

Bay Area Air Quality Management District

Manual of Procedures

Volume VIII

Procedures for Calculating and Generating Mobile Source Emission Reduction Credits

**VOLUME VIII
PROCEDURES FOR CALCULATING AND GENERATING
MOBILE SOURCE EMISSION REDUCTION CREDITS**

**PART 1
INTRODUCTION**
(Adopted October 5, 1994)

This volume of the Manual of Procedures sets forth methodology for calculating and generating appropriate credits for emission reductions from mobile sources. Individual parts within this Volume address particular activities that may produce such credits. If credit is sought for a particular activity that is not discussed within this Volume, District staff may rely upon appropriate methodology set forth by the Air Resources Board in *Mobile Source Emission Reduction Credits: Guidelines for the Generation and Use of Mobile Source Emission Reduction Credits*, February 1994, and its updates. Upon approval of the Air Pollution Control Officer, District staff may also follow alternative procedures not covered in this Volume or in the Air Resources Board Guidelines.

The emission reduction credits calculated and generated pursuant to this Volume may be used as emission offsets pursuant to Regulation 2, as part of an alternative emission reduction program submitted pursuant to Regulation 13, or as otherwise authorized by District Rules and Regulations.

VOLUME VIII
PROCEDURES FOR CALCULATING AND GENERATING
MOBILE SOURCE EMISSION REDUCTION CREDITS

PART 2
VEHICLE BUY-BACK PROGRAMS

(Adopted October 5, 1994)

1. INTRODUCTION

The purposes of this Part are to establish requirements for programs that generate emission reduction credits from the scrapping of older, high-emitting, light-duty vehicles and to establish a methodology for calculating the credits. Under vehicle buy-back programs complying with this Part, an entity would submit an application for approval as a certified scrapper. The certified scrapper would then scrap qualifying vehicles that are voluntarily submitted to the program by their owners. The scrapping would typically be done under contract between the certified scrapper and a dismantler. Dismantled vehicles would then go to a scrap metal processor for final recycling. Credits for reductions in precursor organic compounds (POC) and nitrogen oxides (NOx) calculated pursuant to this Part could then be used, subject to the approval of the Air Pollution Control Officer (APCO), as provided in this Volume and in District Rules and Regulations.

2. DEFINITIONS

- 2.1 BAAQMD Certified Scrapper.** An entity certified by the APCO to earn Mobile Source Emission Reduction Credits in exchange for scrapping vehicles.
- 2.2 Light-Duty Truck.** A motor truck, as defined in Section 410 of the California Vehicle Code, having a manufacturer's gross vehicle weight rating of under 6001 pounds.
- 2.3 Mobile Source Emission Reduction Credits (MSERCs).** Credits for mobile source emission reductions obtained through a program complying with this Volume, calculated as set forth in this Volume, and approved by the APCO.
- 2.4 Nitrogen Oxides (NOx).** The sum of nitric oxides and nitrogen dioxides emitted, collectively expressed as nitrogen dioxide.
- 2.5 Old Vehicles.** 1981 and earlier model-year passenger vehicles and light-duty trucks.
- 2.6 Organic Compound.** Any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate and methane.
- 2.7 Organic Compound, Non-Precursor.** Any organic compound as defined in Regulation 2-1-207.

- 2.8 Organic Compound, Precursor (POC).** Any organic compound as defined in Regulation 1-233 excepting the non-precursor organic compounds defined in Regulation 2-1-207.
- 2.9 Passenger Vehicle.** A motor vehicle for carrying persons, as defined in Section 465 of the California Vehicle Code.
- 2.10 Scrapping.** The process by which old vehicles are permanently removed from service.
- 2.11 Vehicle Buy-Back Program.** A program in which old vehicles are scrapped in exchange for MSERCs.

