CHAPTER 5: OFF-ROAD EQUIPMENT

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I. Guidance

This chapter describes the minimum criteria and requirements for the Carl Moyer Memorial Air Quality Standards Attainment Program's (Carl Moyer Program or Moyer Program) mobile, portable, stationary, off-road compression-ignition (CI or diesel), spark-ignition, and large spark-ignition (LSI) projects such as construction, agricultural, and industrial equipment. For funding guidance on agricultural projects that are funded through the Moyer Program, please refer to the Funding Agricultural Replacement Measures for Emission Reductions (FARMER) guidelines. Air quality management districts or air pollution control districts (air districts) may set more stringent requirements based upon local priorities.

Please note that to fund projects in this category, Chapters 2 and 3 include general provisions and administrative requirements. Appendices A-E provide additional supporting information.

A. Projects Eligible for Funding

The following off-road equipment projects may be eligible for funding:

1. **Repower of Existing Equipment.** The replacement of the existing engine with a newer emission-certified engine instead of rebuilding the existing engine to its original specifications.
2. **Retrofit Purchase.** The installation of a California Air Resources Board (CARB) verified emission control system on an existing engine. Examples include, but are not limited to, particulate filters and diesel oxidation catalysts.
3. **Equipment Replacement.** The purchase of new or used equipment with an engine certified to the current emission standard Tier to replace an older, fully functional piece of equipment that is to be scrapped.
4. **Infrastructure.** See the infrastructure chapter (Chapter 10) for details regarding applicant eligibility and project types for infrastructure in support of off-road equipment.

Please see sections C and D of this chapter for determining maximum grant amounts and minimum eligibility requirements for all off-road project categories. Off-road eligible projects exclude marine, locomotive, and lawn and garden projects. For off-road locomotive projects see Chapter 6, marine projects see Chapter 7, and for lawn and garden projects see Chapter 9.

B. Engine Emission Standards

CARB and the United States Environmental Protection Agency (U.S. EPA) have adopted regulations for exhaust emission standards for new off-road CI and LSI engines and equipment. For reference, Tables 5-9 and 5-10 in the references section, summarize the hydrocarbon (HC), oxides of nitrogen (NOx), and particulate matter (PM) standards in grams per brake- horsepower-hour (g/bhp-hr) and grams per kilowatt-hour (g/kW-hr) for off-road CI Tier 1, 2, 3, and 4 engines. The actual standards, in grams per kilowatt-hour (g/kW-hr), may be found in the California Code of Regulations (CCR), title 13, Sections

2420, et seq. Table 5-11 summarizes the exhaust emission standards for LSI engines. The complete emission standards for LSI engines may be found in the CCR, title 13, Sections 2430, et seq.

C. Determining Funding Amounts

1. Maximum Funding

The maximum amount of funding available to a project is limited by a cost-effectiveness limit (see Appendix E). In addition to cost-effectiveness limits, Table 5-1 summarizes the maximum eligible funding for each project type as a percentage. All projects are also subject to the cost-effectiveness limits specified in Appendix E.

Table 5-1
Maximum Percentage Eligible for Moyer Program Off-Road Projects

Project	Maximum Percentage Eligible
Diesel repower	85%
LSI repower	85%
Repower to zero-emission	85%
Replacement to zero-emission	85%
Mobile equipment replacement	80%
Portable equipment replacement (excludes stationary)	80%
Retrofit	100%
Optional cost-share plus up for fleets taking voluntary action for zero-emission CARB Programs or Regulations	15%

CARB has adopted in-use fleet rules affecting equipment with off-road CI and off- road LSI engines. For equipment subject to these rules, additional limitations may apply according to Sections F through L of this chapter.

2. Project Life

(A) For ~~M~~maximum project life see Table 5-2
(B) The maximum project life does not consider regulatory requirements that may shorten the eligible project life. CARB Programs or regulatory requirements may reduce actual project lives below these maximum values.
(1) Districts have the flexibility to fund zero-emission projects up to the maximum project life and maximum eligible incentive amount for fleets not subject to or taking voluntary action for CARB's programs or regulations

that do not currently have an EPA waiver or authorization.

(C) The minimum project life allowed is one year

Table 5-2 Maximum Project Life

Type	Project Life
Repower only (no retrofit)	7 years
Farm equipment (all projects- refer to FARMER)	10 years(1)
Replacement and repower to zero-emission	10 years
Retrofit only	5 years
Replacement excavators	3 years
Replacement skid steer loaders	3 years
Replacement rough terrain forklifts	3 years
Replacement all other non-farm (existing diesel only)	5 years
Replacement all other non-farm (existing LSI only)	3 years

(1) Agricultural equipment projects refer to FARMER guidelines.

(D) Project life can vary between the minimum and maximum amount based on various factors, including air district funding, cost effectiveness of the project, and regulatory compliance. Air districts may offer a project life fewer than ten years.

(E) For all agricultural equipment projects refer to FARMER guidelines.

3. Usage

Cost-effectiveness calculations must be based on hours operated. Alternative usage methods including miles traveled or fuel consumed may be used with an approved Case-By-Case determination (CBC). Air districts shall calculate hours of usage based on one of the following:

(A) Usage documentation is the average of a minimum of 24 months provided by the applicant at the time of application. For example, if an applicant has ten years of usage data, at least the previous 24 months of usage data must be used. When usage documentation is available, annual usage is not required to be specified in the contract consistent with Chapter 3, Section X.6(B)(1). However, at the district's discretion, usage may be specified in the contract.

(B) If the previous 24 months of documented usage is not available, hours of usage may be estimated based on information provided by the applicant and good engineering judgment. When documented usage is not available, the estimated minimum annual usage is required to be specified in the contract consistent with

Chapter 3, Section X.6.(B)(2). Fleet averages cannot be used to determine estimated usage.

(C) All replacement project engines or equipment must have a fully operational hour meter for the project life. If during the project life the hour meter fails for any reason, it must be repaired or replaced as soon as possible at the owner's expense.

(D) For zero-emission replacement engines or equipment, usage readings may be per an hour meter or other appropriate metric per, Chapter 3, Section X.7, pending approval by CARB.

D. Project Criteria

The minimum qualifications for off-road projects are listed below. All projects must also conform to the requirements in Chapter 2: General Criteria and in Chapter 3: Program Administration. Participating air districts retain the authority to impose additional requirements in order to address local concerns.

1. General Criteria

(A) Existing engines or equipment replaced with new or cleaner engines or equipment, including ZE equipment, are eligible for funding.

(B) Air districts have discretion to use good engineering judgment to determine project horsepower for an existing or new engine or equipment based on the engine label, manual, engine records, or other verifiable records that can be requested from the manufacturer.

(C) For existing equipment in which the actual engine horsepower cannot be determined based upon the engine label, manual, and engine records, air districts may determine existing engine horsepower by the following formula: Engine horsepower = Power Take Off (PTO) x 120 percent.

(D) Future annual hours of equipment operation for determining emission reductions must be based upon readings from an installed and fully operational hour meter. For the purpose of determining usage to calculate emission reductions, the future hours of replacement equipment operation may be estimated using the procedures outlined in the Usage section found in paragraph C.3 of this chapter. For the purpose of reporting actual usage of the replacement equipment during the project life, annual hours of equipment operation during the project life must be based upon readings from an installed and fully operational hour meter.

(E) The certification emission standard and/or Tier designation for the baseline engine (if applicable) and the new engine should be determined from the CARB Executive Order which can be found at: New Vehicle and Engine Certification: Executive Orders or the U.S. EPA Annual Certification Data for Vehicles, Engines, and Equipment website which can be found at: New Vehicle and Engine Certification: Executive Orders. If further clarification is needed, refer to the Tier Off-Road Diesel Color Regulation Chart.

(F) For existing equipment with engines manufactured under the flexibility provision, detailed in CCR, title 13, Section 2423(d), the baseline emission rates shall be

determined by using the previous applicable Tier emission standard for the existing engine model year and horsepower rating. Alternatively, the baseline emission rates may be determined based upon the standard or Tier associated with the actual reference family listed on the emission control information label of the existing equipment. The CARB Executive Order for these engines indicates that the engines are certified under the flexibility provision. Air districts must retain this documentation in the project file.

(G) Baseline engines that participated in the "Tier 4 Early Introduction Incentive for Engine Manufacturers" program, as detailed in CCR, title 13, Section 2423(b)(6), are eligible for funding provided that they are certified to the Tier 4 Final emission standards. CARB's Executive Order for these engines indicates that the engines are certified under this provision. The emission rates for these engines used to determine cost-effectiveness shall be equivalent to the emission factors associated with Tier 3 engines. Air districts must retain this documentation in the project file.

(H) New engines certified to the interim Tier 4 (interim Tier 4, Tier 4 Phase-Out, Tier 4 Phase-in/Alternate NOx) and Tier 4 Final emission standards participating in the averaging, banking, and trading program that are certified to FEL higher than the applicable emission standards are not eligible for funding.

(I) New engines certified to the Tier 4 Final emission standard participating in the averaging, banking, and trading program that are certified to a FEL below the applicable emission standards are eligible for funding. The appropriate emission factor for calculating emission reductions and cost-effectiveness shall be the emission factor associated with the Tier 4 Final or cleaner emission standard.

(J) New engines eligible for off-road projects must meet the Tier 4 Final or cleaner emission standard.

(K) Existing zero- or low-emission equipment are required for worker safety in the following industries, and therefore these projects are not eligible for funding: food retail stores, cold storage, and confined space operations (such as freezers).

(L) The horsepower rating for the replacement engine must not be greater than a 35 percent increase of the original manufacturer rated horsepower of the existing baseline engine (baseline horsepower). For example, the 35 percent increase of 100hp is 135hp. Horsepower ratings up to a 35 percent increase of the baseline horsepower are considered to be in the allowable horsepower range.

Example 1: 135% of the horsepower of a 100 hp engine is the range 100 hp to 135 hp. The horsepower range of 100 hp to 235hp would be incorrect.

(M) The air district may approve a greater than 35 percent increase in horsepower under any of the following circumstances:

(1) Equipment in the allowable horsepower range is not available.

(2) The higher horsepower equipment will result in equal or lower annual emissions than equipment in the allowable horsepower range.

(3) The replacement equipment is zero-emission.

(4) In cases where section (M)(1) through (M)(3) do not apply, if the replacement

engine may be greater than a 35 percent increase, the applicant will pay the additional costs associated with the higher horsepower engine. In this circumstance, the emission reduction calculation must be based upon the funded (higher horsepower) engine.

(5) If the replacement engine is greater than a 35 percent increase, the eligible funding amount must be based upon the cost of an engine or equipment whose horsepower is within the allowable horsepower range. The air district's project file must include documentation of the cost of the higher horsepower equipment as well as the method used to determine the basis for the project grant amount (e.g., dealership cost estimate of lower horsepower equipment).

(N) No funds will be issued for maintenance or repairs related to the operation of the existing or new equipment. The participant takes sole responsibility for ensuring that the engine and/or equipment is/are in operational condition throughout the agreement period.

(O) Existing engines replaced as part of an off-road project must be destroyed and rendered useless. At a minimum, the destruction of an engine must include:

(1) A hole in the engine block with a diameter of at least three inches at the narrowest point. The hole must be irregularly shaped (i.e., no symmetrical squares or circles) and

(2) A section of the oil pan flange must be removed as part of the hole or have a line cut through it that connects the hole.

(3) At the district's discretion, an alternative method of destruction may be used so long as the engine is destroyed and rendered inoperable and the method is consistent with the air district's Policies & Procedures per Chapter 3, Section AA.4.

(P) For portable/stationary agricultural projects, refer to the requirements detailed in the FARMER Guidelines for eligibility. FARMER Guidelines can be found through: Funding Agricultural Replacement Measures for Emission Reductions (FARMER) Program Guidelines. Non-agricultural portable/stationary equipment are eligible for funding through the Moyer Program as long as they are surplus to local rules. Per California Assembly Bill (AB) 1317 (Gray, Chapter 634, 2017), covered sources include stationary irrigation or water conveyance engines (H&SC Section 44275(a)(7). These sources are limited to non- agricultural use engines. These engines may be used, for example, in conservation or fire extinguishing. Eligible non-agricultural stationary projects may also include water conveyance engines or stationary irrigation engines.

