1.0 Purpose

The purpose of this rule is to encourage joint business ventures and establish procedures by which emission reduction credits from mobile sources may be certified.

2.0 Applicability

The provisions of this rule apply to the banking of any mobile source emission reduction credits generated and in the District.

3.0 Definitions

3.1 Actual emission reduction: actual emission reductions are real, enforceable, permanent, quantifiable, and surplus.

3.2 Affected pollutants: nitrogen oxides (NOx), sulfur oxides (SOx), carbon monoxide (CO), PM10, volatile organic compounds (VOC), non-methane organic compound (NMOC), non-methane hydrocarbon (NMHC), non-methane organic gas (NMOG), reactive organic gas (ROG). VOC, NMOC, NMHC, NMOG, and ROG shall be considered synonymous for the purposes of this rule.

3.3 Baseline vehicle: a vehicle that represents the average vehicle sold in a particular model year 1996 through 2003.

3.4 Certificate: a District-issued document specifying the date of issuance, expiration date of credit, type of pollutant, quantity of pollutant, and legal owner of emission reduction credits.

3.5 Driveable: any vehicle that is street legal, licensed by the California Department of Motor Vehicles and available for use and testing.

3.6 Enforceable: verifiable and legally binding.

3.7 Historic actual emissions: actual emissions averaged over the two year period immediately preceding the date of application. If, at any time during the two year period, actual emissions exceeded allowed emission levels, then actual emissions shall be reduced to reflect emission levels that would have occurred if in compliance with all applicable limitations. If less than two years have passed since the operation of the mobile or transportation source began within the District, then the historic actual emissions shall be the actual emissions over the one year period immediately preceding the date of application. If less than one year has passed since the operation of the mobile or transportation source began within the District, then the historic actual emissions shall be zero.
3.8 Mobile source control measure: any strategy to reduce new or existing motor vehicle emissions proposed or adopted by the District.

3.9 Mobile source emission reduction credit (MSERC): actual emission reductions recognized by District and banked in accordance with the requirements of this rule.

3.10 MSERC registry: a tracking system which records all MSERC deposits, withdrawals, transfers, and transactions.

3.11 Permanent: the sum of all credits provided must endure for the life of the emissions unit using the credits. Such time period shall be contained in and enforceable by any applicable Authority to Construct and Permit to Operate.

3.12 Projected emissions: annual emissions based on the same operating characteristics (e.g. fuel consumption, operational characteristics) as historic actual emissions for the calendar year. Projected emissions shall be adjusted for applicant proposed emission reduction strategies which reduce emissions to a level below historic actual emissions. Such adjustments shall only be made to the extent that the emission reduction credits generated are allowed by all applicable rules and regulations. In cases where the proposal includes an increase in the number of vehicles, mileage, etc., projected emissions shall be determined based on the characteristics of the proposed mobile or transportation source and its use.

3.13 Quantifiable: emissions reductions that can be estimated in terms of the amount and characteristics. The same method of estimating emissions should generally be used to quantify emission levels before and after the reduction.

3.14 Real: having actually occurred, not artificially devised.

3.15 Standard bus: a bus engine that meets the required ARB emission standards for the current year.

3.16 Surplus: emission reductions in excess of any emission reduction which is:

3.16.1 required or encumbered by any laws, rules, regulations, agreements, orders, mitigation monitoring plans, and unless such law by its terms states that the emission reduction shall be considered surplus, or

3.16.2 attributed to a control measure noticed for workshop in the District, or proposed or contained in the State Implementation Plan, or

3.16.3 proposed or contained as near-term measures in the District Air Quality Attainment Plan for attaining the annual reductions required by the California Clean Air Act. Temporary actual emissions reductions may be
authorized, if they meet all the requirements of this rule except they are not permanent, and shall cease to exist as temporary actual emission reductions upon implementation of the near-term control measure.

3.16.4 emissions reductions not achieved by the use of vehicle registration surcharge fees.

