ATTACHMENT I
PROPOSED CHANGES TO 2011 CARL MOYER PROGRAM GUIDELINES

Attachment I
Description of Changes to 2011 Carl Moyer Program Guidelines

The following attachment provides a description of each Air Resources Board (ARB) proposed change to the 2011 Carl Moyer Program Guidelines (Guidelines). Revision numbers are provided in the left column for simple reference with Attachments II and III.

Chapter 2: GENERAL CRITERIA

This chapter describes the project criteria that apply to all Carl Moyer Memorial Air Quality Standards Attainment (Carl Moyer or Moyer) Program projects. Additional project criteria are located in the relevant source category chapters.

2.1 General Criteria, Chapter 2, Section AA., page 2-3

The proposed change will add the phrase “as applicable” to the last sentence in the section to clarify the eligibility of technologies where verification or certification does not exist.

2.2 General Criteria, Chapter 2, Section HH., page 2-4

The proposed change will clarify that this paragraph is applicable to “replacement” projects as well as repower projects. Additionally, the proposed language will clarify the eligibility of projects, consistent with sections Y and Z of this chapter.

2.3 Criteria, Chapter 2, Section MM., page 2-5

The proposed change eliminates a typographical error.

2.4 General Criteria, Chapter 2, Section OO., page 2-5

The proposed new section clarifies that any funds earned through Moyer Program resources, such as cash payments for scrapping vehicles, must be used in the Moyer Program.

2.5 General Criteria, Chapter 2, Section PP., page 2-5

The Guidelines do not specify how Moyer funds should be held by the air district. As such, funds may be stored in accounts carrying a risk of loss in principal. The proposed new section requires that, if this occurs, the air district must cover any losses, so that the Moyer Program receives the full benefit of the principal.

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Chapter 3: PROGRAM ADMINISTRATION

This chapter describes the specific administrative requirements that ARB, air districts, and interested parties must follow to ensure the Carl Moyer Program achieves State Implementation Plan (SIP)-creditable emission reductions. Air districts may choose to require more stringent administrative procedures in implementing their local program.

3.1 Program Administration, Chapter 3, Section G.3.(B)(1), page 3-6 to 3-7

The proposed change will clarify that ARB will not ask for a return of unexpended funds if they are under contract.

3.2 Program Administration, Chapter 3, Section H., page 3-7 to 3-8

The proposed change will expand the description of acceptable uses of AB923 funding to include recently added categories. These will be added to the list in section H and to table 3-3.

3.3 Program Administration, Chapter 3, Section I.9., page 3-10

The proposed change will clarify eligibility and funding limits of select match funding types, consistent with statute. Health & Safety Code 44287(E) outlines rules for using port and local monies as program match. Monies provided by local government are subject to the same rules as port monies, and the rule stating that no more than 30 percent of the match may be satisfied by port/local government sources only applies to districts granted more than $300,000.

3.4 a) Program Administration, Chapter 3, Section K.6, pages 3-13 to 3-14
b) Program Administration, Chapter 3, Section V.5.(A), page 3-25
c) Program Administration, Chapter 3, Section X.6., page 3-28
d) Program Administration, Chapter 3, Section Z.10., page 3-35

The proposed change will make the records retention requirements listed throughout the guidelines consistent: End of contract plus three years, unless payment occurs after contract term, in which case the clock is re-started at final payment.

3.5 Program Administration, Chapter 3, Section S.1., pages 3-20 and 3-21

The proposed change will clarify that funds committed under fully executed contract do not need to be returned to ARB. Although Statute specifies expenditure within two years, statute also specifies that ARB cannot request unexpended funds to be returned if they are under contract.

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Description of Changes to 2011 Carl Moyer Program Guidelines

3.6 Program Administration Chapter 3, Section T, page 3-21- 3-22

ARB staff proposes to remove existing requirements for twice-yearly district submittal of a Progress Questionnaire. The requirement causes excess administrative burden without providing reasonably useful additional information to ensure execution and expenditure targets will be met. As an alternative, ARB liaisons will work with district staff to check progress against targets at appropriate intervals.

3.7 Program Administration, Chapter 3, Section V.3., page 3-23

The proposed change eliminates current program review frequency. ARB Incentive Program Review frequency will be as stated in section V, item 3 using a risk-based approach to select air districts to review.

3.8 Program Administration, Chapter 3, Section W.3., page 3-26

The On-Road Voucher Incentive Program has an alternative registration and usage documentation requirement for military service members who have recently returned from deployment. The proposed change would expand the military service provision to all Carl Moyer programs.

3.9 Program Administration, Chapter 3, Section BB.1.(C), page 3-38

Staff proposes to add a specific allowance during the post-inspection of submersible pump projects, allowing the grantee to document some of the required information, to account for the fact that the motor information may not be visible once the motor is fully installed and post-inspected.

3.10 Program Administration, Chapter 3, Section CC.11, page 3-42

The proposed change will clarify that documentation of regulatory compliance is required before funding only in certain cases. Previous language may have led to confusion about when this should and shouldn't be done.

3.11 Program Administration, Chapter 3, Section EE.1., page 3-43

The proposed change for Section EE, Air District Audit of Projects will allow air districts to combine the requirement to audit a set number/percent of projects annually and the requirement to audit all projects for which the annual reporting is not received. Total minimum number of annual audits required is also reduced from 30 to 20 or 5 percent, whichever is less. Note that projects without annual reports do need to be audited even if they exceed 20 or 5 percent. A clarification of defined terms is also included in the Section.