(Q) For baseline emission reduction calculations, the emission factors used from Appendix D will reflect the executive order of the engine model. Baseline engines with no emission control devices will follow the applicable uncontrolled emission standards for the given year. Only eligible baseline engines per the applicable regulation will be considered for emission reduction calculations.

2. Repower

(A) New engines manufactured under the "Flexibility Provisions for Equipment

Manufacturers" as detailed in CCR, title 13, Section 2423(d), are ineligible for funding to repower equipment.

(B) New engines manufactured under the "replacement engine" provisions of CCR, title 13, Section 2423(j) and/or the provisions of 40 Code of Federal Regulations (CFR) 1068.240 which are used to repower equipment to the Tier 4 Final, or cleaner emission standard, or zero-emission are eligible for funding.

(C) For repower plus retrofit projects, the cost of data logging the replacement engine is not eligible. Please refer to Section D.3 Retrofit of this chapter for additional criteria.

(D) For repower projects with new off-road compression-ignition engines equipped with original engine manufacturer after treatment devices, addition of a retrofit is ineligible due to issues with engine warranty and anti-tampering provisions.

(E) Repower to convert to alternative fuel, hybrid, or zero-emission technology is eligible for funding. Repower conversion kits will require a CARB executive order per VEH Section 38391. Zero-emission repower projects must include a three-year or 5,000-hour warranty. Additional repower warranty requirements are listed below:

(1) All components of the conversion kit as well as all the work and chassis components modified or replaced to enable the integration of the conversion kit shall be warranted against defects and workmanship for the full warranty period. The warranty shall also cover corrosion damage for all conversion components as well as equipment chassis components that experience greater exposure to moisture and other environmental conditions due to the integration of the conversion kit.

(2) Damage that occurs because of an incorrectly sized powertrain or other incompatibility between the powertrain and the equipment/chassis (e.g., driveline failures due to excess torque) shall be covered for the full warranty period.

(3) The warranty must cover zero-emission system parts and labor.

(4) The warranty must be fully transferable to subsequent purchasers for the full warranty period.

(F) Variable frequency devices (VFD) may be eligible for funding provided the air district reports VFD cost and serial number information in the Clean Air Reporting Log (CARL).

(G) In stationary electric motor projects, the grantee must provide documentation of application or payment to the local utility company for power installation.

(H) An electric motor on an irrigation pump project that is under contract may be considered for invoice payment once the motor has been delivered to the project site, and the motor has been connected to the electricity grid.

(I) For Moyer funded agricultural irrigation pump project repower requirements, refer to the FARMER guidelines.

(J) For portable/stationary projects, air districts with a local rule may repower engines to Tier 4 Final or cleaner technology as long as there is at least one

year of surplus emission reductions prior to the compliance date of the local rule for the specific tier. The minimum project life in these instances is one year. When repowering engines, air districts are encouraged to consider the feasibility of repowering with zero-emission technology, such as an electric motor, over a Tier 4 Final or cleaner engine.

3. Retrofit

(A) Existing off-road CI engines equipped with original engine manufacturer aftertreatment devices are ineligible for funding.
(B) The retrofit must be verified by CARB to the highest level available for the engine being retrofitted.
(C) Eligible project costs include:
(1) Retrofit system (including all essential components)
(2) Installation
(3) Maintenance (for duration of project life)
(4) Hour meter (if none existed on existing equipment)
(a) The data logging cost of a retrofit-only project is not eligible.
(b) Additional information on verified diesel retrofit systems may be found on CARB's website at Verification Procedure for In-Use Strategies to Control Emissions from Diesel Engines. Information on verified LSI retrofit systems may be found on CARB's website at: LSI Verified Retrofit Systems.

4. Equipment Replacement

(A) Equipment replacement projects are limited to mobile and portable equipment.
(B) The replacement of two or more pieces of existing baseline equipment with one piece of replacement equipment is eligible for funding. Each piece of existing and replacement equipment must comply with all of the appropriate criteria in this section. The replacement equipment must execute the same work function as the baseline pieces of equipment. For baseline emissions calculation, the annual emissions of the two pieces of existing equipment are summed. For the replacement equipment emissions calculation, the annual usage of the two pieces of existing equipment is summed for the replacement equipment usage. The horsepower rating for the replacement equipment must not be greater than 35 percent over the original manufacturer rated horsepower (baseline horsepower) for the average horsepower of the two existing equipment engines (unless the grantee pays for the horsepower upgrade as specified in Section D.1.(M) of this chapter).
(C) If an air district uses equipment dealers to implement the equipment replacement program, reimbursement cannot be issued until all necessary documentation is received and approved by the air district. Participants may purchase the replacement equipment from a private party, provided all required documentation is submitted and approved by the air district. This

includes warranty requirements and all other equipment replacement requirements.

(D) Existing Equipment Requirements

(1) Equipment Ownership: the applicant must have owned the existing equipment in California for the previous two years. The applicant must provide documentation of the following specific to the existing equipment (select one):

(a) Bill of sale for the old existing equipment (preferred)
(b) Tax depreciation logs
(c) Property tax records
(d) Equipment insurance records
(e) Bank appraisals for equipment
(f) Maintenance/service records
(g) General ledgers
(h) Fuel records specific to the existing equipment that identify the equipment owner
(i) Other documentation approved by CARB

(2) Operational Requirements: the existing equipment must be in operational condition to qualify for funding. A pre-inspection of the existing equipment must be performed prior to funding to verify the operational status of the equipment. In addition, the applicant must provide documentation to demonstrate that the equipment was operational for the previous year. The following types of documents are acceptable:

(a) Revenue and usage records that identify operational, standby, and down hours for the equipment
(b) Routine inspections which document the operating condition of the existing equipment (Occupational Safety and Health Administration or workplace required)
(c) Employee timesheets linked to specific equipment use
(d) Preventative maintenance/service records tied to specific hours of equipment use
(e) Repair work orders specific to the equipment
(f) Other documents approved by CARB

(3) Pre-Inspection Requirements: Pre-inspection must verify the operational condition of the existing equipment. The pre-inspection must verify, at a minimum, the following items:

(a) Tires in usable condition (able to hold air, sufficient tread or tracks, etc.)
(b) Steering wheel operational
(c) Equipment able to start up and move backwards and forwards
(d) Buckets, blades, rollers, etc. are working
(e) Undercarriage structurally sound
(f) Fuel tank in usable condition
(g) No parts stripped
(h) Equipment not vandalized

(i) Clear photographs or recorded video of the existing equipment must include the following views listed below. The air district will specify the required digital format.

i. Right side - hood down
ii. Front - hood down
iii. Left side - hood down
iv. Equipment serial number
v. Engine serial number - either tag or stamp on block
vi. Diesel Off-Road Online Reporting System (DOORS)
vii. Equipment Identification Number (EIN), if applicable
viii. Rear

(4) Destruction and Salvage Requirements: Equipment replacement requires that the baseline equipment be scrapped to permanently remove it from service. This ensures that emission reductions are real and prevents the existing equipment from being moved into another locale to continue emitting high levels of pollutants.

(a) Destruction of the equipment may occur either at an air district approved salvage yard or another facility in conjunction with an air district salvage inspection.

(b) Both the baseline engine and equipment must be destroyed. Refer to Section D.1.(O) of this chapter for the engine destruction method. The destruction method of the equipment will vary depending on the structure of the equipment:

i. Equipment with permanent frame rails running the length of the equipment: complete cuts of both frame rails between the front and rear axles.
ii. Equipment with removable/bolt-on frame rails: structural damage, with cuts or otherwise, that renders the main body of the equipment inoperable and unrepairable.
iii. Equipment without frame rails: structural damage, with cuts or otherwise, that renders the main body of the equipment inoperable and unrepairable.
iv. Articulated equipment: damage, cuts or otherwise, to the articulation joints of front and rear halves of the equipment so that neither half can be joined.
v. Other equivalent methods of destruction are acceptable if approved by the air district.

(c) The baseline engine and equipment must be destroyed within 90 days of being replaced. Documentation of the destruction must be provided to the air district within 30 days of destruction.

(d) For zero-emission equipment that may need an extension with reasonable justification, including but not limited to energizing associated infrastructure, an extension of up to 6 months is available at the air district's discretion. The project file must contain documentation

showing reasonable justification for the delay. Air district may also request for additional time beyond the six months timeframe on a case-by-case basis.

i. For zero-emission equipment projects utilizing the 1-year project life, any destruction extensions must not overlap with the 1-year surplus window. If extension is granted, existing equipment must be destroyed within 90 days of infrastructure completion.

(e) Funding is not available for the salvage of any existing equipment.

(f) The baseline equipment salvage value will be negotiated between either the applicant, the dealership, and/or the salvage yard.

(g) A salvage inspection of the baseline equipment must be performed by either the air district or a contracted salvage yard.

(h) Air districts which perform their own salvage inspections must be notified within 14 days of destruction so that a salvage inspection can occur.

(i) Salvage inspection must include clear photographs or recorded video of the following views:

i. DOORS EIN (if applicable)

ii. Equipment serial number

iii. Engine serial number either stamped on the block or on the tag

iv. Destroyed engine block as described in Section D.1.(O) of this chapter.

v. Cut structural components as described in Section D.4.(D)(4) (b) i. - iii in this chapter.

vi. Other views dependent on the method of equipment destruction

(j) Salvage inspection of the existing equipment must be completed prior to disbursement of funds.

(5) Replacement Equipment Requirements

(a) The replacement equipment must serve the same function, have the same load factor, and perform the same work equivalent as the baseline equipment (e.g., replacement of a loader with another loader).

(b) Only items essential to the operation of the equipment and the minimum attachments normally sold with the original equipment, as determined by the air district, are eligible for reimbursement on the replacement equipment. Equipment owners may remove non-emission related body components and place them on the replacement equipment as long as the components do not exist on the replacement equipment and are not part of the paid components for the replacement equipment.

(c) Costs for battery chargers and necessary peripheral equipment associated with electric equipment projects may be included in determination of the (total project cost) grant award amount.

(d) Applicants may purchase the replacement equipment from a private party, provided all required documentation is submitted and approved.

This includes warranty requirements and all other equipment replacement requirements.

(e) If an applicant elects to install a retrofit with the replacement equipment, then the retrofit must be installed prior to equipment delivery to the grantee and must stay in operation on the replacement equipment for the project life. The retrofit must meet all the requirements per Section D.3 of this chapter.

(6) Warranty Requirements

(a) All new or used replacement combustion equipment must have a minimum one-year or 1,600-hour powertrain warranty. The warranty must cover parts and labor. A separate supplemental minimum one-year or 1600-hour power and drivetrain warranty must be purchased if the equipment does not have one. The supplemental warranty costs are not eligible for funding.

(b) For alternative fuel, hybrid or zero-emission replacements, the warranty period is, at minimum, three years or 5,000 usage hours (whichever comes first). ZE supplemental warranty costs are eligible for funding. All applicable powertrain components (including, but not limited to, the energy storage system, fuel-cell stack, motors, and powertrain and thermal management systems), electronic components, telematics components, on-board charging or fueling components, all components along driveline (except for maintenance items, such as tires), and the equipment chassis (including, but not limited to, the frame, cross members, and cab structure) shall be warranted against defects, workmanship, and corrosion for the full warranty period.

(c) It is recommended that the highest-grade warranty be purchased in order to avoid expensive repairs in the future.

(d) Warranty documentation must be provided to the air district.

(7) Post-Inspection Requirements

(a) Post-inspection of the replacement equipment must be completed prior to disbursement of funds.