3.16.5 emissions reductions attributed to a proposed control measure may be re-eligible as surplus actual emissions reductions for:

3.16.5.1 control measures identified in the District Air Quality Attainment Plan or State Implementation Plan where no rule has been adopted within two years from the scheduled adoption date, provided, however, the APCO has not extended the scheduled adoption date, or

3.16.5.2 control measures not identified in the District Air Quality Attainment Plan or State Implementation Plan where no rule has been adopted and two years have elapsed beyond the date of the latest public workshop notice, or

3.16.5.3 control measures proposed in the District Air Quality Attainment Plan which are not included into the Plan adopted by the District Board.

3.17 Transportation control measure: any strategy to reduce vehicle trips, vehicle use, vehicle miles traveled, vehicle idling, or traffic congestion for the purpose of reducing motor vehicle emissions.

4.0 Eligible Emission Reduction Strategies

4.1 Accelerated Retirement of Older Vehicles

4.1.1 To ensure that emission reductions generated are real credits, the program operator must:

4.1.1.1 Provide proof that the vehicle was registered with the California Department of Motor Vehicles (DMV) in the District for a period of at least one year immediately prior to the date the reduction occurred.

4.1.1.2 Surrender the certificate of ownership obtained from the registered owner.
4.1.1.3 Ensure that the vehicle has been driven under its own power to the dismantling site and has not been damaged as to make continued operation unlikely.

4.1.1.4 Ensure that the vehicle contains functional headlights, functional taillights, functional brakes, exhaust system, bumpers, doors, fenders, side and quarter panels, hood, trunk lid, windows, mirrors, windshields, seats, instrumentation, and gauges.

4.1.2 To ensure that the vehicle is never driven again, the program operator shall:

4.1.2.1 destroy the Vehicle Identification Number (VIN) and license plates in accordance with the DMV procedures for permanently scrapping the vehicles;

4.1.2.2 destroy the cylinder block except, as determined by the District in collaboration with antique and collector car interests, engines that have a value for the purposes of restoring collector cars; and

4.1.2.3 crush the remainder of the vehicle except for reusable components (e.g., doors, fenders, bumpers, and disassembled engine components) within three months of purchase.

4.1.3 Emission rates are to be determined using the California Air Resources Board (ARB) most recent and approved computer model. Credits for each pollutant must be calculated separately. The following equation must be used to calculate the emission reductions:

\[
\text{Per Vehicle Emission Reduction (pounds/year)} = \frac{\{(EX_{ret}+EVAP_{ret})-(EX_{rep}+EVAP_{rep})\} \times Mile_{ret}}{\left(\frac{453.6\text{gr}}{\text{lb}}\right) \times (DF)}
\]

Where:

- \(EX_{ret}\) = average exhaust emission rate for retired vehicle from Table 1 (grams/mile).
- \(EVAP_{ret}\) = average evaporative emissions from retired vehicles from Table 1 (grams/mile).
- \(EX_{rep}\) = average exhaust emission rate for replacement vehicle of that current year (grams/mile).
- \(EVAP_{rep}\) = average evaporative emissions from replacement vehicles, adjusted for lower retired vehicle mileage (grams/mile) by the product of \(\text{Mile}_{rep}/\text{Mile}_{ret}\).
Mile\textsubscript{ret} = average annual mileage of retired vehicle from Table 2 (miles/year).

DF = discount factor, 1.2.