3. ADMINISTRATIVE REQUIREMENTS

3.1 BAAQMD Scrapper Certification Requirements

- 3.1.1** BAAQMD certified scrappers shall have vehicles scrapped only by auto dismantlers that are licensed by the California Department of Motor Vehicles.
- 3.1.2** An entity seeking to become a certified scrapper shall submit a complete scrapping plan to the APCO at least 60 days prior to planned initiation of vehicle scrapping. The scrapping plan shall be submitted on forms specified by the APCO, and shall contain information demonstrating the ability to comply with all provisions of this chapter relating to vehicle selection, visual and functional inspection, disposal, and record keeping, including the following:
- a. A description of the entity seeking certification.
 - b. A description of the procedures to be followed in soliciting vehicle owners, and in inspecting and selecting vehicles to be scrapped.
 - c. A description of the procedures to be followed to remove, handle, and dispose of tires, batteries, air conditioner refrigerants, and vehicle fluids.
 - d. A description of the procedures to be followed to destroy the block, the vehicle identification number, and the body / frame.
 - e. A description of record keeping practices to be followed, both for DMV paperwork and for the records required by Section 3.6.
 - f. For ongoing scrapping activity, a description of the means of providing the notice required by Section 3.2.
 - g. For any licensed auto dismantler to be used in the process of scrapping vehicles:
 - i. Copy of the California Department of Motor Vehicles dismantler's license.
 - ii. Copy of dismantler's local business license.
 - iii. A written statement from the auto dismantler certifying compliance with local water conservation regulations; state, county, and city energy and hazardous materials

response regulations; and local water agency soil, surface, and ground water contamination regulations.

- h. An estimate of the number of vehicles to be scrapped and the proposed use of the MSERCs.

3.1.3 The scrapper shall be deemed certified upon written approval of the scrapping plan by the APCO. Approval of the scrapping plan shall be based on information submitted pursuant to Section 3.1.2. The APCO shall have one month to approve the scrapping plan and shall disapprove the scrapping plan if it does not comply with Section 3.1.2. The APCO shall also disapprove the scrapping plan if the air pollutant emissions caused by the scrapping activity exceed the emission reductions achieved by removing the vehicles from service.

3.2 Notice Requirements for Vehicle Scrapping

BAAQMD certified scrappers shall submit written notice to the APCO at least two weeks prior to delivery of the first vehicles for scrapping under any approved scrapping plan, indicating date, location, and an estimate of the number of vehicles to be scrapped. For ongoing scrapping activity, the certified scrapper shall maintain a means acceptable to the APCO for providing advance notice of scrapping.

3.3 Vehicle Selection Requirements

3.3.1 Only 1981 and earlier model-year passenger cars and light-duty trucks shall be eligible for MSERCs through a vehicle buy-back program.

3.3.2 To be eligible for MSERCs, a vehicle to be scrapped shall meet the following requirements:

- a. Upon delivery for scrapping, the vehicle must be registered with the State of California Department of Motor Vehicles (DMV), and registration must not have lapsed for more than three months at any time during the two year period prior to delivery for scrapping. For a vehicle to be considered registered, smog checks must have been performed as required by DMV, but vehicles operating under waiver shall be acceptable.
- b. Registration during the two-year period pursuant to Section 3.3.2a must be as an operable vehicle, except that a vehicle may be registered as a non-operable vehicle for not more than two months occurring at least three months prior to delivery for scrapping.
- c. Registration during the two-year period pursuant to Section 3.3.2a must be to one or more addresses located in the District.

- 3.3.3** Compliance with the requirements of Sections 3.3.2a and 3.3.2b shall be established by review of DMV registration records by the certified scrapper.
- 3.3.4** Compliance with the requirements of Section 3.3.2c shall be established by documentation supplied by the vehicle owner. The following documents may be accepted: Registration Card, Certificate of Title, California Drivers License, California Identification Card, insurance invoice, utility statement, credit card statement, canceled check, or other documents acceptable to the APCO showing at least one registered owner's name, an address in the District, and the date of preparation. Acceptable documents shall be supplied as follows.
- a. For vehicles with the same ownership during the two year period prior to delivery for scrapping, the owner shall supply one of the acceptable documents dated within twelve months of delivery and another dated at least two years prior to delivery.
 - b. For vehicles with different owners during the two year period prior to delivery for scrapping, the current owner shall provide, for each owner during the two-year period, one of the acceptable documents dated during that owner's period of ownership. Where any ownership period exceeds one year, the current owner shall provide two acceptable documents dated at least ten months apart.