(b) The post-inspection must include clear photographs or recorded video of the following views:

i. Pictures(s) or recorded video of full equipment
ii. Equipment serial number
iii. Engine serial number and engine information
iv. Retrofit (if available)
v. Hour meter reading

(E) Air District Requirements

(1) Air districts must establish an off-road equipment replacement plan before funding projects. The plan must include criteria for the following:

(a) Development of grantee contracts which must include a generic statement of work.

(b) Inspections (pre-, post-, salvage). The required digital format for the

inspections photographs or video recordings must be specified.
(c) Reimbursement procedures.
(d) Monitoring and enforcement considerations.
(e) If applicable, for air districts that contract with dealers and salvage yards, the off-road equipment replacement plan must identify the air district's requirements for dealer and/or salvage yard contracts, and the process for oversight and review of program requirements that are expected of each entity, and the repercussions for noncompliance with the terms of the contract for each entity. For air districts that contract with dealer(s), liaison training must be provided to the dealership staff.

(2) Air districts may fund equipment replacement projects through a regional program administered by a designated air district. The designated air district could be either an air district located within the regional program, or a large air district located outside of the regional program. A regional equipment replacement implementation plan must be established, containing all the required components as required in an individual air district's equipment replacement implementation plan. A regional equipment replacement plan must also contain a detailed description of the funding mechanism among the participating air districts. All air districts participating in the regional program must sign the regional equipment replacement implementation plan and must adhere to all the requirements specified in such regional implementation plan.

(3) Air districts are encouraged but are not required to establish contracts with dealers and salvage yards for participation in the program.

(4) Air districts must ensure the following are performed:
(a) Pre-inspection of the existing equipment. This may be performed by an air district approved dealer.
(b) Verification that the replacement equipment proof of sale and if applicable, proof of financing has been received from the dealer or participant.
(c) Post-inspection of the replacement equipment. This may be performed by an air district approved dealer.
(d) Salvage inspection of the existing equipment. This may be performed by an approved salvage yard.
(e) Verification that all post-inspection of replacement equipment and salvage inspection of existing equipment were completed, and all documentation is submitted and approved prior to disbursement of funds.

(5) The air district is allowed to make full payment to the dealer at the time the dealer delivers the replacement equipment to the applicant under the following framework:
(a) The air district must complete the pre-inspection of the existing equipment and post-inspection of the replacement equipment to make sure that all equipment complies with program requirements.

(b) The air district must sign a contract with the dealer and the salvage yard that contains, at a minimum, the program requirements that are expected of each entity and the repercussions for noncompliance with the terms of the contract for each entity. This shall include, but is not limited to, the requirement that the dealer delivers the existing equipment to a qualified salvage yard within 60 days of the date that the existing equipment was turned into the dealer by the applicant.

(c) The air district must ensure the equipment is scrapped within 60 days of the salvage yard's receipt of the equipment, unless it is a zero-emission project on an extension, through salvage inspection with the salvage yard to properly document the destruction of the existing equipment in accordance with the Moyer Program equipment replacement program requirements.

(F) Dealer Requirements

(1) Equipment dealers that enter into a contract with an air district must:

(a) Provide basic information to potential applicants about the equipment replacement category. Air districts must also provide liaison training to dealership staff.

(b) Inform potential applicants of rights and responsibilities as outlined in the air district and CARB guidelines.

(c) Help the potential applicants correctly complete the application. It is important that the participant understands the meaning of the program and the subsequent air district contract if approved for funding. The air district will provide all forms and certificates as appendices to the application.

(d) Ensure that the application package is complete. The dealer must verify that all the following items are included in the application package:

i. A signed and complete application.

ii. All documentation as required in Section D.4.(E) of this chapter.

iii. The following information must also be included in the documentation:

a. Make
b. Model
c. Model year
d. Equipment serial number
e. Engine make
f. Engine serial number
g. Expected delivery date of existing equipment

iv. Documentation of replacement equipment warranty.

(e) Submit the completed application package to the air district.

(2) After the application and all required documentation have been approved by the air district, the dealer must provide the air district with proof of sale and if applicable, proof of financing of the replacement equipment. The financing package will enable the air district to determine the

reimbursement costs that may be accrued in case the participant defaults on the contracted performance requirements. Proof of project financing can be a document showing the lender and the amount loaned, which at a minimum is a copy of the check given to the dealer equal to the portion of the project that was not Moyer Program funded. Proof of project financing is always required unless the grantee paid cash for the portion of the project that was not Moyer Program funded.

(3) Prior to releasing the replacement equipment to the participant, the dealer must have documentation of an air district pre-inspection of the existing equipment and the post-inspection of the replacement equipment. Alternatively, if approved by the air district to do pre- and post-inspections, the dealer must verify that photographs or recorded videos of the existing equipment and the replacement equipment, as defined in Sections D.4.(E) of this chapter, are clear prior to submitting them to the air district.

(4) Provide documentation certifying that the existing equipment will be received by a contracted salvage yard within 30 days.

(G) Salvage Yard Requirements

(1) Equipment salvage yards are encouraged to enter into an agreement with the air district and attend training to qualify for participation.

(2) Contracted salvage yard(s) must:

(a) Destroy the existing equipment and engine within 60 days of receipt of the existing equipment in accordance with the program guidelines, unless it is a zero-emission project on an extension.

(b) Provide the air district with all photographs or recorded videos required under the air district's salvage inspections requirements per Section D.4.(E)b. of this chapter within ten business days of salvaging the existing equipment.

(c) For each project, provide the following information:

i. Make
ii. Model
iii. Model year
iv. Serial number
v. Engine make
vi. Engine serial number
vii. Delivery date of the baseline equipment

(d) Submit a completed certificate of equipment destruction or other similarly approved documentation to the air district.

E. Zero-Emission Utility Terrain Vehicle (UTV) Voucher Projects

1. Guidance

This section describes the minimum criteria and requirements for the Zero-Emission Utility Terrain Vehicle (UTV) Voucher Projects (UTV replacement project). The UTV voucher projects are intended to encourage and accelerate the use of off-road, zero-emission UTVs to qualified public agencies, nonprofit agencies, and business

operations by providing vouchers for the purchase of new zero-emission UTV vehicles. UTV replacement provides a streamlined approach to reduce emissions from certain smaller off-road engines by replacing baseline combustion UTVs with zero-emission UTVs. UTVs are not required to be replaced by Off-Highway Recreational Vehicle CARB Program, making the emission benefits surplus. The UTV replacement project provides funding for vouchers to offset part of the cost of a replacement zero-emission UTV. The UTV Replacement Project would provide incentives for up to 75 percent of the cost of a new zero-emission UTV with a maximum of $13,500 to qualified businesses, public agencies and entities, and nonprofit organizations involved in commercial operations.

2. Determining Funding Amounts

(A) Projects Eligible for Funding:
The purchase of new zero-emission UTV to replace the baseline combustion UTV that is to be scrapped is eligible for funding under this project.

(B) Maximum Eligible Funding Amounts
This chapter is open to commercial businesses, public agencies and entities, and nonprofit organization applicants which must provide information with supporting documentation consistent with Section E.4.(B) of this chapter to be eligible for the maximum funding amount in Table 5-3.

(C) Although this section primarily outlines a voucher program model, air districts may choose to write contracts for public agencies or commercial operations. If this option is elected the maximum allowable grant amount per equipment is still limited to the value listed in Table 5-3.

Table 5-3
Maximum Eligible Funding Amounts (Dollars)

Equipment	Grant Amount
Utility Terrain Vehicle (UTV)	$13,500 or 75%, whichever is less

3. Project Criteria

The general requirements for UTV projects are listed below. In addition to the general requirements, specific requirements for UTV projects are listed in Chapter 2: General Criteria and 3: Program Administration respectively. Additional minimum qualifications for participants and UTVs are listed below in Sections B.4, B.5, and B.6.

(A) Project Requirements
To be eligible for the Zero-Emission UTV Project, UTV models would be required to meet the following criteria:
(1) New: The vehicle must be a new vehicle.
(2) Vehicle Specifications and Performance Thresholds: Eligible UTVs must have a towing capacity of 500 pounds or greater and a total vehicle weight

of 700 pounds or greater.

(3) Warranty Provisions: The vehicle drivetrain, including applicable energy storage tanks or battery packs, must be covered by a manufacturer warranty, for a minimum of one year. Prior to approving a project, CARB or the District may request that the manufacturer provide copies of representative vehicle and battery warranties and a description of the manufacturer's plans to provide warranty and routine vehicle service. If the UTV has an extended warranty option, the extended warranty may be included as an eligible cost.

(4) All projects must conform to the requirements in Chapter 2: General Criteria.

(5) All projects must conform to the requirements in Chapter 3: Project Administration, except for the following Sections:

U. Requirements for Project Applications
Z. Project Pre-Inspection
AA. Project Post-Inspection
BB. Project Invoice and Payment
CC. Air District Grantee Annual Reporting
DD. Air District Audit of Projects
EE. Nonperforming Projects

and as noted elsewhere. Participating air districts retain the discretion to consider additional requirements to address local concerns.

4. Participant Requirements

All participants must meet the following requirements to be eligible for funding:

(A) Application Form

To be approved for UTV replacement funds, the applicant must meet UTV replacement project type requirements and submit an application. Once the application is approved by the air district or third-party, the applicant will be notified of their approval.

(B) Applicant must certify in the application:

(1) Be an eligible business, nonprofit, public agency, or government entity that can show proof of California Business Tax ID or Nonprofit Tax ID number,

(2) Own and Operate: The participant must currently own and have operated the baseline combustion UTV in California for two years or 24 months prior to submitting an application;

(3) Enter into a contractual agreement with the District for a minimum of 3 years. Keep the vehicle and meet all applicable project requirements for the duration of the contract;

(4) Provide the District with past maintenance records and/or service history on the baseline UTV within 24 months prior to application submittal;

(5) Ensure the baseline UTV, as identified in the pre-inspection, is permanently

destroyed by a District approved dismantler;
(6) Not purchase, make payments toward, and/or take possession of the new zero-emission UTV prior to receiving a fully executed contract from the District;
(7) Not make or allow any modifications to the vehicle systems, including motor and other hardware, the addition of auxiliary power sources, or changes to the software calibrations;
(8) Commit that any emission reductions generated by the purchased zero-emission UTV will not be used as marketable emission reduction credits, to offset any emission reduction obligation of any person or entity, or to generate a compliance extension or extra credit for determining regulatory compliance;
(9) Be available for follow-up inspection if requested by the District, CARB, or CARB's designee for the purposes of project oversight and accountability; and
(10) Destruction: The baseline engine and equipment must be destroyed within 90 days of receipt of the new zero-emission UTV. Documentation of the destruction must be provided to the air district within 30 days of destruction.

5. Baseline UTV Requirements

Each baseline combustion UTV must meet the following conditions before the UTV replacement application can be approved and the applicant awarded a voucher.

(A) Operational Combustion UTV: The baseline combustion UTV must be in operational condition. The UTV must be able to start, move, and have all operational parts intact. Applicant certifies operability on the application form.
(B) Provide the District with past maintenance records and/or service history on the UTV that would be replaced for a minimum of two years or 24 months.
(C) Delivery of the Baseline Combustion UTV to the Air District or Air District-specified Facility for Salvage: The participant must deliver the baseline operational UTV to the air district or air district-specified facility for salvage within 60 days of purchase of the replacement UTV. The air district or air district-specified facility must reject the baseline UTV if it is deemed inoperative.

6. Replacement UTV Requirements

All replacement UTVs must meet the following requirements before a voucher is awarded to the participant:

(A) New Zero-Emission UTV: The replacement UTV must be new, and zero-emission.
(B) Like for Like Replacement: The new replacement UTV must serve the same function and perform the same work as the baseline UTV.

7. Air District Requirements

An air district implementing the Project must meet the following requirements:

(A) Updated Air District's Moyer Project Policies and Procedures (P&P's): The air district must update its current Moyer Project P&P's describing their project consistent with these Guidelines within two (2) months after they begin implementation of the UTV replacement project. Air districts are not required to submit updated P&P's to CARB, but it must be available to CARB upon request.