<table>
<thead>
<tr>
<th>Model-Year Group</th>
<th>ROG\textsubscript{exhaust}</th>
<th>ROG\textsubscript{evap.}</th>
<th>NOx</th>
<th>CO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-1972</td>
<td>9.6</td>
<td>2.8</td>
<td>4.0</td>
<td>69.5</td>
</tr>
<tr>
<td>1972-1974</td>
<td>7.6</td>
<td>2.1</td>
<td>3.8</td>
<td>46.4</td>
</tr>
<tr>
<td>1975-1981</td>
<td>2.6</td>
<td>1.3</td>
<td>3.0</td>
<td>36.1</td>
</tr>
<tr>
<td>1982-1992</td>
<td>0.6</td>
<td>0.3</td>
<td>0.9</td>
<td>10.1</td>
</tr>
<tr>
<td>1993</td>
<td>0.2</td>
<td>0.1</td>
<td>0.4</td>
<td>3.3</td>
</tr>
<tr>
<td>Fleet Average</td>
<td>1.0</td>
<td>0.4</td>
<td>1.2</td>
<td>13.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model-Year Group</th>
<th>Annual Mileage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-1972</td>
<td>4,900</td>
</tr>
<tr>
<td>1972-1974</td>
<td>5,300</td>
</tr>
<tr>
<td>1975-1981</td>
<td>6,400</td>
</tr>
<tr>
<td>1982-1992</td>
<td>11,000</td>
</tr>
<tr>
<td>1993</td>
<td>14,500</td>
</tr>
<tr>
<td>Fleet Average</td>
<td>10,100</td>
</tr>
</tbody>
</table>

4.1.4 The maximum credit lifetime for accelerated retirement emission reductions is three years unless the applicant chooses to establish a different credit lifetime. An alternate credit lifetime must be calculated in accordance with the ARB document "Methodology for Estimating Emissions from On-Road Motor Vehicles", Volume II (September, 1993).

4.1.5 Any emission reduction begun within a calendar quarter shall be credited within that quarter's certificate.

4.1.6 No MSERC may be saved for use in a subsequent calendar quarter or year.

4.1.7 An applicant may want to demonstrate higher emission levels than average fleet values by instituting a District approved testing program. A testing program will not be approved unless the applicant for the testing proves that:

4.1.7.1 There is no potential for tampering with the vehicle prior to testing in order to maximize emissions; and
4.1.7.2 Testing procedures are consistent and have been approved by ARB.

4.1.8 For accelerated retirement of older vehicles, records of the following must be kept: log of registration form, certificate of ownership showing VIN numbers, and certification that the engine was destroyed pursuant to Section 4.1.2 and the frame crushed. Records shall be kept for a three year period and made available for District inspection.

4.2 Low-Emission Transit Buses

4.2.1 Credits for the purchase of or conversion to low emission transit buses instead of standard buses is based on the difference between the certification standards of the two bus types. The credit life is the expected operating life of the substitute low-emission bus.

4.2.2 When urban bus NOx emission standards change, credits must be calculated using the new standard. Credits for each pollutant must be calculated separately. The following equation must be used to calculate the emission reductions:

Per Vehicle Emission Reduction (pounds/year) = \[ \frac{(C_{ret} \times CF \times M) - (L_{rep} \times CF \times M)}{(Y) \times (453.6 \text{ gr/lb}) \times (DF)} \]

Where:
- \( C_{ret} \) = certified emission rate for standard bus from Table 3 (grams/bhp-hr).
- \( L_{rep} \) = certified emission rate for low-emission bus from Table 3 (grams/bhp-hr).
- \( CF \) = appropriate conversion factor from Table 4 (Bhp-hr/mile).
- \( M \) = average lifetime mileage of the standard bus or otherwise approved mileage (miles).
- \( Y \) = number of years of use expected from the low emission bus (years).
- \( DF \) = discount factor, 1.2.

<table>
<thead>
<tr>
<th>Table 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Bus NOx Certification Standards</td>
</tr>
<tr>
<td>Type</td>
</tr>
<tr>
<td>---------------</td>
</tr>
<tr>
<td>Standard Bus</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Low-Emission Bus</td>
</tr>
</tbody>
</table>
4.2.3 Any emission reduction begun within a calendar quarter shall be credited within that quarter's certificate.