3.12 Program Administration, Chapter 3, Section FF.4.(E), page 3-46

The proposed change will clarify that recalculations of cost-effectiveness (CE) must utilize the methodology applied at the time of original contract. The intent of previous language concerning re-calculations of project allowances was that re-calculations would always be done using the same CE cap and methodology as the original case.

3.13 Program Administration, Chapter 3 (Various Sections)

The proposed change gives guidance in the treatment of funds earned through the program. Reporting and spending requirements will be the same as those for interest earned through the Carl Moyer Program.

3.14 Program Administration, Chapter 3 (Various Sections)

a) Program Administration, Chapter 3, Section D.5.
b) Program Administration, Chapter 3, Section E.3.
c) Program Administration, Chapter 3, Section H.
d) Program Administration, Chapter 3, Section L.4.
e) Program Administration, Chapter 3, Section U.1.
f) Program Administration, Chapter 3, Section V.
g) Program Administration, Chapter 3, Section Y.6.
h) Program Administration, Chapter 3, Section DD.4.

The proposed change will alter references to “audit” and change to “incentive program review” where applicable and add language indicating that Department of Finance’s fiscal audits may be conducted. This modification aligns with new policy changing all analyses conducted by program staff to “program review” rather than “audit,” and adds notification about Review functions to include Department of Finance’s role in Program Review.

Chapter 6: EMERGENCY EQUIPMENT

This chapter describes the minimum criteria and requirements for Carl Moyer Memorial Air Quality Standards Attainment Program (Carl Moyer Program) Emergency Equipment projects.

6.1 Emergency Vehicles, Chapter 6, Chapter Title and Introduction, page 6-1, Section C.1.(A), page 6-1

The proposed change will revise the introductory language describing the Chapter and update the eligible equipment to include all authorized emergency vehicles as defined in the Vehicle Code.

6.2 Emergency Vehicles, Chapter 6, Section C.1.(D), page 6-2

The proposed change clarifies that the replacement vehicle should be equipped with an engine certified to the appropriate intended service class. For vocational purposes, a medium heavy-duty vehicle may be equipped with a heavy heavy-duty engine but should remain within 10 percent of the intended service class weight range. Vehicles equipped with engines outside the intended service class can result in abnormal engine wear and affect the performance of original engine manufacturer emission control systems, factors which ultimately can impact the engine's useful life.

6.3 Emergency Vehicles, Chapter 6, Section C.1.(F), page 6-2

The proposed change will clarify eligible cost. Eligible cost includes the whole fire truck, everything that is integrated into the vehicle. It does not include items that are removable.

6.4 Emergency Vehicles, Chapter 6, Section C.3.(B), page 6-4

The proposed change will remove the requirement that fuel logs be provided electronically, allowing a standard copy of the fuel logs to suffice. Additional methods of documentation may still be requested for case-by-case approval.

6.5 Emergency Vehicles, Chapter 6, Section C.5.(A), page 6-5

The proposed change will eliminate the requirement limiting replacement to 2010 model year replacements after 2013.

Chapter 7: OFF-ROAD COMPRESSION IGNITION EQUIPMENT

This chapter describes the minimum criteria and requirements for Carl Moyer Program mobile, self-propelled, off-road compression-ignition (CI) projects such as construction and agricultural equipment. This chapter also describes criteria for non-agricultural portable equipment.

7.1 a) Off-Road Compression Ignition Equipment, Chapter 7, Section A, page 7-1
b) Off-Road Compression Ignition Equipment, Chapter 7, Section A., Table 7-1, page 7-2
c) Off-Road Compression Ignition Equipment, Chapter 7, Section E., page 7-10

The proposed changes to sections listed for (a), (b), (c) and (d) will correct the title of the Regulation for In-Use Off-Road Diesel-Fueled Fleets where referenced in Chapter 7.

7.2 Off-Road Compression Ignition Equipment, Chapter 7, Section D.1.(B) and (C), page 7-5

Staff proposes to add language clarifying that portable engines, which are not equipped with propulsion engines, may be eligible for funding and that in general portable equipment is eligible. Staff also proposes to clarify that air districts may use good engineering judgment in combination with verifiable information such as emission control information labels, equipment manuals or other records to determine and document engine or equipment horsepower (hp).

7.3 Off-Road Compression-Ignition Equipment, Chapter 7, Section D.1.(F), page 7-8

The proposed change will clarify that the reference engine family emission factor may be used for equipment with existing (old) engines manufactured under the flexibility provisions. Current Carl Moyer Program guidelines state that for baseline equipment originally produced under the "flexibility provisions for equipment manufacturers," baseline emission rates are to be determined by the model year and horsepower rating of the engine. The emission factor is then selected by using the emission factor for the previous applicable Tier. This is a conservative approach which is appropriate in most cases. However, in some cases flexibility equipment engines may be emitting at a higher rate which can be determined when the reference engine family is listed on the emission control information label.

For example, if the baseline equipment has a 2006 model year engine between 130 $\leq$ kW < 225 (175 $\leq$ hp < 300), Tier 3 standards were in place at the time of manufacture. Based on current guideline criteria, the emission reduction calculations would be based on the Tier 2 standard. However, if the reference engine family was certified to a Tier 1 standard, the proposed change would allow the Tier 1 standard to be used.

7.4 Off-Road Compression Ignition Equipment, Chapter 7, Section D.1., page 7-6

Current criteria in the off-road chapters are not consistent regarding whether advanced approval is required when determining usage based upon fuel use. The proposed change will clarify that to base equipment usage on fuel, a district must obtain a case-by-case approval.