(1) If applicable, air district Moyer P&P's are to include the following:

(a) Example third-party agreements

(b) Detailed description of the payment process

(B) Agreements

(1) An air district may have written agreements with both of the following parties:

(a) A hazardous waste materials disposal company

(b) A recycling company

The agreements can be included as part of the air district's agreements with the same entities for other Moyer Programs. The recycling company and the hazardous waste material company can be the same company.

(2) An air district must have a written agreement if working with either or both of the following parties,

(a) A UTV manufacturer, or

(b) A UTV merchant

The agreement must include the requirements of Subsection 8: Participating Manufacturer Requirements, or 9: Participating Merchant Requirements of this Chapter, as applicable, and Chapter 3: Program Administration, Section X. Minimum Contract Requirements, except for the following Subsections: 5. Contract Term, 6. Project Specifications, 7.Maintenance, and 10. Reporting.

(C) Third-Party: An air district may enter into an agreement with a third-party to manage some of the air district's program requirements. The third-party must agree to comply with all UTV replacement program requirements. The air district must train the third-party on UTV replacement program requirements and include an example of the agreement in its P&P's.

(D) Project Application: Applications, at a minimum, must have the following information:

(1) Information about the Applicant:

(a) Name

(b) Mailing Address (including city, state, zip code).

(c) Physical Address (if different from mailing address)

(d) Provide the Official Business or Organization name that is concurrent with the business license or Employer Identification Number

(e) Provide a Business or Organization Address (the principal place of

business)
(f) Employer Identification Number or Business Tax Identification Number (if applicable)
(g) Phone Number
(h) Date of Application
(2) Information about the Applicant's Baseline Combustion UTV:
(a) Manufacturer (if known)
(b) Model Year (if known)
(c) Engine Family (if known)
(3) Information about the Applicant's Replacement UTV
(a) Model Year (if known)
(b) Manufacturer (if known)
(c) Engine Family (if known)
(4) Section for the applicant to certify the following information is accurate and true:
(a) Baseline UTV is operational.
(b) Applicant resides in California.
(c) Applicant currently owns and has operated the baseline combustion UTV in California for two years prior to submitting an application.
(d) From the date of purchase, applicant intends to own and operate the new UTV California for a minimum of 36 months and is not acquiring the replacement UTV for resale.
(e) A box for the applicant to check and sign to certify the information included in (4) is true and correct.

(E) Application Approval: The application approval process consists of the following steps:
(1) Applicant submits signed application to the air district or third-party.
(2) Air district or third party reviews and approves application and returns it to applicant or notifies applicant of approval. Air districts may follow up with an applicant in order to complete an incomplete or illegible application.

(F) Operational Condition of Baseline UTV: Air district must ensure that each baseline UTV is in apparent operational condition. The air district must reject the baseline UTV if it is deemed inoperative and cannot meet the requirements of Section D. 4. (D) (3) of this chapter where the UTV must be able to start, move, and have all operational parts intact.

(G) Project Payment: Air districts must include a detailed description of the payment process.

(H) Merchant, Manufacturer or Applicant Reimbursement Package: Prior to receiving reimbursement, a participating manufacturer, participating merchant, or the applicant must submit a reimbursement package to the air district. The reimbursement package must be submitted to the air district within 60 days of receiving the replacement UTV. The following documents should be included in the reimbursement package:
(1) Invoice or receipt that shows the final purchase price for all items

(2) Recycling, disposal, or destruction receipt
(3) The name and address of the participant (individual or business)
(4) Copies of original applications if third-party received original applications

(I) UTV Destruction Documentation
(1) All baseline combustion UTVs must be destroyed and rendered permanently unusable and irreparable within 90 days of receipt consistent with Section D.4.(4) of this chapter
(2) Add identifiable marks on the equipment prior to destruction to ensure baseline is equipment destroyed

(J) Audit and Monitoring: Air districts must allow CARB to monitor their UTV replacement project, which may include audits of the air district's implementation of the project.

(K) Reporting in Clean Air Reporting Log: Air districts must follow the reporting, recordkeeping and other requirements described in Chapter 3 of the Carl Moyer Guidelines, including, without limitation, Sections Q: Funding Year Liquidation, R: Return and Allocation of Funds, and S: Program Nonperformance.

8. Participating Manufacturer Requirements

Participating manufacturers' agreements must include the following information:

(A) Covered UTV: Information about the cordless UTV covered by the agreement:
(1) A statement the manufacturer understands the eligible equipment in this program is limited to Section8.(B) below.

(B) Manufacturer Qualifications: A statement that the manufacturer meets the following minimum qualifications for participation in the UTV replacement program and shall continue to meet these qualifications throughout its participation in the UTV replacement program
(1) Manufacturer has had a valid Employer Identification Number and California business license for a minimum of the last two years.
(2) Manufacturer agrees to allow the air district or CARB to inspect UTV or audit program records covered under this agreement during normal business hours.

(C) Air District Does Not Warrant or Endorse UTV: A statement that the air district does not warrant or endorse the manufacturer's UTV for any purpose, including materials, workmanship, merchant ability or fitness for use. Nothing in the air district/manufacturer contract shall be construed as a warranty or endorsement.

(D) Return of Funds: A statement that, should the manufacturer fail to show that they are implementing the Program consistent with the UTV replacement program requirements, the manufacturer or merchant shall return to the air district funds in proportion to any loss of emission reductions compared with the projected reductions of the agreement.

(E) Project Recalls: A statement that as soon as reasonably possible, manufacturer shall notify the air district and individually notify any and all purchasers of

equipment through this Project of any recall of the UTV or any of its constituent parts ordered by manufacturer or by a government agency.

9. Participating Merchant Requirements

Participating merchants' agreements must include the following:

(A) Merchant Qualifications: A statement that the merchant meets the following minimum qualifications for participation in the UTV replacement program and shall continue to meet these qualifications throughout its participation in the UTV replacement program.
  (1) Merchant has had a valid business license issued in California for a minimum of the last two years.
  (2) Merchant agrees to allow the air district or CARB to inspect UTV or audit program records covered under this Agreement during normal business hours.

(B) Invoice or Receipt: A statement that the merchant shall show the voucher amount on the replacement UTV invoice or receipt. The receipt of voucher funds does not lower the base price of the UTV, nor does it reduce the tax basis of the UTV but is an incentive to the UTV owner that will result in a lower price paid by the participant.

(C) Return of Funds: A statement that, should the merchant fail to show that they are implementing the Program consistent with UTV replacement program requirements, the manufacturer or merchant shall return to the air district funds in proportion to any loss of emission reductions compared with the projected reductions of the agreement.

10. Participating Hazardous Waste Materials Disposal, Recycling Company Requirements, or Third-Party Administrator

Optional destruction and disposal agreements with participating hazardous waste materials disposal, recycling companies' or third-party administrator to destroy or dispose of the baseline combustion UTV must include the following:

(A) Destruction of UTV: A statement that the hazardous waste materials disposal, recycling company, or third-party administrator, shall destroy the combustion UTV and engine within 60 days of receipt such that the UTV and engine is no longer operable or repairable.

(B) Receipt of UTV Destruction: A statement that the hazardous waste materials disposal, recycling company, or third-party administrator, shall notify the air district that the combustion UTV is destroyed by sending the air district documentation indicating the number of UTV destroyed.

F. Projects subject to the In-Use Off-Road Diesel-Fueled Fleets Regulation (Off-Road Regulation) (CCR, title 13, Section 2449 et. Seq.)

1. Eligible projects for all large, medium, and small fleets, as defined in the Off-Road Regulation, must provide at least one year of emission reductions surplus to the

regulation with a corresponding minimum project life of at least one year.

2. For baseline emission reduction calculations, the emission standard will reflect the executive order of the engine model. Baseline engines with no emission control devices will follow the applicable uncontrolled emission standards for the given year. Only eligible baseline engines per the applicable regulation will be considered for emission reduction calculations.
   (A) The existing equipment must be registered in DOORS.
   (B) Fleets must be in compliance with the regulation in order to be eligible for and receive funding. Fleets subject to the Off-Road Regulation that meet the final compliance requirements of the Off-Road Regulation are eligible for funding and are exempt from the requirements of Section F.2.(C)(8)a through (13) of this section below.
   (C) Applicants must submit information regarding fleet size and compliance status. All documentation submitted must be signed and dated by the applicant and include language certifying that the fleet list provided is accurate and complete. Air districts are not required to validate submitted information and will not be held liable if fleet owners falsify fleet information. The following information shall be submitted at the time of application:
      (1) DOORS ID of the fleet.
      (2) DOORS EIN of the existing equipment.
      (3) Fleet size information (total horsepower) as reported to DOORS
      (4) Information to determine compliance with the Off-Road Regulation
         (a) Large fleets and medium fleets are required to show final compliance with the fleet average requirements of the Off-Road Regulation.
         (b) Small fleets are required to show compliance with the fleet average requirements of the Off-Road Regulation.
         (c) For those fleets that have previously received Moyer Program funding, a list of funded equipment with the DOORS EIN of the funded equipment.
      (5) Applicants must submit to the air district the DOORS EIN of the replacement equipment no later than at post-inspection of replacement equipment
      (6) Applicants are not required to submit information on exempted equipment. Information on exempted off-road equipment can be found in the Off-Road Regulation.
      (7) No emission reductions achieved from a funded project can count towards a fleet's regulatory requirements for the duration of the contract term.
      (8) Eligibility for a project is based upon the tier phase out schedule and Best Available Control Technology (BACT) requirements of the Off-Road Regulation.

Table 5-4
Tier Phase-Out Schedule

Year (January 1)	Large Fleets	Medium Fleets	Small Fleets	Optional Path: Ultra -Small Fleets >500hp
2024	Tier 0/MY 1994 or older on-road	n/a	n/a	n/a
2026	Tier 1/MY 1999 or older on-road	Tier 0/MY 1994 or older on-road	n/a	n/a
2028	Tier 2/MY 2003 or older on-road	Tier 1/MY 1999 or older on-road	Tier 0/MY 1994 or older on-road	Tier 0/MY 1994 or older on-road
2030	n/a	Tier 2/MY 2003 or older on-road	Tier 1/MY 1999 or older on-road	Tier 1/MY 1999 or older on-road
2032	n/a	n/a	Tier 2/MY 2003 or older on-road	n/a
2036	n/a	n/a	n/a	Tier 2/MY 2003 or older on-road

(a) For projects subject to BACT: Any equipment funded through the Moyer Program, and that is still under contract, must be deducted from the amount of equipment eligible for funding. For instance, a fleet that is eligible for funding to reduce emissions for 50 percent of its horsepower, but which has already received funding in previous years to reduce emissions from 20 percent of its horsepower, is only eligible for funding to reduce emissions from 30 percent of its horsepower.
(b) Equipment funded through the Moyer Program must be included in the fleet's total horsepower from which the BACT requirements of the regulation are calculated.
(c) Projects must be installed and in operation at least one year before the BACT requirements become effective for the funded equipment.

(d) For fleets participating in the Voluntary Zero-Emission (ZE) Flexibility, for each ZE vehicle adopted, the fleet may continue to operate a Tier 1 or Tier 2 vehicle for two additional years beyond the phase-out years.
(e) Participating fleets must still meet final compliance in order to be eligible for funding through the Moyer Program.

(9) Large Fleets
(a) Eligible projects for large fleets, as defined in the Off-Road Regulation must provide at least one year of emission reductions surplus to the regulation with a corresponding minimum project life of at least one year
(b) Starting January 1st, 2024, large fleets can no longer include Tier 0/MY 1994 or older on-road engines.
(c) Starting January 1st, 2026, large fleets can no longer include Tier 1/MY 1999 or older on-road engines.
(d) Starting January 1st, 2028, large fleets can no longer include Tier 2/MY 2003 or older on-road engines.
(e) Large fleets may have alternative requirements per Section F.2.(C)(13) below.

