesel buses, replaced 168 buses, and replaced 80 CNG tanks
Program review scope

• Proposition 1B Goods Movement Program (GMP)
  - November 2006, voters authorized the Legislature to appropriate $1 billion in bond funding to quickly reduce air pollution emissions and health risk from freight movement along California’s priority trade corridors
  - Air District has administered the program in the Bay Area since 2008

• Scope
  - Fiscal years: 2007/08 – 2013/14
  - $90,446,625 in expenditures
  - Retrofitted 930 trucks, and replaced 1,224 trucks
  - Installed shore power at 12 berths at the Port of Oakland
Air Quality Improvement Program (AQIP)

- Created in 2007 by AB 118 to fund clean vehicle and equipment projects that reduce criteria and toxic air pollutants
- District projects have included technology demonstrations and a lawn mower replacement program

Scope

- Fiscal year: 2010/11
- $2,890,608 in expenditures
- Conducted three technology demonstrations
- Replaced 411 lawn mowers with electric mowers
<table>
<thead>
<tr>
<th>Dates</th>
<th>Milestone/activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 10, 2014</td>
<td>ARB notification letter</td>
</tr>
<tr>
<td>Week of October 20, 2014</td>
<td>Entrance meeting &amp; ARB field work</td>
</tr>
<tr>
<td>Week of January 20, 2015</td>
<td>DOF Field work</td>
</tr>
<tr>
<td>Week of March 9, 2015</td>
<td>DOF Field work</td>
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<tr>
<td>Week of April 6, 2015</td>
<td>DOF Field work</td>
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<tr>
<td>Week of April 20, 2015</td>
<td>ARB Project inspections</td>
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<tr>
<td>June 8, 2015</td>
<td>DOF Exit interview</td>
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<tr>
<td>August 6, 2015</td>
<td>ARB Exit interview</td>
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<tr>
<td>August 31, 2015</td>
<td>ARB Final report issued</td>
</tr>
<tr>
<td>Pending</td>
<td>DOF Final report</td>
</tr>
</tbody>
</table>
ARB results

Findings

• None

Recommendations

• **CMP**: Develop additional procedures to ensure project files are complete.

• **CMP**: Use a more detailed breakdown of project costs in staff project evaluations to reduce the risk of including ineligible costs.
Exceptional practices

• Successful development of electronic filing systems for the Carl Moyer and Goods Movement programs.

• Completeness of LESBP project files and recognition of effective and efficient program administration.

• Quick implementation and funding of the replacement of over 350 drayage trucks with much cleaner trucks (May - December 2012).
Questions
Bay Area Air Quality Management District
Mobile Source Committee

December 2, 2015

FYE 2014 TFCA Audit Report Results
and
FYE 2015 Report on TFCA Regional Fund Expenditures and Effectiveness

Damian Breen
Deputy Air Pollution Control Officer
Overview

• TFCA Background

• Audit #16:
  ➢ Process
  ➢ Findings and Air District Responses
  ➢ Trends

• FYE 2015 Expenditures and Cost-Effectiveness:
  ➢ Expenditures
  ➢ Emissions Reductions
  ➢ Cost-Effectiveness
Background

Transportation Fund for Clean Air (TFCA)

• Funded by $4 motor vehicle registration fee surcharge
  - 60% to Regional Fund & Air District-sponsored projects
  - 40% to County Program Manager Fund

• Statutory authority and requirements of the program are set forth in California Health and Safety Code Sections 44241 and 44242
  - **Section 44242**: requires a fiscal audit of all projects and programs funded with TFCA monies (at least every two years)
  - **Section 44241**: requires annual public hearing to review TFCA expenditures to determine effectiveness in improving air quality
• February 18, 2015, Board approved award of contract to Gilbert Associates, Inc. (Gilbert) for independent audit services

• Audit # 16 Scope:
  - Reviewed financial and compliance objectives for Regional Fund and Air District-sponsored projects that were closed out by 6/30/2014
  - Covered 28 TFCA projects (20 project sponsors) and over $10M in TFCA funds expended
  - Conducted audit field work and follow-up May - Nov. 2015
Audit #16
Process (cont’d)

- Financial audits performed in accordance with generally accepted auditing standards in the U.S. and applicable standards contained in *Government Auditing Standards*
- Compliance audits performed in accordance with the requirements outlined in the Health and Safety code, funding agreements, and *Government Auditing Standards*
  - Focus to ensure TFCA expenditures were paid in accordance with program’s objectives
  - Not designed to provide assurance on overall project compliance
Project Sponsor Findings:

- **2014-1**: Five projects had one or more late report
- **2014-2**: One Project Sponsor had failed to submit an annual monitoring report

Air District Responses:

- Continue to strengthen District’s Administrative Procedures:
  - Streamline reporting process
  - Increase outreach to project sponsors (calls and reminder notices)
  - Prohibit project sponsors with uncorrected audit findings from future funding
- Continue to evaluate other agencies’ best practices
Air District Findings:

- None
Performance Trend for TFCA Audits # 13 - # 16

% of Project Sponsors and projects with findings

% of projects with findings

% of Project Sponsors and projects with findings

% of projects with findings

0% 10% 20% 30% 40% 50% 60% 70%

Audit #13 Audit #14 Audit #15 Audit #16

% of projects with findings % of sponsors with findings

0% 10% 20% 30% 40% 50% 60% 70%

2009 or earlier 2010 or later
Overview

• TFCA Background

• Audit #16:
  - Process
  - Findings and Air District Responses
  - Trends

• FYE 2015 Expenditures and Cost-Effectiveness:
  - Expenditures
  - Emissions Reductions
  - Cost-Effectiveness
Summary of FYE 2015 Expenditures and C-E Report Results

• Reviewed expenditures and effectiveness of 29 TFCA Regional Fund and Air District-sponsored programs that concluded in FYE 2015 (fully paid and closed-out)

• Expenditures: $7.63 million
  ➢ $3.46 million for Air District programs
  ➢ $3.40 million for Regional Fund grants
  ➢ $765,101 in administrative and audit costs

• Lifetime criteria pollutant emissions reduced: 124.8 tons
  ➢ 27.70 tons of reactive organic gases
  ➢ 62.72 tons of nitrogen oxides
  ➢ 34.35 tons of particulate matter

• Lifetime greenhouse gas emissions reduced: 62,717 tons
FYE 2015 Expenditures and C-E Report
Expenditures by Project Category

- **Spare the Air**: $1,176,363 (32%)
- **Vehicle Buy-Back**: $124,948 (17%)
- **Bicycle Facilities**: $170,058 (12%)
- **Enhanced Mobile Source Inspections/Smoking Vehicle**: $2,162,193 (2%)
- **On-Road Alternative-Fuel Vehicles**: $786,953 (17%)
- **Ridesharing**: $120,000 (34%)
- **Shuttles**: $2,322,589 (3%)

**Total Expenditures**: $7,914,703
## Summary of FYE 2015 Expenditures and C-E Report Results

<table>
<thead>
<tr>
<th>Category</th>
<th># of Projects</th>
<th>TFCA $ Expended</th>
<th>% of TFCA $ Expended</th>
<th>Emissions Reduced (tons)</th>
<th>% of Emissions Reduced</th>
<th>C/E - Weighted ($/ton)</th>
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<tr>
<td>Bicycle Facilities</td>
<td>17</td>
<td>$170,058</td>
<td>2.48%</td>
<td>1.84</td>
<td>1%</td>
<td>$90,000</td>
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<td>Shuttles</td>
<td>6</td>
<td>$2,322,589</td>
<td>33.84%</td>
<td>20.57</td>
<td>16%</td>
<td>$95,398</td>
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<td>Ridesharing</td>
<td>1</td>
<td>$120,000</td>
<td>1.75%</td>
<td>4.33</td>
<td>3%</td>
<td>$18,794</td>
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<td>On-Road Alternative-Fuel Vehicles</td>
<td>2</td>
<td>$786,953</td>
<td>11.47%</td>
<td>23.55</td>
<td>19%</td>
<td>$86,354</td>
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<td>Enhanced Mobile Source Inspections/ Smoking Vehicle Program</td>
<td>1</td>
<td>$2,162,193</td>
<td>31.50%</td>
<td>4.55</td>
<td>4%</td>
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<td>Spare the Air Program</td>
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<td>$1,176,363</td>
<td>17.14%</td>
<td>69.93</td>
<td>56%</td>
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<td>Vehicle Buy-Back Program</td>
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<td>$124,948</td>
<td>1.82%</td>
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<td><strong>Total for Projects and Programs</strong></td>
<td>29</td>
<td>$6,863,104</td>
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<td>124.77</td>
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<td>Administration</td>
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<td>$765,101</td>
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FYE 2015 Expenditures and C-E Report

Key Findings

- TFCA funds were allocated to eligible projects and programs, consistent with the authorizing legislation
- Overall cost-effectiveness: $49,545/ton criteria pollutant emissions reduced:
  - Five of the 29 projects and programs achieved less-than-originally-estimated emissions reductions
  - Two of the six shuttle projects met the established cost-effectiveness cap for the program and four projects did not
- Other public health benefits:
  - Conserve energy and help to reduce greenhouse gases
  - Reduce traffic congestion
  - Expanding public’s access to services that provide first and last-mile connections to rail, ferry, and mass transit
  - Improve physical fitness and public safety by facilitating pedestrian and other car-free modes of travel
Questions