7.5 Off-Road Compression Ignition Equipment, Chapter 7, Section D.1., Page 7-6

The proposed change will delete current section (I), expanding the eligibility to all diesel forklifts, and a new section is proposed to clarify the eligibility of repowers using new replacement engines. This change clarifies that engines built according to California or federal replacement engine provisions (Title 13, California Code of Regulations (CCR), section 2434(j) and/or 40 Code of Federal Regulations (CFR) 1068.240) are eligible for funding.

United States Environmental Protection Agency (U.S. EPA) recently finalized amendments to the federal replacement engine regulations, placing a limitation on using replacement engines to repower equipment older than 40 years.

7.6 Off-Road Compression Ignition Equipment, Chapter 7, Section D.1., page 7-6

Air districts have requested clarification of which load factor to select for various off-road projects, particularly when the description of the equipment types varies in different equipment categories. The proposed change will add a section (M) to clarify that load factor should be selected based first upon the equipment category (construction, mobile agriculture, cargo handling, airport ground support equipment (GSE), and then by equipment type. This is consistent with how project load factors are selected in the Carl Moyer Program Clean Air Reporting Log (CARL) database.

7.7 Off-Road Compression Ignition Equipment, Chapter 7, Section D.2.(C), page 7-7

Staff proposes to clarify the criteria to determine eligibility of engines used in a repower project.

7.8 a) Off-Road Compression Ignition Equipment, Chapter 7, Section D.2.(D)(1), page 7-8
b) Off-Road Compression Ignition Equipment, Chapter 7, Section D.2.(E)(1) and (2), page 7-8

The Regulation for In-Use Off-Road Diesel-Fueled Fleets (Off-Road Regulation) prohibits adding Tier 1 engines to any fleet after January 1, 2016. Tier 2 engines can no longer be added to medium and large fleets after January 1, 2018 or to small fleets after January 1, 2023. This proposed change clarifies that in addition to not being eligible for funding due to regulatory restrictions, repowers with engines meeting these standards are prohibited from installation due to regulation.

7.9 a) Off-Road Compression Ignition Equipment, Chapter 7, Section D.2.(G)(3), page 7-9
b) Off-Road Compression Ignition Equipment, Chapter 7, Section E.4.(D), page 7-12

The proposed change will clarify the retrofit requirements for large fleets subject to the Off-Road Regulation. For large fleets subject to the Off-Road Regulation, the guidelines require projects to include particulate matter (PM) controls for engines greater than 75 horsepower after January 1, 2013 and for engines less than 75 horsepower after January 1, 2014. Questions have arisen as to how these deadlines are to be implemented. Staff proposes to clarify that the deadlines above are relative to the project commitment date and that if a project contract is not executed within six months, the project must be reevaluated to include a PM filter. Also, staff proposes to clarify that for large fleets after the dates mentioned above, engines which are certified to the Tier 4 final PM standard would be eligible for funding in a repower project and a retrofitted PM filter would not be required.

7.10 Off-Road Compression Ignition Equipment, Chapter 7, Section E.1.(A), page 7-10

ARB's Off-Road Regulation staff is updating Diesel Off-Road Online Reporting System (DOORS) to include information regarding fleet size and compliance status tools. The current guidelines state that applicants should use the fleet average calculator to determine compliance status and submit this information to the air districts. Staff proposes to delete reference to the online fleet calculator and specify the information from DOORS fleets must submit when applying for funding. Also, staff proposes to clarify the information to be documented to more easily determine project surplus and eligibility. This change also includes a statement that air districts will not be held liable if fleet owners falsify fleet information.

7.11 Off-Road Compression Ignition Equipment, Chapter 7, Section G.2., page 7-13

The proposed change will clarify which documents are needed for portable equipment. Staff proposes to simplify the criteria by allowing a district to document that a registration or permit is not required. A similar change is proposed in Chapter 10, Section C.7.(B).

7.12 Off-Road Compression Ignition Equipment, Chapter 7, Section G.4., page 7-13

The proposed change will clarify portable equipment eligibility requirements. Staff proposes to remove redundant language and to include existing language from Chapter 10, section C.7.(D) that will help clarify the funding opportunities for projects subject to SBx2 3 that fall under Chapter 7.

7.13 Off-Road Compression Ignition Equipment, Chapter 7, Section G.6. and G.7., page 7-13

The proposed change will add existing language from Chapter 10, section C.7.(F) that explains retrofit requirements for portable engine projects.

Chapter 9: OFF-ROAD EQUIPMENT REPLACEMENT

This chapter describes the minimum criteria and requirements for Carl Moyer Program mobile, self-propelled off-road compression-ignition (CI) and large spark-ignition (LSI) equipment replacement projects. Air districts may set more stringent requirements based upon local priorities.

9.1 Off-Road Equipment Replacement, Chapter 9, Section C.2.(B), page 9-3

The proposed change will clarify that the reference engine family emission factor may be used for equipment with existing (old) engines manufactured under the flexibility provisions.

Current Carl Moyer Program guidelines state that for baseline equipment originally produced under the "flexibility provisions for equipment manufacturers," baseline emission rates are determined by the model year and horsepower rating of the engine. The emission factor for the previous applicable Tier is then selected. This is a conservative approach which is appropriate in most cases. However, in some cases flexibility equipment engines may be emitting at a higher rate which can be determined when the reference engine family is listed on the emission control information label.

For example, if the baseline equipment has a 2006 model year engine between 130 $\leq$ Kilowatt (kW) < 225 (175 $\leq$ hp < 300), Tier 3 standards were in place at the time of manufacture. Based on current guideline criteria, the emission reduction calculations for flexibility equipment would be based on the Tier 2 standard. However, if the reference engine family was certified to a Tier 1 standard, the proposed change would allow the actual Tier 1 standard to be used. (Also see similar change proposed to Chapter 7 - revision 7.2).