(10) Medium Fleets
(a) Eligible projects for medium fleets, as defined in the Off-Road Regulation must provide at least one year of emission reductions surplus to the regulation with a corresponding minimum project life of at least one year.
(b) Starting January 1st, 2026, medium fleets can no longer include Tier 0/MY 1994 or older on-road engines.
(c) Starting January 1st, 2028, medium fleets can no longer include Tier 1/MY 1999 or older on-road engines.
(d) Starting January 1st, 2030, medium fleets can no longer include Tier 2/MY 2003 or older on-road engines.

(11) Small Fleets (includes Captive Attainment Area Fleets)
(a) Eligible projects for small fleets, as defined in the Off-Road Regulation must provide at least one year of emission reductions surplus to the regulation, with a corresponding minimum project life of at least one year.
(b) Starting January 1st, 2028, small fleets can no longer include Tier 0/MY 1994 or older on-road engines.
(c) Starting January 1st, 2030, small fleets can no longer include Tier 1/MY 1999 or older on-road engines.
(d) Starting January 1st, 2032, small fleets can no longer include Tier 2/MY 2003 or older on-road engines.

(12) Optional Path: Fleets with 500 hp or less
(a) Eligible projects for fleets with 500 hp or less, as defined in the Off-Road Regulation must provide at least one year of emission reductions surplus to the regulation, with a corresponding minimum project life of at least

one year.

(b) Starting January 1st, 2028, fleets with 500 hp or less can no longer include Tier 0/MY 1994 or older on-road engines.

(c) Starting January 1st, 2030, fleets with 500 hp or less can no longer include Tier 1/MY 1999 or older on-road engines.

(d) Starting January 1st, 2036, fleets with 500 hp or less can no longer include Tier 2/MY 2003 or older on-road engines.

(13) Surplus Off-Road Opt-In for NOx (SOON) Program

(a) Fleets located in air districts that have opted into the SOON program and that are subject to the SOON provisions are eligible for funding in accordance with the Off-Road Regulation (CCR, title 13, Section 2449.2) and must meet the applicable criteria in Sections A through D in this chapter.

(b) Projects funded under SOON, are not subject to Section F above, except for the requirements of Sections F.1., F.2.(A) through (C), and F.2.(13).

G. Projects subject to the Regulation for Cargo Handling Equipment at Ports and Intermodal Rail Yards (CHE Regulation) (CCR, title 13, Section 2479)

1. Eligible Engines

(A) For compliance, the CHE requires Tier 4 or equivalent emission engines, therefore for repower or replacement projects, only Tier 4 Final engines or cleaner are eligible for replacement funding.

(B) Applicants must submit their current or 2016 statement of compliance with the CHE rule (CCR, title 13, Section 2479). All documentation submitted must be signed and dated by the applicant and include language certifying that the fleet list provided is accurate and complete. Air districts are not required to validate submitted information and will not be held liable if fleet owners falsify fleet information.

(C) Eligible projects must provide at least one year of emission reductions surplus to the regulation, with a corresponding minimum project life of at least one year. Cargo handling fleets that can demonstrate compliance with the requirements of the CHE Regulation are eligible for funding.

H. Projects Subject to the ~~Former~~ Large Spark Ignition Engine Fleet Requirements (LSI Fleet Regulation) (CCR, title 13, Section 2775 et. seq.) and Zero-Emission Forklift Fleet Regulation (ZE Forklift Regulation)

1. Eligible funding must provide at least one year of emission reductions surplus to the LSI Fleet Regulation and <u>subject to the</u> ZE Forklift Regulation, with a corresponding minimum project life of at least one year.

(A) <u>Districts may fund fleets that are not subject to or take voluntary action to the ZE Forklift Regulation. Districts have the flexibility to fund fleets that</u>

are not subject to or take voluntary action to the ZE forklift regulation up to the maximum project life and maximum eligible incentive amount.

2. Large and Medium Forklift Fleets and Fleets of Four or More Sweeper/Scrubbers, Ground Support Equipment, and/or Industrial Tow Tractors: In order to be eligible for funding, large and medium forklift fleets and fleets of four or more non-forklift LSI equipment must meet the final fleet average emission level applicable on January 1, 2013 and, if ~~applicable~~ subject to, be surplus to the ZE Forklift Regulation.
3. Agricultural Crop Preparation Forklift Fleets Model Year 1990 and Newer: Refer to the FARMER guidelines for eligible equipment requirements.
4. LSI fleets that have met the final compliance requirements of the LSI Fleet Regulation and, if subject to, are surplus to the ZE Forklift Regulation are eligible for funding. Due to the regulatory requirements for rental and lease equipment subject to the LSI Fleet Regulation, projects that include rented or leased equipment are not eligible.
5. Fleets with equipment not subject to the LSI Fleet Regulation are eligible for funding, including:
   (A) Agricultural crop preparation non-forklift equipment and pre-1990 forklifts, through the FARMER program.
   (B) Forklifts used exclusively in fields to harvest and maintain crops through the FARMER program.
   (C) Non-forklift LSI equipment such as aerial lifts, commercial turf equipment, mining and construction equipment, and industrial equipment.
   (D) Small fleets (one to three forklifts and/or one to three sweepers/scrubbers, industrial tow tractors, or pieces of airport ground support equipment (airport GSE)).
6. Required Off-Road LSI Fleet Information: For forklifts, sweeper/scrubbers, airport GSE, and/or industrial tow tractors, an applicant's fleet size impacts project eligibility. Applicants must submit information regarding fleet size and compliance status. Applicants must submit their 2023 or later attestation of compliance with the LSI regulation. All documentation submitted must be signed and dated by the applicant and include language certifying that the fleet list provided is accurate and complete. Air districts are not required to validate submitted information and will not be held liable if fleet owners falsify fleet information.
   (A) Large/Medium/Non-Forklift Fleets: For large, medium, and non-forklift fleets subject to the LSI Fleet Regulation, applicants are required to report compliance records for the entire statewide fleet as described in the regulatory language (CCR, title 13, Section 2775.2).
      (1) DOORS ID of the fleet
      (2) DOORS EIN of the existing equipment
      (3) Fleet size information (total number of forklifts; total number of non-forklift LSI equipment)
      (4) Information to determine compliance with the LSI fleet Regulation. Large and medium fleets are required to show compliance with the applicable

final fleet average emission level.

(B) Small Fleets: Small fleets are not required to maintain compliance records, but for the purposes of determining project eligibility. Air districts must obtain the following information for the entire statewide fleet:

(1) Equipment identification number (equipment identification number, fleet assigned identification, etc.)

(2) Equipment type (e.g., forklift, GSE, etc.)

(3) If applicable, applicants must submit to the air district the DOORS EIN of the replacement equipment not later than at post-inspection of the replacement equipment.

(4) Applicants are not required to submit information on exempted equipment (except as noted above for small fleets). Information on exempted LSI equipment can be found in CCR, title 13, Sections 2775(b), 2775.1(c) (4), and 2775.1(d-f) of the Final Regulation Order.

(C) Eligibility for a project subject to the ZE Forklift Regulation is based on Table 5- 5 Model Year Phase-Out schedule below.

(1) Projects taking voluntarily action in accordance to the ZE Forklift Regulation following the Model Year Phase-Out schedule (Table 5-5) may receive district funding for zero-emission forklifts up to the maximum project life and incentive amount, including the optional cost-share plus-up (Table 5-1).

(a) For example, a fleet applies for ZE forklift funding, this fleet is not subject to the regulation but is voluntarily phasing out their forklift and following the ZE Forklift Model Year Phase-Out schedule (Table 5-5). The district has the flexibility to fund this fleet at the maximum project life of 10 years and may offer the maximum eligible incentive amount and may be offered the optional cost-share plus up.

(2) Projects taking voluntary action but not following the ZE Forklift Model Year Phase-Out schedule (Table 5-5) can still receive funding, and districts can fund zero-emission forklift projects up to the maximum project life and incentive amount. However, these fleets are not eligible for the optional cost-share plus up (Table 5-1).

Table 5-5
ZE Forklift Regulation Model Year Phase-Out

Compliance Date	Class IV Forklifts with a Rated Capacity of 12,000 Pounds or less	Class IV Forklifts with a Rated Capacity Greater than 12,000 Pounds	Class IV Forklifts with a Rated Capacity of 12,000 Pounds or Less for Small Fleets and Crop Preparation Services	Class IV Forklifts with a Rated Capacity Greater than 12,000 Pounds for Small Fleets and Crop Preparation Services	Class V Forklifts
1/1/2028	2018 MY and older[(1)]	n/a	n/a	n/a	n/a
1/1/2029	n/a	n/a	2016 MY and older[(2)]	n/a	n/a
1/1/2030	n/a	n/a	n/a	n/a	2017 MY and older[(3)]
1/1/2031	2019-2021 MY	n/a	n/a	n/a	n/a
1/1/2032	n/a	n/a	2017-2019 MY	n/a	n/a
1/1/2033	2022 and 2023 MY	n/a	n/a	n/a	2018-2020 MY
1/1/2034	n/a	n/a	2020 and 2021 MY	n/a	n/a
1/1/2035	2024 and 2025 MY	2025 MY and older	n/a	n/a	2021 and 2022 MY
1/1/2036	n/a	n/a	2022 and 2023 MY	n/a	n/a
1/1/2037	n/a	n/a	n/a	n/a	n/a

Compliance Date	Class IV Forklifts with a Rated Capacity of 12,000 Pounds or less	Class IV Forklifts with a Rated Capacity Greater than 12,000 Pounds	Class IV Forklifts with a Rated Capacity of 12,000 Pounds or Less for Small Fleets and Crop Preparation Services	Class IV Forklifts with a Rated Capacity Greater than 12,000 Pounds for Small Fleets and Crop Preparation Services	Class V Forklifts
1/1/2038	n/a	n/a	2024 and 2025 MY	2025 MY and older	2023-2028 MY(4)

(1) A phase-out percentage cap may be applied pursuant to Section 3006(e), Phase-Out Percentage Caps of the Zero Emission Forklift Regulation.
(2) A phase-out percentage cap of 25% may be applied pursuant to Section 3006(e), Phase-Out Percentage Caps of the Zero Emission Forklift Regulation.
(3) A phase-out percentage cap of 50 or 25% may be applied pursuant to Section 3006(e), Phase-Out Percentage Caps of the Zero Emission Forklift Regulation.
(4) Includes 2026 through 2028 MY Class V LSI Forklifts in Rental Agency Revenue Fleets.

(3) No emission reductions achieved from a funded project can count towards a fleet's regulatory requirements for the duration of the contract term.
(4) Applicants must submit to the air district the DOORS EIN of the replacement equipment no later than at post-inspection of replacement equipment.
  (a) Equipment must be reported in DOORS, designated as funded and include contract start, contract end, and the replacement ZE forklift equipment information.

I. Projects subject to the Airborne Toxic Control Measure for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater (Portable Engine ATCM) (CCR, title 17, Section 93116 et. seq.)

1. In order to be eligible for funding, diesel engines regulated under the Portable Engine ATCM must be permitted or registered in an air district or registered in the Portable Equipment Registration Program. Applicants are required to show current registration with or submit a statement of compliance with the Portable Engine ATCM. Applicants with large fleets that have opted to meet the requirements of CCR, title 17, Section 93116.3(c)(2), shall submit reports required in CCR, Title 17, Section 93116.4(d)(2). If the portable engine is not required to be permitted or

registered, documentation must be included in the project file from the air district stating that a permit or registration is not required to operate in the air district.