4.2.4 No MSERC may be saved for use in a subsequent calendar quarter or year.

4.2.5 In-use testing of a portion of low-emission buses shall be tested at the applicant's expense annually. Buses failing to meet their certified emission standard shall be repaired to maintain the low-emission certifications. The applicant has the responsibility to maintain the engine to the certified standards for the life of the vehicle or credit. The applicant must demonstrate that they have plans and contracts in place to meet these obligations before credit can be granted.

4.2.5.1 Testing procedures for new low-emission buses shall be approved by the District and ARB.

4.2.5.2 Testing procedures for converted buses shall comply with the ARB document "Guidelines for the Generation of Mobile Source Emission Reduction Credits by Retrofitting Existing Vehicles" and shall be approved by the District.

4.2.6 Credits from new low emission buses shall be based on an average lifetime mileage of 500,000 miles over a 12 year period, unless a longer time period is approved by the District.

4.2.7 Credits from bus conversions shall be based on average lifetime mileage as represented by historically similar buses, less all actual mileage from the individual bus prior to its conversion.

<table>
<thead>
<tr>
<th>Fuel</th>
<th>Bhp-hr/mile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diesel</td>
<td>4.3</td>
</tr>
<tr>
<td>Methanol</td>
<td>4.3</td>
</tr>
<tr>
<td>Compressed Natural Gas</td>
<td>4.1</td>
</tr>
</tbody>
</table>

Table 4
Emission Conversion Factors for New Buses
4.2.8  To generate credits for a time period significantly longer than that of the life of an individual low-emission bus, an extended life credits plan shall be implemented. Extended life credits are generated by purchasing a number of buses over a period of time such that the individual credits generated by each bus form a continuous string of credits that are summed together during their overlapping credit lives. The extended life credit plan shall contain the following items:

4.2.8.1 The credit calculation for each individual bus purchased is conducted according to the equation of Section 4.2.2.

4.2.8.2 A plan for purchasing buses. The amount of individual bus credit to be granted is calculated taking into account all future emission standards that are known at the time of application.

4.2.8.3 The credit amounts which can be used as emission offsets for a stationary source is the average value of the individual bus credits generated over the contractually extended credit lifetime.

4.2.8.4 Individual bus credits projected to be generated in the year 2003 and later are discounted by 50 percent before being included in the cumulative or lifetime average credit calculations.

4.2.8.5 Once the permitted stationary source begins operation, the sum of available credits at the point in time must not fall below the lifetime average except during the last third of the extended credit period (e.g., years 21 through 30 of a thirty year period).

4.2.8.6 A stationary source which uses extended life, low-emission bus credits to meet emission offset requirements cannot commence operations until the cumulative amount of credit generated equals or exceeds the required offset level.

4.3  Purchase of Zero Emission Vehicles

4.3.1 The applicant must ensure that the vehicle manufacturer does not use any zero-emission vehicle (ZEV) produced for purchase through the program in the calculation of its statewide fleet average NMOG emission rate, bank the emission credits for future use, or sell the credits to another major manufacturer.
4.3.2 Emission reductions are the difference between the average emission rate of a new, emitting vehicle and a ZEV. The new car average emission rate is determined by the average model year emission rate. Baseline vehicle emission rates are shown in Table 5.

4.3.3 Emission rates are to be determined using the ARB most recent and approved computer model. Credits for each pollutant must be calculated separately. The following equation must be used to calculate the emission reductions:

\[
\text{Per Vehicle Emission Reduction (pounds/year)} = \frac{(\text{emission rate of baseline vehicle not purchased because a ZEV was purchased instead, Table 5}) \times (100,000 \text{ mile life}) \times (\text{number of ZEVs purchased})}{(453.6 \text{ gm/lb}) \times (10 \text{ years}) \times (\text{discount factor, 1.2})}
\]