9.2 Off-Road Equipment Replacement, Chapter 9, Section C.3.(A)(1), page 9-6

In an effort to reduce the resources required to search and document available equipment, the proposed change will allow air districts to consider location of equipment dealerships within their district when evaluating equipment availability. This potentially will reduce the overall number of equipment

manufacturers that must be documented as having or not having equipment available meeting the most current emission standards.

9.3 Off-Road Equipment Replacement, Chapter 9, Section C.3.(A)(6), page 9-7

The proposed change will delete language that is not consistent with the general criteria, clarifying that projects must achieve an annual Oxides of Nitrogen (NOx) emission reduction of at least 15 percent as specified in Chapter 2.

9.4 Off-Road Equipment Replacement, Chapter 9, Section C.3.(D), page 9-7

To clarify how to determine engine or equipment horsepower, staff proposes that air districts be allowed to use good engineering judgment in combination with verifiable information such as emission control information labels, equipment manuals, or other records to determine and document engine or equipment horsepower. (Also see similar change proposed to Chapter 7 – revision 7.2).

9.5 a) Off-Road Equipment Replacement, Chapter 9, Section C.1.(F)(1), page 9-3
b) Off-Road Equipment Replacement, Chapter 9, Section C.3.(D), page 9-7

Staff proposes to provide additional flexibility to fund replacement equipment with a horsepower higher than 125 percent of the existing equipment, which typically occurs in cases where equipment is not available with the same horsepower as the original equipment or in cases where the overall emission reductions are greater with the higher horsepower equipment.

Staff proposes to include an option that would allow the higher horsepower equipment so long as project grant amounts are based upon the documented cost of equipment of equivalent horsepower. For example, an applicant would like to replace a 100 horsepower tractor with a 200 horsepower tractor that costs $65,000. The applicant also provided the cost ($50,000) for a 125 horsepower tractor. Assuming the project is cost effective using the emission reductions from the 200 horsepower tractor and 80 percent of the cost of the 125 horsepower tractor, the project can go forward. The maximum grant amount would be $40,000 (i.e. 80 percent of $50,000) and the applicant would pay the cost difference between the 200 and 125 horsepower tractor. Air districts which choose this option to fund higher horsepower equipment must document the costs of the higher horsepower funded equipment and the costs of the lower horsepower equipment used to determine project grant amounts.

9.6 Off-Road Equipment Replacement, Chapter 9, Section C.3.(G), page 9-8

The current Carl Moyer Program Guidelines require that documentation of equipment financing be provided to the air district by either the applicant or the dealer. In order to reduce the overall administrative burden on grantees and air

districts, staff proposes to delete the requirement to submit documentation of equipment financing.

9.7 a) Off-Road Equipment Replacement, Chapter 9, Section C.3.(H)(6), page 9-10
b) Off-Road Equipment Replacement, Chapter 9, Section C.7.(E)(4), page 9-18

For large fleets subject to the Off-Road Regulation, the guidelines require projects to include particulate matter (PM) controls for engines greater than 75 horsepower after January 1, 2013 and for engines less than 75 horsepower after January 1, 2014. Questions have arisen as to how these deadlines are to be implemented. This change is to clarify that the deadlines above are relative to the project commitment date and that if a project contract is not executed within six months, the project must be reevaluated to include a PM filter. Also, staff proposes to clarify that for large fleets after the dates mentioned above, equipment with engines certified to the Tier 4 final PM standard would be eligible for funding and a retrofitted PM filter would not be required.

9.8 Off-Road Equipment Replacement, Chapter 9, Section C.3.(I), page 9-10

The proposed change will clarify that to base equipment usage on fuel use, a district must obtain a case-by-case.

9.9 Off-Road Equipment Replacement, Chapter 9, Section C.3.(J)(1), page 9-10

At this time the 2011 Guidelines require applicants that are replacing diesel or spark-ignited equipment with electric equipment to submit evidence of a plan to install either battery chargers for each piece of equipment or fast-charging capability which may be used with many pieces of equipment. Staff proposes to eliminate this requirement.

9.10 Off-Road Equipment Replacement, Chapter 9, Section C.3.(K), page 9-10

Air districts have requested clarification of which load factor to select for various off-road projects, particularly when the description of the equipment types varies in different equipment categories. The proposed change will clarify that load factor should be selected based first upon the equipment category (construction, mobile agriculture, cargo handling, airport GSE), and then by equipment type. This is consistent with how project load factors are selected in CARL.

9.11 Off-Road Equipment Replacement, Chapter 9, Section C.4.(C), page 9-11

Staff proposes to eliminate the need to collect documentation from the salvage yard where air district staff conducts the salvage inspection. However, the salvage yard must notify the air district within 10 days that the salvage inspection can occur to ensure the inspection occurs in a timely manner.

9.12 a) Off-Road Equipment Replacement, Chapter 9, Section C.5.(C), page 9-12
b) Off-Road Equipment Replacement, Chapter 9, Section C.6.(B), page 9-15

Air districts are required to have an equipment replacement plan in place prior to funding off-road equipment replacement projects. An equipment replacement plan describes the administrative requirements of air district's equipment replacement program including pre-, post- and salvage-inspections, monitoring, oversight, project contracting and payment, and dealer or salvage yard tasks. The air districts, in a collaborative effort with ARB staff, reviewed the current administrative requirements of the equipment replacement chapter and made recommended changes to streamline both the administrative requirements and eliminate those elements of air district equipment replacement plans which are redundant. Accordingly, the proposed change will eliminate the requirement that dealer partnerships be described in the off-road equipment replacement plan. Rather dealer and dismantler tasks would be described in the contract between a district and dealer/salvage yard. Also as part of this change, staff proposes to clarify that the dealer requirements in Section 6 of Chapter 9 only apply to those dealers that enter into a contract with air districts.