2. Projects that are 100 percent agricultural are exempt from the Portable Engine ATCM. Agricultural projects that are 51-99 percent agricultural are still subject to the Portable Engine ATCM and must refer to the FARMER Guidelines for eligibility in the Moyer Program.
3. Fleets that currently meet the final regulatory requirements are eligible for funding and are exempt from the requirements of sections (A) through (D) below.
   (A) Large Fleets
      (1) The first compliance date for large fleets, as defined in the Portable Engine ATCM, is January 1, 2020. The final compliance date is January 1, 2027. Funding for these fleets is available through December 31, 2025.
      (2) For large fleets that opt to comply with the PM emission fleet average, applicant's fleet must meet the 0.06 g/bhp-hr Fleet PM standard throughout the project life.
   (B) Small Fleets
      (1) The first compliance date for small fleets, as defined in the Portable Engine ATCM, is January 1, 2020. The final compliance date is January 1, 2029. Funding for these fleets is available through December 31, 2027.
   (C) For existing equipment with engines manufactured under the flexibility provisions detailed in CCR, title 13, Section 2423(d), eligibility is based on the fleet requirements in CCR, title 17, Section 93116.3(c)(1)(A). For example, Tier 3 flex engines for large fleets must be replaced by December 31, 2025, to have one year of surplus to be eligible for funding.
   (D) Eligibility for a project is based upon the tier phase out schedule and the fleet average table below.

Table 5-6
Tier Phase-Out Dates as defined in the Portable Engine ATCM

Engine Certification	Engines Rated: 50 - 750 bhp Large Fleet	50 - 750 bhp Small Fleet	> 750 bhp
Tier 1	1/1/2020	1/1/2020	1/1/2020
Tier 2 built prior to 1/1/2009	1/1/2022	1/1/2023	1/1/2025
Tier 2 built on or after 1/1/2009	N/A	N/A	1/1/2027
Tier 3 built prior to 1/1/2009	1/1/2025	1/1/2027	N/A
Tier 3 built on or after 1/1/2009	1/1/2027	1/1/2029	N/A

Tier 1,2, and 3 flexibility engines: December 31 of the year 17 years after the date of manufacture. This provision shall not apply to any engine operation before the effective date of this regulation.

Large fleets that elect not to comply with Section 93116.3(c)(1) of the Portable Engine ATCM are required to meet fleet average particulate emissions outlined in the table below.

Table 5-7
Portable Engine ATCM Fleet Average

Compliance Date	Fleet PM Standard (g/bhp-hr)
1/1/2020	0.1
1/1/2023	0.06
1/1/2027	0.03

Funding opportunities are no longer available for Uncontrolled, Tier 1, and Tier 2 engines built prior to 1/1/2009 that have less than 750 brake-horsepower.

J. Projects subject to the Airborne Toxic Control Measure for Stationary Compression Ignition Engines Requirements (Stationary ATCM) (CCR, title 17, Section 93115)

1. Agricultural projects subject to the Stationary ATCM must refer to the FARMER Guidelines for eligibility in the Moyer Program.
2. Non-ag stationary engines are eligible for funding as long as they are surplus to applicable regulations and local rules.

K. Projects subject to the Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants from In-Use Heavy-Duty Diesel-Fueled Vehicles (Statewide Truck and Bus Regulation) (CCR, title 13, Section 2025)

Although this regulation primarily affects vehicles with on-road engines, some vehicles with off-road engines are also covered. Districts also need to check applicant applicability to the advanced clean fleet regulation. Any application for Moyer Program funding to replace a vehicle with an off-road engine that is subject to an on- road regulation must comply with the applicable surplus requirements described in Chapter 4. For example, an on-road yard truck with an off-road engine must meet the applicable on-road surplus requirements described in Chapter 4, Section C.2.A(5), and must also comply with all off-road project criteria described in this chapter.

L. Projects Subject to the Airborne Toxic Control Measure for In-Use Diesel Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities Where TRUs Operate (CCR, title 13, Section 2477)

1. The existing equipment must be registered with ARB Equipment Registration (ARBER).
2. Fleets must be in compliance with the regulation in order to be eligible for and receive funding. Fleets subject to the TRU ATCM that meet the final compliance requirements of the TRU ATCM are eligible for funding and are exempt from the requirements of Section 3 through 5 below.

~~Phase-in Compliance Schedule for ZE Truck TRU Fleets:~~

~~Table 5-8~~
~~Phase-in Compliance Schedule for ZE Truck TRU Fleets~~

~~Compliance Date as of December 31~~	~~Required ZE Truck TRU Fleet Percentage~~
~~2023~~	~~15%~~
~~2024~~	~~30%~~
~~2025~~	~~45%~~
~~2026~~	~~60%~~
~~2027~~	~~75%~~
~~2028~~	~~90%~~
~~2029 and thereafter~~	~~100%~~

3. In-Use Compliance Dates for MY 2022 and Older TRU and TRU Gen Set Engines: Beginning December 31, 2022, no owner or owner/operator shall operate or cause to be operated in California, a MY 2022 and older TRU or TRU gen set engine, unless it meets the in-use performance criteria set forth in Section 2477.5(c) for Ultra-Low Emission TRU (ULETRU)[1] in use PM performance standard

[1] The Engine Certification value for the Ultra-Low Emission TRU category corresponds to the Tier 4 "final" Nonroad/Off-road Emission Standards for greater than 25 horsepower engines.

emissions standards for all regulated pollutants and the in-use PM performance standard.

4. PM Emission Standard for MY 2023 and Newer TRU and TRU Gen Set Engines: Beginning December 31, 2022, no owner or owner/operator shall operate or cause to be operated in California, a MY 2023 and newer TRU or TRU gen set engine, unless it meets a PM emission standard of 0.02 g/hp-hr or lower.
5. Applicants must submit information regarding TRU compliance status. All documentation submitted must be signed and dated by the applicant and include language certifying that the fleet list provided is accurate and complete. air districts are not required to validate submitted information and will not be held liable if fleet owners falsify fleet information. The following information shall be submitted at the time of application:
   (A) ARBER identification number of the fleet.
   (B) ARBER CARB Identification Number (IDN) of the existing equipment.
   (C) Information to determine compliance with the TRU Regulation.
   (D) Funding opportunities may exist for zero-emission replacement projects only.
   (E) Alternative technologies such as pure cryogenic systems are not required to be verified, but CARB must review and approve such systems in writing on a case-by-case basis.
   (F) The participant shall install an hour-meter or other means to measure usage on the TRU to track operating hours and shall provide this information to CARB or the air district upon request.
   ~~(G) The maximum State funding percentage is 50 percent.~~

II. Acronyms

Acronym	Definition
ARBER	Air Resources Board Equipment Registration
ATCM	Airborne Toxic Control Measure
BACT	Best Available Technology
CARB or Board	California Air Resources Board
CARL	Clean Air Reporting Log
CBC	Case-by-Case
CCR	California Code of Regulations
CFR	Code of Federal Regulations
CHE	Cargo Handling Equipment
CI	Compression Ignition

Acronym	Definition
CORE	Clean Off-Road Equipment Voucher Incentive Project
DOORS	Diesel Off-Road Online Reporting System
EIN	Equipment Identification Number
FARMER	Funding Agricultural Replacement Measures for Emission Reductions
FEL	Family Emission Limit
g/bhp-hr	Grams per brake-horsepower-hour
g/kw-hr	Grams per kilowatt-hour
GSE	Ground Support Equipment
HC	Hydrocarbon
HP	Horsepower
HSC	Health and Safety Code
IDN	Identification Number
kW	Kilowatt
LSI	Large Spark-Ignition
MY	Model Year
NMHC	Non-Methane Hydrocarbon
NOx	Oxides of Nitrogen
P & P's	Policies and Procedures
PM	Particulate Matter
PTO	Power Take-Off
SOON	Surplus Off-Road Opt-In for NOx Program
TRU	Transportation Refrigeration Unit
U.S. EPA or EPA	United States Environmental Protection Agency
ULETRU	Ultra-Low Emission Transportation Refrigeration Unit
UTV	Utility-Terrain Vehicles

Acronym	Definition
VEH	Vehicle Code
VFD	Variable Frequency Devices
ZE	Zero-Emission

III. Definitions

Agricultural Operations: (1) the growing or harvesting of crops from soil (including forest operations) and the raising of plants at wholesale nurseries, but not retail nurseries), or the raising of fowl or animals for the primary purpose of making a profit, providing a livelihood, or conducting agricultural research or instruction by an educational institution, or (2) agricultural crop preparation services such as packinghouses, cotton gins, nut hullers and processors, dehydrators, and feed and grain mills. Agricultural crop preparation services include only the first processing after harvest, not subsequent processing, canning, or other similar activities. For forest operations, agricultural crop preparation services include milling, peeling, producing particleboard and medium density fiberboard, and producing woody landscape materials. A vehicle that is used by its owner for both agricultural and nonagricultural operations is considered to be a vehicle engaged in agricultural operations, only if over half of its annual operating hours are for agricultural operations.

Agricultural Tractor: Self-propelled agricultural vehicle having at least two axles and wheels, endless tracks, or a combination of wheels and endless tracks, particularly designed to pull, push, carry, or provide power to operate implements or pull agricultural trailers and implements, or any combination of these functions used for agricultural work (including forestry work), which may be provided with a load platform. Agricultural vehicles have a maximum design ground speed of not less than 6 km/h and may be equipped with one or more seats.

Air District or District: An air pollution control district or an air quality management District.

Air Pollution Control Officer: The air pollution control officer, executive director, executive officer or designee as determined by each air district.

Airport Ground Support Equipment (GSE): Mobile diesel-fueled off-road compression ignition vehicles used to service and support aircraft operations. GSE vehicles perform a variety of functions, including but not limited to aircraft maintenance, pushing or towing aircraft, transporting cargo to and from aircraft, loading cargo, and baggage handling. GSE vehicles include equipment types such as baggage tugs, belt loaders, and cargo loaders.

Best Available Control Technology (BACT): Is the Verified Diesel Emission Control Strategy (VDECS) and turnover requirements in CCR title 13, Section 2449.1(b).

Case-by-Case Determination: A process in which local air districts may request Moyer Program staff to review and approve a project that varies from the specific requirements of

these Guidelines only if such approval will not adversely affect the achievement of real, surplus, quantifiable, enforceable and cost-effective emission reductions. See Chapter 3: Program Administration, Section W: Case-by-Case Determination Process for additional information.

Captive Attainment Area Fleet: A fleet or an identified subpart of the fleet (fleet portion, consistent with, California Code of Regulations, title 13, Section 2449(d)) in which all of the vehicles in the fleet or fleet portion operate exclusively within the following counties: Alpine, Colusa, Del Norte, Glenn, Humboldt, Lake, Lassen, Mendocino, Modoc, Monterey, Plumas, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz, Shasta, Sierra, Siskiyou, Trinity, Tehama, and Yuba. A fleet or identified fleet portion that operates one or more vehicles outside the counties listed above is not a captive attainment area fleet.

Certification: A finding by the California Air Resources Board (CARB) or the U.S. EPA that a mobile source or emissions control device has satisfied applicable criteria for specified air contaminants.

Clean Air Reporting Log (CARL): An on-line database tool maintained by CARB and used by air districts to track and report projects and funds under the Moyer Program.

Commitment: Under Chapter 5, a program milestone in which Moyer Program funds have been designated or applied towards an eligible project approved by the air district board, district air pollution control officer, or other delegated authority.

Compression Ignition Engine: An internal combustion engine with operating characteristics significantly similar to the theoretical diesel combustion cycle. The regulation of power by controlling fuel supply in lieu of a throttle is indicative of a compression ignition engine.

Cost-Effectiveness: A measure of the dollars provided to a project for each ton of covered emission reduction (H&SC Section 44275(a)(4)).

Cost-Effectiveness Limit: The maximum amount of funds the Moyer Program will pay per weighted ton of emission reductions, using the methodology in Appendix C.

Destruction of Engine and/ or Equipment: To permanently destroy the engine and/or equipment using a method consistent with the air district's policies and procedures, where the engine and/ or equipment are rendered useless and permanently disabled.

DOORS Fleet ID Number: The number CARB assigns to each fleet when a fleet initially reports to CARB to identify the fleet.

Emission Control System: Any device, system, or element of design that controls or reduces the emissions of regulated pollutants from a vehicle.

Emission Factor (EF): A category specific estimate of emissions per unit of activity. On-road emission factors are based on CARB mobile source emission inventory model values. Off-road emission factors are based on values applied in CARB category specific inventory models.