<table>
<thead>
<tr>
<th>Model-Year</th>
<th>Ex+RL NMOG(^1) (gram/mile)</th>
<th>Evap NMOG(^2) (gram/day)</th>
<th>NOx (gram/mile)</th>
<th>CO (gram/mile)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>0.41</td>
<td>2.0</td>
<td>0.60</td>
<td>2.9</td>
</tr>
<tr>
<td>1997</td>
<td>0.28</td>
<td>1.7</td>
<td>0.52</td>
<td>2.7</td>
</tr>
<tr>
<td>1998</td>
<td>0.22</td>
<td>0.91</td>
<td>0.44</td>
<td>2.5</td>
</tr>
<tr>
<td>1999</td>
<td>0.17</td>
<td>0.91</td>
<td>0.36</td>
<td>2.3</td>
</tr>
<tr>
<td>2000</td>
<td>0.11</td>
<td>0.91</td>
<td>0.30</td>
<td>2.1</td>
</tr>
<tr>
<td>2001</td>
<td>0.11</td>
<td>0.91</td>
<td>0.29</td>
<td>2.1</td>
</tr>
<tr>
<td>2002</td>
<td>0.11</td>
<td>0.91</td>
<td>0.29</td>
<td>2.1</td>
</tr>
<tr>
<td>2003</td>
<td>0.10</td>
<td>0.91</td>
<td>0.28</td>
<td>1.9</td>
</tr>
</tbody>
</table>

\(^1\)Exhaust plus running loss emissions.
\(^2\)Evaporative emissions.

4.3.4 The NOx, NMOG, and CO emission rates for the baseline car assumes a ten-year, 100,000-mile useful life.

4.3.5 Any emission reduction begun within a calendar quarter shall be credited within that quarter's certificate.

4.3.6 No MSERC may be saved for use in a subsequent calendar quarter or year.

4.3.7 Marketing emission reductions until 1996 shall be credited in the amount of 23 pounds of NMOG per vehicle lifetime; and after 1996 shall be credited in the amount of 20 pounds of NMOG per vehicle lifetime.
4.3.8 The applicant must verify through VIN record keeping that each vehicle's emission reduction is not being credited in the manufacturers fleet average NMOG emission rate.

4.3.9 For purchase of ZEVs, records of the VIN numbers from the manufacturer which will not be counted in the fleet average emission rate and VIN numbers of each ZEV purchased for credit.

4.4 Retrofitting Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles

4.4.1 Credit will only be granted for vehicles retrofitted following the certification and compliance test procedures in the "California Certification and Installation Procedures for Alternative Fuel Retrofit Systems for Motor Vehicles Certified for 1994 and Subsequent Model Years" (ARB, May 14, 1992).

4.4.2 Emission reductions are the difference between the certification standard before and the low emission vehicle standard after a vehicle is retrofitted, adjusted for the remaining life of the vehicle.

4.4.3 Emission rates are to be determined using the California Air Resources Board (ARB) most recent and approved computer model. Credits for each pollutant must be calculated separately. Credits for dual-fuel vehicles will only be calculated for the mileage traveled using the clean fuel. The following equation must be used to calculate the emission reductions:

\[
\text{Per Vehicle Emission Reduction (pounds/year)} = \frac{[\text{Cori} - \text{Rret}](\text{M} - \text{O})}{(453.6 \text{ gr/lb})\text{Y}(\text{DF})}
\]

Where:
- \(\text{Cori}\) = certification standard of original vehicle from Table 6, 7 or 8 (grams/mile).
- \(\text{Rret}\) = certification standard of retrofitted vehicle from Table 6, 7, or 8 (grams/mile).
- \(\text{M}\) = total vehicle mileage from Table 9 (miles).
- \(\text{O}\) = odometer reading of vehicle after retrofit equipment is installed (mile).
- \(\text{Y}\) = typical useful life expected from Table 9 (years).
- \(\text{DF}\) = discount factor, 1.2.