9.13 Off-Road Equipment Replacement, Chapter 9, Section C.5.(G)(1),(2), and (3), page 9-13

The proposed change will modify the language so that the Equipment Identification Number (EIN) is not required to be photographed during post-inspection but is still required to be obtained at that time. Regulatory requirements allow equipment owners 30 days from receipt of an ARB-issued EIN to label equipment in their fleet. Since equipment owners may not have an opportunity to label their equipment, and to be consistent with regulatory requirements, the proposed modifications will allow districts to accept written documentation of the EIN as part of the equipment post-inspection in lieu of a photo of the EIN on the equipment.

Additionally, staff proposes to reduce the number of required photographs to lessen the administrative burden on participants and air districts.

9.14 Off-Road Equipment Replacement, Chapter 9, Section C.5.(l)(4), page 9-14

The proposed change will alter references from "audit" to "incentive program review" or "review".

9.15 Off-Road Equipment Replacement, Chapter 9, Section C.7.(B)(1), page 9-16

The Off-Road Regulation staff is updating DOORS to include information regarding fleet size and compliance status tools. The current guidelines state that applicants should use the fleet average calculator to determine compliance status and submit this information to the air districts. Staff proposes to delete reference to the online fleet calculator and specify the information from DOORS

fleets must submit when applying for funding. Also, staff proposes to clarify the information is to be documented to more easily determine project surplus and eligibility. This change also includes a statement that air districts will not be held liable if fleet owners falsify fleet information. (Also see similar change to Chapter 7 – revision 7.10)

9.16 The proposed change will correct title of Off-Road Regulation where referenced:
a) Off-Road Equipment Replacement Amend Section C.2.(D), page 9-4
b) Off-Road Equipment Replacement Amend Section C.3.(H)(4), page 9-8
c) Off-Road Equipment Replacement Amend Section C.7., page 9-16

Chapter 10: PORTABLE AND STATIONARY AGRICULTURAL SOURCES

This chapter describes the minimum criteria and requirements for Carl Moyer Program portable and stationary agricultural engine projects and non-engine agricultural projects as defined in Health and Safety Code section 39011.5. Requirements for self-propelled agricultural use equipment (e.g. tractors) may be found in Chapter 7: Off-Road Compression-Ignition equipment. Air districts may set more stringent requirements based upon local priorities.

10.1 Portable and Stationary Agricultural Sources, Chapter 10, Sections C.1(K), page 10-4

The proposed change will clarify that funding for peripheral equipment associated with electric motor projects may include the last service pole used to hold the electric wires to power the motor. Peripheral equipment may be included in the grant award amount.

10.2 Portable and Stationary Agricultural Sources, Chapter 10, Section C.1(L), page 10-5

The proposed change will reduce administrative requirements and eliminate the Variable Frequency Device (VFD) cost cap. As part of the current administrative requirements, districts must notify ARB liaison via correspondence if a VFD will be included in the project grant and must request a case-by-case or cap the VFD eligible cost to be less than 50 percent of the new motor cost. Staff proposes to remove this requirement.

10.3 Portable and Stationary Agricultural Sources, Chapter 10, Section C.1.(P), page 10-5

Currently, participants must submit documentation of payment to the local utility company for power installation. This ensures that the applicant has coordinated with the local utility company for the electric motor to be connected to the electrical power grid. To streamline electric motor projects, staff proposes to also allow a copy of the applicant's application to the local utility company for power installation.

10.4 Portable and Stationary Agricultural Sources, Chapter 10, Section C.2.(B), Page 10-6

Air districts have requested additional flexibility to fund replacement engine/motor equipment with a horsepower higher than 150 percent of the existing engine/motor, which has typically occurred via the case-by-case review process.

Staff proposes to remove the case-by-case review requirement by including an option that would allow the higher horsepower engine/motor to be eligible for funding as long as the applicant pays for the additional cost associated with the larger sized engine. For instance, an applicant proposes to replace a 50 horsepower engine with a 99 horsepower engine that costs $30,000. The applicant also provided the engine cost ($20,000) for an engine at 150 percent of the existing engine size. Assuming the project is cost effective using the emission factors for the higher 99 horsepower engine and 85 percent of the cost of the 75 horsepower engine, the project can go forward. The maximum grant would be $17,000 (i.e; 85 percent of $20,000) and the applicant would pay the cost difference between the 99 and 75 horsepower engines. Air districts must document the cost of the lower horsepower equipment used to determine the project grant amount

10.5 Portable and Stationary Agricultural Sources, Chapter 10, Section C.2.(C), Page 10-6

Air districts have requested additional flexibility to fund repower projects in which the total number of existing engines is different than the total number of replacement engines/motors which has typically occurred via the case-by-case review process.

Staff is proposing to remove the case-by-case requirement and will advise air districts to adjust the project load factor if the project increases or decreases the project horsepower by 125 percent for the non-calculation project entry into CARL.

10.6 Portable and Stationary Agricultural Sources, Chapter 10, Section C.2.(F), Page 10-6

The proposed change will allow generator set engine projects to receive Moyer grant funding.