Equipment Identification Number: A unique identification number assigned by CARB to each vehicle in an owner's fleet subject to this regulation. All reporting and recordkeeping

will link vehicle data with this number.

Excavator: An engineering vehicle consisting of an upper carriage with hydraulically rotating upper deck (revolving 360°) and attachment, directly mounted to either a wheeled or crawler undercarriage. The front end of the excavator attachment consists either of a bucket, grapple, scrap shear, or another implement.

Executed Contract: A legally binding contract signed by the local air district Air Pollution Control Officer, or other air district designated representative, and the grantee to fund an eligible engine, equipment, or vehicle project that will reduce covered emissions. An executed contract is a program milestone in which parties agree to meet the obligations within the contract by a specified date.

Family Emission Limit (FEL): An emission level that is declared by the manufacturer to serve in lieu of an emission standard for certification purposes and for the averaging, banking, and trading program, as defined in title 13, CCR, Section 2423.

Farm Equipment: As applied to off-road engines, includes equipment used in agricultural operations as defined in the Regulation for In-Use Off-Road Diesel-Fueled Fleets (California Code of Regulations, title 13, Section 2449(c)(1)). As applied to portable and stationary engines, including agricultural sources as defined in Health and Safety Code Section 39011.5.

Fleet Average Emission Level: The arithmetic mean of the combined hydrocarbon plus oxides of nitrogen emissions for each piece of applicable large spark-ignition engine powered equipment comprising an operator's fleet. For full definition, see California Code of Regulations, title 13, Section 2775.

Forest Operations: (A) forest fire prevention activities performed by public agencies, including but not limited to construction and maintenance of roads, fuel breaks, firebreaks, and fire hazard abatement or (B) cutting or removal or both of timber, other solid wood products, including Christmas trees, and biomass from forestlands for commercial purposes, together with all the work incidental thereto, including but not limited to, construction and maintenance of roads, fuel breaks, firebreaks, stream crossings, landings, skid trails, beds for falling trees, fire hazard abatement, and site preparation that involves disturbance of soil or burning of vegetation following forest removal activities. Forest operations include the cutting or removal of trees, tops, limbs and or brush which is processed into lumber and other wood products, and or for landscaping materials, or biomass for electrical power generation. Forest operations do not include conversion of forestlands to other land uses such as residential or commercial developments.

Forklift: Electric Class 1 or 2 rider trucks or large spark-ignition engine powered Class 4, 5 or 6 rider trucks as defined by the Industrial Truck Association. Electric Class 3 trucks are not forklifts for the purposes of these Guidelines. More information can be found at https://www.osha.gov/etools/powered-industrial-trucks/types-fundamentals/types and http://www.indtrk.org.

Funding Amount: The amount of funds dedicated to a contracted project for reporting purposes in CARL; this value may never exceed the grant amount.

Grant Amount: Contracted amount of Moyer funds for a project, which may not exceed the maximum dollar amount or maximum percentage of eligible cost specified by source category and project type.

Industrial Tow Tractor: An electric or large spark-ignition engine-powered Class 6 truck as defined by the Industrial Truck Association. They are designed primarily to push or pull non-powered trucks, trailers, or other mobile loads.

Large Fleet: Under the In-Use Off-Road Diesel-Fueled Fleets Regulation, a fleet with a total maximum power greater than 5,000 horsepower. A fleet must meet large fleet requirements of this regulation if the total vehicles under common ownership or control would be defined as a large fleet. All fleets owned by the United States, the State of California, or agencies thereof (i.e., an agency in the judicial, legislative, or executive branch of the federal or state government) are considered as a unit whole and must meet the large fleet requirements of the In-Use Off-Road Diesel-Fueled Fleets Regulation (California Code of Regulations, title 13, Section 2449). Under the Large Spark Ignition Engine Fleet Requirements Regulation, a large fleet is an operator's aggregated operations in California of 26 or more pieces of large spark-ignition equipment.

Maximum Grant Amount: The maximum amount of money a grantee is eligible to receive for a cost-effective Moyer Program project. The maximum grant amount for a project is the lowest of the three following values: (a) the grant amount at the cost-effectiveness limit; (b) the maximum percentage of eligible cost; or (c) any maximum dollar amount specified in the relevant source category chapter.

Maximum Percentage: The maximum percentage of eligible cost that may be expended on a project as specified by source category and project type, often to reflect incremental cost.

Medium Fleet: Under the In-Use Off-Road Diesel-Fueled Fleets Regulation, a fleet with total minimum power of greater than 2,500 horsepower and with a total maximum power less than or equal to 5,000 horsepower. Under the Large Spark Ignition Engine Fleet Requirements Regulation, an operator's aggregated operations in California of 4 to 25 pieces of large spark-ignition equipment.

Model Year: The same meaning as defined in title 13, CCR, Section 2421(a)(38).

Non-forklift Fleet: Under the Large Spark Ignition Engine Fleet Requirements Regulation, an operator's aggregated operations in California of four or more sweeper/scrubbers, industrial tow tractors, or pieces of airport ground support equipment, alone or in combination.

Non-Moyer Funds: Project funds from sources other than the Moyer Program, Moyer match funds, and AB 923 $2 DMV fees.

Off-Road Large Spark-ignition Engines or "LSI Engines": Any engine that produces a gross horsepower of 25 horsepower or greater (greater than 19 kilowatts for 2005 and later model years) or is designed (e.g., through fueling, engine calibrations, valve timing, engine speed modifications, etc.) to produce 25 horsepower or greater (greater than 19 kilowatts for 2005 and later model years). If an engine family has models at or above 25 horsepower

(greater than 19 kilowatts) and models below 25 horsepower (at or below 19 kilowatts), only the models at or above 25 horsepower (above 19 kilowatts) would be considered LSI engines. The engine's operating characteristics are significantly similar to the theoretical Otto combustion cycle with the engine's primary means of controlling power output being to limit the amount of air that is throttled into the combustion chamber of the engine. LSI engines or alternate fuel-powered LSI internal combustion engines are designed for powering, but not limited to powering, forklift trucks, sweepers, generators, and industrial equipment and other miscellaneous applications. All engines and equipment that fall within the scope of the preemption of Section 209(e)(1)(A) of the Federal Clean Air Act, as amended, and as defined by regulation of the Environmental Protection Agency, are specifically excluded from this category. Specifically excluded from this category are: 1) engines operated on or in any device used exclusively upon stationary rails or tracks; 2) engines used to propel marine vessels; 3) internal combustion engines attached to a foundation at a location for at least 12 months; 4) off-road recreational vehicles and snowmobiles; and 5) stationary or transportable gas turbines for power generation.]

Off-Road Utility Terrain Vehicle (UTV): Any off-highway motor vehicle that has all of the following features and characteristics: designed to travel on four or more wheels, having bench or bucket seating for two or more persons, having a steering wheel for steering control, designed for operation over rough terrain, having an internal combustion engine with a displacement less than or equal to one liter, having a maximum brake power less than or equal to 30 kilowatts, capable of speeds 25 miles per hour or more, and having either 1) a rear payload of 350 pounds or more, or 2) seating for six or more passengers.

Policies and Procedures: An air district manual for local implementation of the Moyer Program. For more information see Chapter 3, Section D.5.

Project Life: The period for which the Moyer Program funds surplus emission reductions for a given project.

Remotely Located: Agricultural engines located in a federal ambient air quality area that is designated as unclassifiable or attainment for all PM and ozone national ambient air quality standards and that are located more than one-half mile from any residential area, school, or hospital.

Repower: A repower is the replacement of the existing engine with an electric motor or a newer emission-certified engine instead of rebuilding the existing engine to its original specifications.

Small Fleet: A fleet with total max hp of less than or equal to 2,500 hp that is owned by a business, nonprofit organization, or local municipality, a local municipality fleet in a low population county irrespective of total max hp, a nonprofit training center irrespective of total max hp, or a captive attainment area fleet irrespective of total max hp.

Stationary CI Engines: A CI engine that is designed to stay in one location, or remains in one location. A CI engine is stationary if any of the following are true: (A) the engine or its replacement is attached to a foundation, or if not so attached, resides at the same location for more than 12 consecutive months. Any engine such as backup or standby engines, that

replaces an engine at a location and is intended to perform the same or similar function as the engine(s) being replaced, shall be included in calculating the consecutive time period. The cumulative time of all engine(s), including the time between the removal of the original engine(s) and installation of the replacement engine(s), will be counted toward the consecutive time period; or (B) the engine remains or will reside at a location for less than 12 consecutive months if the engine is located at a seasonal source and operates during the full annual operating period of the seasonal source, where a seasonal source is a stationary source that remains in a single location on a permanent basis (at least two years) and that operates at that single location at least three months each year; or (C) the engine is moved from one location to another in an attempt to circumvent the 12 month residence time requirement. The period during which the engine is maintained at a storage facility shall be excluded from the residency time determination.

Tier 0 Engine: An engine not subject to the requirements in title 13, CCR, Section 2423; Title 40, Code of Federal Regulations (CFR), Part 89; or Title 40, CFR, Part 1039.

Tier 1 Engine: An engine subject to the Tier 1 new engine emission standards in title 13, CCR, Section 2423(b)(1)(A) and/or Title 40, CFR, Part 89.112(a). This also includes engines certified under the averaging, banking, and trading program with respect to the Tier 1 Family Emission Limits (FEL) listed in title 13, CCR, Section 2423(b)(2)(A) and/or Title 40, CFR, Part 89.112(d).

Tier 2 Engine: An engine subject to the Tier 2 new engine emission standards in title 13, CCR, Section 2423(b)(1)(A) and/or Title 40, CFR, Part 89.112(a). This also includes engines certified under the averaging, banking, and trading program with respect to the Tier 2 FEL listed in title 13, CCR, Section 2423(b)(2)(A) and/or Title 40, CFR, Part 89.112(d).

Tier 3 Engine: An engine subject to the Tier 3 new engine emission standards in title 13, CCR, Section 2423(b)(1)(A) and/or Title 40, CFR, Part 89.112(a). This also includes engines certified under the averaging, banking, and trading program with respect to the Tier 3 FEL listed in title 13, CCR, Section 2423(b)(2)(A) and/or Title 40, CFR, Part 89.112(d).

Tier 4 Final Engine: An engine subject to the final after treatment-based Tier 4 emission standards in title 13, CCR, Section 2423(b)(1)(B) and/or Title 40, CFR, Part 1039.101. This also includes engines certified under the averaging, banking, and trading program with respect to the Tier 4 FEL listed in title 13, CCR, Section 2423(b)(2)(B) and/or Title 40, CFR, Part 1039.101.

Tier 4 Interim Engine: An engine subject to the interim Tier 4 emission standards (also known as transitional) in title 13, CCR, Section 2423(b)(1)(B) and/or Title 40, CFR, Part 1039.101. This also includes engines certified under the averaging, banking, and trading program with respect to the Tier 4 FEL listed in title 13, CCR, Section 2423(b)(2)(B) and/or Title 40, CFR, Parts 1039.102 and 1039.104(g).

Turnover: Retiring a vehicle, designating a vehicle as a permanent low-use vehicle, repowering a vehicle with a higher tier engine, or rebuilding the engine to a more stringent emissions configuration. Rented or leased vehicles that are returned to a rental or leasing company do not count as turnover for the lessee. Similarly, vehicles leased or rented out by

a rental or leasing company do not count as turnover for the rental or leasing company.

Voluntary Action: A voluntary action refers to a decision by a fleet or entity to align with a regulation or regulatory requirement before it is legally applicable to them, such as when the entity is not currently subject to the regulation, or when the regulation has not yet received a waiver or authorization from the U.S. Environmental Protection Agency (EPA). This action is undertaken at the entity's discretion and does not constitute a legal obligation or imply enforceability. It is intended solely as a proactive measure and should not be interpreted as a requirement or as conferring any regulatory compliance status under current law.

Zero-Emission Equipment: Equipment that produces zero exhaust emissions of any criteria pollutant (or precursor pollutant) or greenhouse gas under any and all possible operational modes and conditions.