<table>
<thead>
<tr>
<th>Category</th>
<th>NMOG</th>
<th>CO</th>
<th>NOx</th>
</tr>
</thead>
</table>

Table 6

Certification Standards for Passenger Cars and Light-Duty Trucks With Gross Vehicle Weights of 3750 Pounds or Less (grams/mile)
### Table 7
**Certification Standards for Light-Duty Trucks With Gross Vehicle Weights of More Than 3750 Pounds (grams/mile)**

<table>
<thead>
<tr>
<th>Category</th>
<th>NMOG</th>
<th>CO</th>
<th>NOx</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adopted for 1993</td>
<td>0.50</td>
<td>9.0</td>
<td>1.0</td>
</tr>
<tr>
<td>TLEV</td>
<td>0.16</td>
<td>4.4</td>
<td>0.7</td>
</tr>
<tr>
<td>LEV</td>
<td>0.100</td>
<td>4.4</td>
<td>0.4</td>
</tr>
<tr>
<td>ULEV</td>
<td>0.050</td>
<td>2.2</td>
<td>0.4</td>
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</tbody>
</table>

### Table 8
**Certification Standards for Medium-Duty Vehicles (grams/mile)**

<table>
<thead>
<tr>
<th>Weight Class (lbs)</th>
<th>LEV NMOG</th>
<th>LEV CO</th>
<th>LEV NOx</th>
<th>ULEV NMOG</th>
<th>ULEV CO</th>
<th>ULEV NOx</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-3,750</td>
<td>0.125</td>
<td>3.4</td>
<td>0.4</td>
<td>0.075</td>
<td>1.7</td>
<td>0.2</td>
</tr>
<tr>
<td>3,751-5,750</td>
<td>0.160</td>
<td>4.4</td>
<td>0.7</td>
<td>0.100</td>
<td>2.2</td>
<td>0.4</td>
</tr>
<tr>
<td>5,751-8,500</td>
<td>0.195</td>
<td>5.0</td>
<td>1.1</td>
<td>0.117</td>
<td>2.5</td>
<td>0.6</td>
</tr>
<tr>
<td>8,501-10,000</td>
<td>0.230</td>
<td>5.5</td>
<td>1.3</td>
<td>0.138</td>
<td>2.8</td>
<td>0.7</td>
</tr>
<tr>
<td>10,001-14,000</td>
<td>0.300</td>
<td>7.0</td>
<td>2.0</td>
<td>0.180</td>
<td>3.5</td>
<td>1.0</td>
</tr>
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</table>

### Table 9
**Total Vehicle Mileage and Typical Useful Life of Vehicles**

<table>
<thead>
<tr>
<th>Category</th>
<th>Total Vehicle Mileage (miles)</th>
<th>Typical Useful Life (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger Cars</td>
<td>100,000</td>
<td>10</td>
</tr>
<tr>
<td>Light-Duty Trucks</td>
<td>100,000</td>
<td>10</td>
</tr>
<tr>
<td>Medium-Duty Vehicles</td>
<td>120,000</td>
<td>10</td>
</tr>
</tbody>
</table>

4.4.4 Any emission reduction begun within a calendar quarter shall be credited within that quarter's certificate.

4.4.5 No MSERC may be saved for use in a subsequent calendar quarter or year.

4.4.6 Emission reductions for fuel evaporative and running loss emissions associated with retrofitting a vehicle to use a non-volatile fuel shall be quantified using factors available from ARB, and must be approved by the District. Marketing emission reductions associated with retrofitting a vehicle to use a non-volatile fuel shall be credited in the amount of 23
pounds of NMOG per vehicle lifetime until 1996; and in the amount of 20 pounds of NMOG per vehicle lifetime after 1996. The credits granted shall be based on the sum of the lifetime evaporative, running loss, and marketing emission reductions adjusted for the vehicle lifetime mileage less the odometer reading after the retrofit equipment is installed.

4.4.7 The applicant shall maintain records of owner's registration and a logbook of odometer readings and proof of compliance with the Air Resources Board retrofit certification standard.