10.7 Portable and Stationary Agricultural Sources, Chapter 10, Section C.7.(B), page 10-9

The proposed change will clarify which documents are needed for portable equipment. Staff proposes to simplify the criteria by allowing a district to document that a registration or permit is not required. A similar change is proposed in Chapter 7, Section G.2.

Chapter 11: LOCOMOTIVES

This chapter describes the minimum criteria and requirements for Carl Moyer Program locomotive projects. Air districts may set more stringent requirements based upon local priorities.

11.1 Locomotives, Chapter 11, Section A, page 11-1; Section B, Table 11-2, page 11-2; Section D.2, pages 11-2 to 11-6:

The proposed change will rename Alternative Technology Switcher Purchase section to Locomotive Replacement. Recent availability of single engine medium horsepower locomotives achieving Tier 4 emission standards using after-treatment allows an additional option for new locomotives with emissions at or below Ultra Low Emission Locomotive (ULEL) levels to be considered for funding. The proposed change also specifies that the baseline emissions must be based on the emission tier of the locomotive engine being replaced.

11.2 Locomotives, Chapter 11, Section D.2(B)(1), page 11-5

The proposed change will require ARB staff to provide or approve emission factors for some new locomotives.

EPA has recently certified multi-engine switcher locomotives based on off-road engine certifications without requiring locomotive-based emission testing and is no longer providing locomotive emission factors for these locomotives in the published certification spreadsheets. Emission factors for these locomotives must be provided or approved by ARB staff.

11.3 Locomotives, Chapter 11, Section D.1(J), D.2 (A)(1), and D.4, pages 11-4, 11-5,

and 11-7

The proposed change will require ARB verification for locomotive projects.

EPA does not currently include any durability testing requirement for certification of some locomotives with limited production volumes. Staff proposes that eligible locomotives be verified by ARB to ensure minimum durability of emission reductions.

Chapter 12: MARINE VESSELS

This chapter describes the minimum criteria and requirements for Carl Moyer Program marine vessel projects. Air districts may set more stringent requirements based upon local priorities.

12.1 Marine Vessels, Chapter 12, Table 12-1, page 1; Table 12-2, page 12-3

Staff proposes to add language to clarify that vessels used for multiple purposes should be considered in accordance with the requirements of the Commercial Harbor Craft Regulation (CHC regulation). The project types in these tables were established to reflect the fact that some vessels are required by the CHC regulation to reduce their emission levels according to schedules to meet Tier 2 and Tier 3 standards. A vessel becomes subject to the CHC regulation's schedules when it crosses the usage threshold for certain categories.

For example, under the current language, a vessel used as both a charter fishing vessel (fishing) and charter diving vessel (excursion) would fall under two project types and two maximum eligibility funding levels. With the proposed language, a vessel used for both fishing and diving purposes would become subject to the emissions requirements when the number of hours of use for diving exceeds 300 per year, regardless of the number of hours used for fishing.

12.2 Marine Vessels, Chapter 12, Section C.2.(A), page 12-5

In general, only engines with the best available emission control technology are eligible for funding for vessel repowers. The existing language describing eligible engines is not clear concerning the common use of off-road certified engines for auxiliary repowers. In addition, the guidelines inaccurately require that engines less than 100 hp must meet the Tier 3 standard after January 1, 2009. Another source of confusion is that the Commercial Harbor Craft Regulation (CHC) rule also establishes requirements for best available emission levels for all newly acquired engines and engines required for compliance with the schedules to meet Tier 2 and Tier 3 standards. Staff proposes that the language in this section be modified to clarify that the engine requirements in the CHC regulation are to

be used to evaluate eligibility for funding. Specifically, all new engines and replacement engines purchased for Carl Moyer Program marine vessel repower projects must meet the requirements of the CHC set forth under California Code of Regulations, title 17, section 93118.5(e). ARB is also proposing to allow case-by-case for repower of propulsion engines with off-road engines.

12.3 Marine Vessels, Chapter 12, Section C.2.(D)(3), page 12-6

Marine repower projects frequently incur significant non-engine expenses. Expenses related to maintenance are not eligible, while costs essential to the installation and function of the new engine are eligible. Staff proposes that the eligibility of the new transmission be evaluated by district staff for each project instead of requiring case-by-case approval by ARB staff. Districts must document the eligibility of the transmission using the same standards they currently use to document the eligibility of other non-engine expenses.

Chapter 13: LIGHT-DUTY VEHICLES

This chapter describes the minimum criteria and requirements for Carl Moyer Program light-duty vehicles projects.

13.1 Light-Duty Vehicles, Chapter 13, Section C. Regulatory Background, pages 13-2 and 13-3

The enterprise operator requirements contained in the voluntary vehicle retirement regulations state that the operator must either be a licensed dismantler or have a binding agreement with a licensed dismantler. The proposed language allows districts the flexibility to act as enterprise operators in administration of the light-duty vehicle retirement programs. It should be noted, however, that the costs to the district to administer the program will be considered as administrative costs and count toward the district's overall five percent administrative cap.

13.2 Light-Duty Vehicles, Chapter 13, Section M. Emission Benefits, page 13-9

Emission reductions from conventional Voluntary Accelerated Vehicle Retirement (VAVR) projects are calculated using the VAVR Regulation methodology. Replacement vehicle emissions are the fleet average emissions for all gasoline-powered light-duty vehicles for model years 1990 through the year of vehicle retirement. Emission rates and average vehicle miles traveled are generated by ARB's motor vehicle emissions model. NOx, Reactive Organic Gas (ROG), Carbon Monoxide (CO), and PM emission reductions over the three year project life by vehicle model year are located in Chapter tables. Staff proposes language stating that these tables will be updated on an as needed

basis through a mail-out to reflect revisions to the motor vehicle emissions model year and/or to include additional years.