IV. References

California Air Resources Board; Executive Orders for Off-Road Engines.
https://www.arb.ca.gov/msprog/offroad/cert/cert.php

California Code of Regulations Title 13, Section 2423; Chapter 9: Article 4: Off-Road Vehicles and Engines Pollution Control Devices; Exhaust Emission Standards and Test Procedures- Off-Road Compression-Ignition Engines.

View Document - California Code of Regulations (westlaw.com)

Code of Federal Regulations Title 40, Section 1068.240; Chapter 1: Environmental Protection Agency; General Compliance Provisions for Engine Programs.
https://www.gpo.gov/fdsys/pkg/CFR-2011-title40-vol33/pdf/CFR-2011-title40-vol33-part1068.pdf

California Code of Regulations Title 13, Section 2700 to Section 2711; Chapter 14: Verification Procedure, Warranty and in-Use Compliance Requirements for in-Use Strategies to Control Emissions from Diesel Engines.
https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?guid=IA10B65005A1E11EC8227000D3A7C4BC3&originationContext=documenttoc&transitiOnType=Default&contextData=(sc.Default)

California Code of Regulations Title 13, Section 2775; Chapter 15: Additional off-Road Vehicles and Engines Pollution Control Requirements; Large Spark-Ignition (LSI) Engine Fleet Requirements.

https://ww2.arb.ca.gov/sites/default/files/classic/msprog/offroad/orspark/largesparkappa- clean.pdf

California Code of Regulations Title 13, Section 2449; Chapter 9: Off-Road Vehicles and Engines Pollution Control Devices; Regulation for In-Use Off-Road Diesel Vehicles.
https://www.arb.ca.gov/regact/2007/ordiesl07/frooal.pdf

California Code of Regulations Title 13, Section 2022; Chapter 1: Motor Vehicle Pollution Control Devices; Diesel Particulate Matter Control Measure for Municipality or Utility

On-Road Heavy-Duty Diesel-Fueled Vehicles.
http://www.arb.ca.gov/regact/dpmcm05/revfro.pdf

California Air Resources Board; California Emissions Inventory Model: Off-Road Web Platform

https://arb.ca.gov/emfac/offroad/

California Code of Regulations Title 13, Section 2025; Chapter 1: Motor Vehicle Pollution Control Devices; Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants from In-Use Heavy-Duty Diesel-Fueled Vehicles.
https://www.arb.ca.gov/msprog/onrdiesel/documents/tbfinalreg.pdf

California Code of Regulations Title 13, Section 2027; Chapter 1: Motor Vehicle Pollution

Control Devices; In-Use On-Road Diesel-Fueled Heavy-Duty Drayage Trucks. https://www.arb.ca.gov/msprog/onroad/porttruck/finalregdrayage.pdf

California Air Resources Board In-Use Off-Road Diesel Final Regulation Order Amendments to Sections 2449, 2449.1, and 2449.2, Title 13, California Code of Regulations. https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/off-roaddiesel/froa-1.pdf

Portable Engines

California Code of Regulations Title 17, Section 93116; Chapter 1: Air Resources Board; Airborne Toxic Control Measure for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater. https://ww2.arb.ca.gov/sites/default/files/2020-03/PERP_Reg_12.5.18R.pdf

California Air Resources Board (February 2, 2007) Staff Report: Initial Statement of Reasons for Proposed Amendments to the Airborne Toxic Control Measure for Diesel Particulate Matter from Portable Engines. https://www.arb.ca.gov/regact/2007/perp07/isor.pdf

California Air Resources Board (December 10, 2009) Staff Report: Initial Statement of Reason for Proposed Amendments to the Regulations Applicable to Portable Diesel Engines and Diesel Engines Used in Off-Road and On-Road Vehicles. Stationary Source Division. https://arb.ca.gov/regact/2010/perp2010/perpisor.pdf

Stationary Agricultural Engines

FARMER Guidelines; Funding Agricultural Replacement Measures for Emission Reductions (FARMER) Program Guidelines https://ww2.arb.ca.gov/sites/default/files/2018-07/farmerguidelines-final.pdf

Transport Refrigeration Units

California Air Resources Board: Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units and TRU Generator Sets, and Facilities Where TRUs Operate. https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2021/tru2021/fro.pdf

Table 5-9
CARB and U.S. EPA Tier 1, 2, and -3 Exhaust Emission Standards for New Off-Road Diesel Engines ≥ 25 Horsepower (hp) grams per brake horsepower-hour (g/bhp-hr)

Maximum Rated Power hp (kW)	Tier	Model Year	NOx	HC	NOx + NMHC	PM
25≤hp<50 (19≤kW<37)	Tier 1	1999-2003[1]	N/A	N/A	7.1 (9.5)	0.6 (0.80)
25≤hp<50 (19≤kW<37)	Tier 2	2004-2007	N/A	N/A	5.6	0.45

Maximum Rated Power hp (kW)	Tier	Model Year	NOx	HC	NOx + NMHC	PM
					(7.5)	(0.60)
50≤hp<75 (37≤kW<56)	Tier 1	1998-2003[a]	6.9 (9.2)	N/A	N/A	N/A
50≤hp<75 (37≤kW<56)	Tier 2	2004-2007	N/A	N/A	5.6 (7.5)	0.3 (0.40)
50≤hp<75 (37≤kW<56)	Tier 3[2]	2008-2011	N/A	N/A	3.5	0.3
75≤hp<100 (56≤kW<75)	Tier 1	1998-2003[1]	6.9 (9.2)	N/A	N/A	N/A
75≤hp<100 (56≤kW<75)	Tier 2	2004-2007	N/A	N/A	5.6 (7.5)	0.3 (0.40)
75≤hp<100 (56≤kW<75)	Tier 3	2008-2011	N/A	N/A	3.5 (4.7)	0.3 (0.40)
100≤hp<175 (75≤kW<130)	Tier 1	1997-2002[1]	6.9 (9.2)	N/A	N/A	N/A
100≤hp<175 (75≤kW<130)	Tier 2	2003-2006	N/A	N/A	4.9 (6.6)	0.22 (0.30)
100≤hp<175 (75≤kW<130)	Tier 3	2007-2011	N/A	N/A	3.0 (4.0)	0.22 (0.30)
175≤hp<300 (130≤kW<225)	Tier 1	1996-2002	6.9 (9.2)	1.0	N/A (1.3)	0.4 (0.54)
175≤hp<300 (130≤kW<225)	Tier 2	2003-2005	N/A	N/A	4.9 (6.6)	0.15 (0.20)
175≤hp<300 (130≤kW<225)	Tier 3[3]	2006-2010	N/A	N/A	3.0 (4.0)	0.15 (0.20)

Maximum Rated Power hp (kW)	Tier	Model Year	NOx	HC	NOx + NMHC	PM
300≤hp<600 (225≤kW<450)	Tier 1	1996-2000	6.9 (9.2)	1.0	N/A (1.3)	0.4 (0.54)
300≤hp<600 (225≤kW<450)	Tier 2	2001-2005	N/A	N/A	4.8 (6.4)	0.15 (0.20)
300≤hp<600 (225≤kW<450)	Tier 3r 3(3)	2006-2010	N/A	N/A	3.0 (4.0)	0.15 (0.20)
600≤hp≤750 (450≤kW≤560)	Tier 1	1996-2001	6.9 (9.2)	1.0	N/A (1.3)	0.4 (0.54)
600≤hp≤750 (450≤kW≤560	Tier 2	2002-2005	N/A	N/A	4.8 (6.4)	0.15 (0.20)
600≤hp≤750 (450≤kW≤560	Tier 3(3)	2006-2010	N/A	N/A	3.0 (4.0)	0.15 (0.20)
hp>750 (kW>560)	Tier 1	2000-2005	6.9 (9.2)	1.0	N/A (1.3)	0.4 (0.54)
hp>750 (kW>560)	Tier 2	2006-2010	N/A	N/A	4.8 (6.4)	0.15 (0.20)

(1) EPA model year. CARB model year for Tier 1 starts at 2000 for 25 hp ≤ to <175 hp.
(2) Engine families in this power category may meet the Tier 3 PM standard instead of the Tier 4 interim PM standard in exchange for introducing the final Tier 4 PM standard in 2012.
(3) Caterpillar, Cummins, Detroit Diesel Corporation, and Volvo Truck Corporation agreed to comply with these standards by 2005.

Table 5-10
CARB and U.S. EPA Tier 4 Exhaust Emission Standards for New Off-Road Diesel Engines ≥ 25 hp (g/bhp-hr)

Maximum Rated Power hp (kW)	Tier	Model Year	NOx	HC	NOx + NMHC	PM
25≤hp<50 (19≤kW<37)	Tier 4 Interim	2008-2012	N/A	N/A	5.6 (7.5)	0.22 (0.30)
25≤hp<50 (19≤kW<37)	Tier 4 Final	2013 and later	N/A	N/A	3.5 (4.7)	0.02 (0.03)
50≤hp<75 (37≤kW<56)	Tier 4 Interim[1]	2008-2012	N/A	N/A	3.5 (4.7)	0.22 (0.30)
50≤hp<75 (37≤kW<56)	Tier 4 Final	2013 and later	N/A	N/A	3.5 (4.7)	0.02 (0.03)
75≤hp<100 (56≤kW<75)	Tier 4 Phase-In	2012-2014	0.3 (0.4)	0.14	N/A (0.19)	0.01 (0.02)
75≤hp<100 (56≤kW<75)	Tier 4 Phase-Out	2012-2014	N/A	N/A	3.5 (4.7)	0.01 (0.02)
75≤hp<100 (56≤kW<75)	Tier 4 Alternate NOx[2]	2012-2014	2.5 (3.4)	0.14	N/A	0.01 (0.02)
75≤hp<100 (56≤kW<75)	Tier 4 Final	2015 and later	0.3 (0.4)	0.14	N/A	0.01 (0.02)
100≤hp<175 (75≤kW<130)	Tier 4 Phase-In	2012-2014	0.3 (0.4)	0.14	N/A	0.01 (0.02)
100≤hp<175 (75≤kW<130)	Tier 4 Phase-Out	2012-2014	N/A	N/A	3.0	0.01 (0.02)
100≤hp<175 (75≤kW<130)	Tier 4 Alternate NOx[2]	2012-2014	2.5 (3.4)	0.14	N/A	0.01 (0.02)
100≤hp<175 (75≤kW<130)	Tier 4 Final	2015 and later	0.3	0.14	N/A	0.01

Maximum Rated Power hp (kW)	Tier	Model Year	NOx	HC	NOx + NMHC	PM
			(0.4)			(0.02)
175≤hp<750 (130≤kW<560)	Tier 4 Phase-In	2011-2013	0.3 (0.4)	0.14	N/A	0.01 (0.02)
175≤hp<750 (130≤kW<560)	Tier 4 Final	2014 and later	0.3	0.14	N/A	0.01 (0.02)
hp>750 (kW>560)	Tier 4 Interim	2011-2014	2.6	0.3	N/A (0.40)	0.07 (0.10)
hp>750 (kW>560)	Tier 4 Final	2015 and later	2.6 (0.67)	0.14	N/A (0.19)	0.03 (0.04)

(1) Engine families in this power category may meet the Tier 3 PM standard instead of the Tier 4 interim PM standard in exchange for introducing the final Tier 4 PM standard in 2012.
(2) The implementation schedule shown is the three-year alternate NOx approach. Other schedules are available.

Table 5-11
Exhaust Emission Standards for New Off-Road LSI Engines >1.0 liter (g/bhp-hr)

Model Year	NOx+ Non-Methane Hydrocarbons (NMHC)
2001-2006[(1)]	3.0
2007-2009	2.0
2010 and later	0.6

(1) Standards phased in from 2001 – 2004 instead of the Tier 4 interim PM standard in exchange for introducing the final Tier 4 PM standard in 2012. Caterpillar, Cummins, Detroit Diesel Corporation, and Volvo Truck Corporation agreed to comply with these standards by 2005.