4.4.8 Dual fuel vehicles may generate credits using clean fuel provided the vehicle, when using gasoline, meets the certification standards for the original gasoline engine. Credits for dual fuel vehicles are based on the number of miles traveled using clean fuels.

4.4.9 Beginning January 1, 1995, vehicles which weigh between 8,500 pounds and 14,000 pounds and are to be certified to engine emission standards, may use credit-generating calculation procedures similar to the heavy-duty calculation procedures of Section 4.5. These vehicles will be reclassified as medium-duty vehicles in 1995, at which time they can certify to optional engine emission standards. The same test procedures used to certify the original engines must be used to certify the retrofitted engines to credit-generating standards.

4.4.10 Vehicle identification numbers, proof of registration, and proof of compliance with the retrofit certification standard for the retrofitted vehicle shall be provided to the District on an annual basis. No retrofitted vehicle may be transferred out of the District.

4.5 Retrofitting Heavy-Duty Vehicles

4.5.1 Emission reductions are the difference between the ceiling standard before and the low emission vehicle credit standard after a vehicle is retrofitted, adjusted for the remaining life of the vehicle. Credits for each pollutant must be calculated separately.

4.5.2 The ceiling standard for each pollutant of interest is the certification standard to which the engine was originally certified when first placed into service by its manufacturer. Engines which were originally certified to a combined HC+NOx standard shall be pro-rated by the original emission certification values of each pollutant, as shown on the ARB certification Executive Order. The specific numerical values are available from ARB.

4.5.3 The maximum credit standard for NOx will be at least 25% below the applicable ceiling standard, rounded to the next lower 0.5 gram/bhp-hr
increment. The maximum credit standard for PM will be at least 30% below the applicable ceiling standard, rounded to the next lower 0.05 gram/bhp-hr increment. The maximum credit standard for NMHC will be at least 30% below the applicable ceiling standard, rounded to the next lower 0.2 gram/bhp-hr increment. The maximum credit standard for CO will be at least 30% below the applicable ceiling standard, rounded to the next lower 5.0 gram/bhp-hr increment.

4.5.4 Certification of credit standard will only be granted for heavy-duty vehicles (vehicles with gross vehicle weights greater than 14,000 pounds) retrofitted following the certification and compliance test procedures in the "California Certification and Installation Procedures for Alternative Fuel Retrofit Systems for Motor Vehicles Certified for 1994 and Subsequent Model Years" (ARB, May 14, 1992).

4.5.5 For heavy-duty vehicle retrofits that result in a vehicle with dual-fuel operation, the system shall be certified separately on each fuel. The hardware shall be certified to an appropriate credit standard during operation solely on the cleaner of the two fuels. The hardware shall be certified to at least the ceiling standard while operating solely on the other fuel.

4.5.6 The duration of the credit life shall be based on the expected vehicle life remaining until the vehicle is retired or the engine is next expected to be overhauled, whichever occurs first. Consideration will be given to historical fleet records of similar vehicles with similar operation and histories.

4.5.7 Appropriate conversion factors shall be submitted to the District at the time of application based on commonly accepted data and methodology. The conversion factors are subject to District and ARB approval.

4.5.8 Emission rates are to be determined using the ARB most recent and approved computer model. Credits for each pollutants must be calculated separately. Credits for dual-fuel vehicles will only be calculated for the mileage traveled using the clean fuel. The following equation must be used to calculate the emission reductions:

\[
\text{Per Vehicle Emission Reduction (pounds/year)} = \frac{[(C_{ori}-R_{ret})*CF*(M-O)]}{[(453.6 \text{ gr/lb})*(Y)*(DF)]}
\]

Where:
- \( C_{ori} \) = certification standard of original vehicle (gram/bhp-hr).
- \( R_{ret} \) = certification standard of retrofitted vehicle (gram/bhp-hr).
- \( CF \) = conversion factor (bhp-hr/mile).
- \( M \) = total vehicle lifetime mileage (miles).
O = odometer reading of vehicle after retrofit equipment is installed (mile).
Y = typical useful life expected (years).
DF = discount factor, 1.2.