13.3 Light-Duty Vehicles, Chapter 13, Section M. Emission Benefits, including Tables 13-4 to 13-6

The proposed modifications would add Tables 13-4,13-5, and Table 13-7 using EMFAC2011 LDV to provide emission benefits for 2014 and 2015. Table 13-4 would be renumbered to Table 13-6. These changes will allow districts to calculate the emission benefits for the next two years, including the benefits of retiring light-duty diesel vehicles, using the latest version of EMFAC.

Chapter 14: LAWN AND GARDEN EQUIPMENT REPLACEMENT

This chapter describes the minimum criteria and requirements for Carl Moyer Program Lawn and Garden Equipment (L&GE) replacement projects. L&GE replacement provides a streamlined approach to reduce emissions by replacing existing gasoline lawn mowers with cordless, zero-emission, electric lawn mowers. L&GE replacement provides real emission benefits by providing lawn mowers owners the incentivized option of purchasing a cordless, zero-emission lawn mower instead of a higher polluting gasoline lawn mower. Zero-emission lawn mowers are not required by regulation, so the emission benefits are surplus. Carl Moyer Program funds for vouchers are used to offset part of the cost of the replacement electric lawn mower.

14.1 Lawn and Garden Replacement, Chapter 14, Section D., Table 14-1, page 14-10

The proposed minor modification is to correct a typographical error. The proposed change will correct the year referenced in the title “Gasoline Lawn Mower Emission Reductions (lbs./10yr)” to ""Gasoline Lawn Mower Emission Reductions (lbs./yr.)”.

OFF-ROAD VOUCHER INCENTIVE PROGRAM (ORVIP)

These guidelines describe the minimum criteria and requirements for the Carl Moyer Memorial Air Quality Standards Attainment (Carl Moyer) Program Off-Road Voucher Incentive Program (ORVIP). The ORVIP provides a streamlined approach to reduce emissions by replacing existing, high polluting equipment with newer, lower emission equipment. The ORVIP provides real emission

benefits by retiring the high-polluting equipment earlier than would have been expected through normal attrition or by regulation. Carl Moyer Program funds for voucher projects are used to offset part of the cost of the replacement equipment. California air pollution control/air quality management districts shall utilize these guidelines as a stand-alone document and need not refer to the current Carl Moyer Program guidelines in implementing this program. Air districts do not have the discretion to set more stringent requirements based upon local priorities.

ORVIP.1. Section B, page 2

The proposed change will clarify the voucher funding amount, such that if there is a discrepancy between the engine horsepower of the existing and replacement equipment, then the lower horsepower should be used to determine the voucher funding amount.

ORVIP.2. Section C.1.(E), page 3

This section states that the participant may obtain public and/or private financing to assist in the purchase of replacement equipment, but cannot seek additional public funded grants. Staff proposes to clarify that the statement about seeking additional public funded grants is specific to the purchase of the replacement equipment and does not apply to any additional purchase of a retrofit which may be installed on the equipment, but is not funded by the ORVIP.

ORVIP.3.

a) Section C.2.(A)(9), page 5
b) Appendix D4., page 36

The proposed change will add the word “calendar” to the section to clarify.

ORVIP.4. Section C.4.(C)(1), page 8

This section states for engines that are certified to family emission limits (FEL) higher than the applicable emission standards are ineligible for funding. Staff proposes to revise the criterion so that engines that have FEL higher than the interim Tier 4 emission standards, but below the Tier 3 standards, will be eligible for funding. The funding levels in Appendix O, associated with Tier 3 engines, must be used when determining the allowable funding for these engines.

ORVIP.5. Section C.4.(C)(2), page 8

The proposed change will add engine eligibility, by specifying that engines participating in the averaging, banking, and trading program that are certified to a

FEL below the applicable emission standards are be eligible to participate in the ORVIP.

ORVIP.6. Section C.4.(C)(4), page 9

This section states that the replacement equipment engine must be certified to a NOx emission standard that is at least 15 percent lower than the emission standard of the existing equipment engine. Staff proposes to delete this section as it is unnecessary because all replacement engines meeting the Tier 3 or interim Tier 4 NOx standards are more than 15 percent lower than the emission standards of the existing uncontrolled engines.

ORVIP.7. Section C.4.(C)(5), page 9

This section currently states that equipment manufactured under the "Flexibility Provisions for Equipment Manufacturers" are ineligible for funding. Staff proposes to revise the criterion so that a flexibility engine with emissions higher than the interim Tier 4 emission standards, but below the Tier 3 standards will be eligible for funding.

ORVIP.8.

a) Section C.5.(Q), page 11
b) Section C.5.(V), page 13
c) Section C.5.(BB), page 14

The proposed change extends the notification period for rejected applications and project from 5 business days to 15 business days. Additionally, districts will have up to 15 business days to enter project data into CARL.

ORVIP.9.

a) Section C.5.(FF), page 14
b) Section C.6.(A)(2)c., page 16

The proposed change will alter references from "audit" to "incentive program review" or "review" where applicable.

ORVIP.10. Section C.6.(A)(9), page 17

The proposed change extends the destruction requirement from 30 calendar days to 60 calendar days and deletes reference to the title because off-road equipment do not have registered titles like on-road vehicles.

ORVIP.11. Section D, page 22

The flow chart shows the procedure for an option in which the dealer performs the pre-inspection instead of the air district. However, when the air district

performs the pre-inspection, the inspection would occur after the application is turned in (which is not shown in the current flow chart). Staff proposes to revise the flowchart to show both options, as well as to address Revision ORVIP.10. regarding "title."

ORVIP.12.

a) Section C.1.(A)(2), page 3
b) Section D, page 21
c) Appendix A, page 23

The official title of the Off-Road Regulation is the In-Use Off-Road Diesel-Fueled Fleets Regulation. Staff proposes to correct all references to use the official title.

ORVIP.13. Section D, page 21

The model years for the horsepower bins are mislabeled by one year. Staff proposes that the model years for 25-49 hp, 50-99 hp, and 100-174 hp be corrected to pre-1999, pre-1998, and pre-1997, respectively.

ORVIP.14. Appendix B, Sections 7- 9, page 32

The proposed change leaves the training and outreach plan to the discretion of the air district.

ORVIP.15. Appendix I, page 48

The proposed change will clarify photograph requirements.

In the Required Photographs tables of Appendix I, a photograph of DOORS EIN is required at the post inspection of the replacement equipment. Although the EIN can be easily obtained online at the time of purchase, the grantee might not have sufficient time to paint the EIN onto the equipment before the post-inspection. Thus, staff is proposing to modify the requirement such that the EIN is not required to be photographed at post inspection, but the EIN will still need to be obtained by the post inspection.

Additionally, the subject and number of required photographs is proposed to be reduced to lessen the administrative burden on participants and air districts.

ORVIP.16. Appendix N, page 3

The current usage survey requests the participant to estimate the annual mileage in various geographic areas. However, off-road usage is not based on mileage. Staff proposes to modify this requirement to estimate usage generically.

ORVIP.17. Appendix O, VIP Replacement Funding Matrix for Construction Tractor/Loader/Backhoe page 56 and VIP Replacement Funding Matrix for Agricultural Tractor, page 58

Staff proposes to include corrections to the funding amounts for specific horsepower classes. The current amounts are incorrect due to a typographical error.

Appendix B: DEFINITIONS

AppB. Appendix B, Definition, Returned Funds

The proposed change will alter references to “audit” and change to “incentive program review” or “review” where applicable.

Appendix C: COST-EFFECTIVENESS CALCULATION METHODOLOGY

AppC1. Appendix C, All Sections

The proposed changes will clarify: the requirements for treating projects that involve co-funding with other public funds, modify language regarding particulate matter (PM), as well as fix typographical and grammatical errors throughout the Appendix.

Health and Safety Code, sections 44283 (d) and (g) provide statutory requirements for treating projects being co-funded with Moyer funding and other public funds. The statutes specify that Moyer grants may not exceed the incremental cost less any public incentives and that all state and district funds must be cost effective.

The existing guidelines do not include an appropriate formula to calculate the annualized cost to be used in cost-effectiveness calculations for projects with co-funding. Staff proposes new formula C-17a to show how to calculate the annualized cost for projects that include co-funding from other public funds. C-17a replaces formula C-2 for projects with co-funding from other public funds, including tax rebates and incentives.

In addition, staff has proposed changes in the language describing the co-funding formulas (C-16, C-17a, and C-17b) to better clarify which other public funding sources to include when calculating the maximum grant based on incremental cost and which funding sources to include when calculating the maximum grant based on cost effectiveness.

Staff also proposes adding explicit language to clarify that for projects with co-funding from other public sources, including tax incentives and rebates, formula C-16 must be used with formula C-3, formula C-17a must be used in place of formula C-2, and formula C-17b must be used with formula C-18.

Staff also proposes to delete the requirement for functioning hour meters on baseline equipment as it is inconsistent with source category Chapters and other methods for determining usage in Section 5 (A), Calculating Annual Emission Reductions Based on Hours of Operations.

Additionally, staff proposes to modify the language to accurately note that PM is provided a weighting factor of 20, independent of fuel type, consistent with formula C-5.

Additional minor changes are proposed throughout the Appendix, to address typographical and grammatical errors, as well as formatting inconsistencies. (Note: This includes changing the superscript to subscript in formula C-12. However, for clarity purposes this specific modification is not indicated in strikeout/underline.)

APPENDIX D

TABLES FOR EMISSION REDUCTION AND COST-EFFECTIVENESS CALCULATIONS

This Appendix presents tables summarizing the data needed to calculate the emission reductions and cost effectiveness of potential projects. Included are data such as engine emission factors, load factors, and other conversion factors used in the calculations discussed in Appendix C: Cost-Effectiveness Calculation Methodology.

AppD.1.a) Appendix D, Tables D1 – D6, pages D-3 – D-7.

Staff proposes changes to the emission factors in Tables D-1 through D-6 to reflect ARB's latest emission factor model, EMFAC2011. The existing Tables used emission factors based on ARB's older emission factor model, EMFAC2007. The existing tables will be deleted and replaced with updated tables.

b) Appendix D, Table D-7 and Table D-8, page D-8

Staff proposes to delete Tables D-7 and D-8 for Transport Refrigeration Units (TRU) and Auxiliary Power Unit (APU) Default Load Factor and TRU and APU Emission Factors. TRU and APU projects require ARB case-by-case approval and the proper load factors and emission factors will be specified in the case-by-case determination.

c) Appendix D, Table D-10, pages D-10 to D-11 and Table D-13, pages D-15 to D-16

The proposed change will revise Table D-10 and D-13, to include additional load factors for diesel powered and large spark ignited mobile and portable equipment, to better determine appropriate project emission reductions for those equipment types.