4.5.9 Any emission reduction begun within a calendar quarter shall be credited within that quarter's certificate.

4.5.10 No MSERC may be saved for use in a subsequent calendar quarter or year.

4.5.11 Evaporative, running loss, and marketing emission reductions from retrofitting vehicles shall be quantified using factors available from the Air Resources Board, and must be approved by the District. Evaporative emission control systems are required for diesel-fueled vehicles converted to other liquid fuels. Conversion hardware shall be properly designed to prevent increased evaporative emissions for gasoline-fueled vehicles converted to other liquid fuels.

4.5.12 Vehicle identification numbers, proof of registration, and proof of compliance with the retrofit certification standard for the retrofitted vehicle shall be provided to the District on an annual basis. No retrofitted vehicle may be transferred out of the District.

5.0 MSERC Application Procedures

5.1 Any entity which owns or operates a source at which an eligible emission reduction has occurred or will occur may apply for an MSERC Certificate in accordance with the requirements of this rule.

5.2 The entity requesting the MSERC Certificate shall make an application on forms supplied by the District with a filing fee of $650.00. Any transaction of a previously issued certificate requires an application on forms supplied by the District with a filing fee of $60.00.

5.3 An application shall be filed for each emission reduction. The application may be for reductions in one or more affected pollutants. The application shall contain sufficient information to allow for adequate evaluation of actual emission reductions from each project.

5.4 Applications for reductions shall be submitted within 180 days after the emission reduction occurs, except for reductions prior to the adoption of this rule. For reductions which occurred prior to the adoption of this rule, applications must be submitted within 180 days after adoption of this rule.
5.5 In accordance with the provisions of Rule 1030 (Confidential Information) and Section 114(c) of the Federal Clean Air Act, Applicants may claim confidentiality of information contained in the application.

6.0 Administrative Requirements

6.1 A stationary source which uses MSERCs to meet emission offset requirements cannot commence operations until the cumulative amount of credit generated equals or exceeds the required offset level. The stationary source receiving MSERC shall submit a plan to the District for approval for supplying emission offsets for the entire life of the stationary source.

6.2 The APCO shall determine whether or not an MSERC banking application is complete not later than 30 calendar days following receipt of the application, or after a longer time period agreed upon in writing by both the applicant and the APCO.

6.3 If the APCO determines that the application is not complete, the applicant shall be notified in writing of the decision, specifying the additional information that is required. The applicant shall have 90 days to submit the requested information. Upon receipt of all requested information, the District shall have 30 calendar days to determine completeness. If the application is still incomplete, the APCO may cancel the MSERC application with written notification to the applicant. Thereafter, only information to clarify, correct, or otherwise supplement the information submitted in the application may be requested.

6.4 Withdrawal of a banking application shall result in cancellation of the application.

6.5 The District shall have immediate access to the premises of any mobile source emission reduction facility to review records, equipment, vehicles, etc.

6.6 Reviews may include inspections, testing, review of records, or any other action deemed necessary to verify compliance. Copies of all records will be provided to the District within 7 calendar days of such a request.

6.7 The recipient of emission reductions shall submit audits on a quarterly basis verifying that the MSERC has been achieved. These audits shall be submitted within 30 days after the end of each calendar quarter, in a computerized format approved by the District.

6.8 Violation of any provision of this rule shall be grounds for the APCO to disallow or void any MSERC associated with the violation and be subject to the penalties specified in the California Health and Safety Code.

6.9 All District approved mobile source emission reduction credits will be listed in the MSERC registry.
6.10 The applicant or any other party may appeal the APCO's decision following provisions specified in Regulation V (Procedure Before the Hearing Board).