3.4 Vehicle Visual and Functional Inspection

In order to be eligible for MSERCs, each vehicle to be scrapped shall be subjected to a visual and functional inspection prior to scrapping. Inspections shall be conducted by the BAAQMD certified scrapper. The following elements shall be included in the inspection.

- 3.4.1** Vehicle must have been driven under its own power to the scrapping site.
- 3.4.2** The vehicle identification number (VIN) attached to the vehicle, and the vehicle model and body type must match vehicle identification information contained in the Department of Motor Vehicles records. If available, the VINs on the Certificate of Title and current registration must be matched to the VIN on the vehicle.
- 3.4.3** Person delivering vehicle to scrapping site must be verified as the person having legal authority to transfer vehicle ownership. Additionally, the vehicle must not have any liens.
- 3.4.4** The presence of the original vehicle components or equivalent replacement components must be visually verified. The component inspection shall include, but not be limited to, the following:
- a. Exhaust system
 - b. Battery

- c. Bumpers
- d. Doors
- e. Fenders
- f. Side and quarter panels
- g. Hood and trunk lid
- h. Windshields
- i. Seats
- j. Instrumentation and gauges

3.4.5 The vehicle owner, or a person authorized by the vehicle owner, shall switch off the engine and then restart the engine as directed by the certified scrapper or District personnel. The vehicle shall not be accepted if the ignition switch or the starter motor fails to operate.

3.5 Vehicle Disposal Requirements

3.5.1 Scrapping shall entail, at a minimum, the permanent destruction of the following vehicle components:

- a. Vehicle identification number
- b. Cylinder block
- c. Body / frame

3.5.2 Vehicle components listed in subparagraphs 3.5.1.a through 3.5.1.c shall be permanently destroyed within 90 days after the old vehicle is delivered for scrapping. Removal of usable components, e.g., doors, fenders, body panels, bumpers, and engine components, is allowed during the 90-day period.

3.5.3 All activities associated with scrapping vehicles, including but not limited to the disposal of vehicle fluids and vehicle components, shall comply with applicable federal, state, and local laws, regulations, codes, and permitting requirements.

3.6 Recordkeeping Requirements

3.6.1 BAAQMD-certified scrappers shall maintain copies of the following documents for five years following approval of MSERCs generated by vehicle scrapping:

- a. The scrapping plan described in Section 3.1.
- b. The notices given pursuant to Section 3.2.
- c. A summary showing starting and ending dates of the vehicle buy-back program; number of vehicles scrapped; and dates vehicles were scrapped.
- d. For each vehicle, a duplicate copy of Report of Vehicle to be Dismantled and Notice of Acquisition (California Department of Motor Vehicles Registration Form 42) validated by line date stamping on the front of the form.

- e. For each vehicle, a copy of the California Certificate of Title or the Application for Duplicate Title.
- f. For each vehicle, a copy of the documentation required by Section 3.3.4.

3.6.2 BAAQMD certified scrappers shall store and maintain computer data records of scrapped vehicles and shall make the record for any vehicle accessible to the APCO during scrapping and for at least five years after approval of the MSERC generated by scrapping the vehicle.

- a. The computer hardware, software, and communications protocol to be used for storing and maintaining computer data records shall be specified by the APCO for compatibility with existing District computer equipment.
- b. Data records for each scrapped vehicle shall include the following:
 - i. Vehicle make
 - ii. Vehicle model
 - iii. Vehicle model year
 - iv. Vehicle license plate number
 - v. Vehicle identification number
 - vi. Vehicle mileage
 - vii. Scrapped vehicle owner's name, address, telephone number
 - viii. Date of delivery for scrapping
 - ix. POC and NOx mobile source emission reduction credit
 - x. Name of person(s) conducting vehicle visual and functional inspection as required by Section 3.4, with employer's name, address, and telephone number

4. CALCULATION, APPROVAL, AND USE OF CREDITS

4.1 Calculation of Credits

4.1.1 Each scrapped vehicle will qualify for a total MSERC based on an assumed average remaining vehicle life of three years. The following formula shall be used to calculate the MSERC:

$$\text{MSERC} = 3 \times \frac{\text{MILES (SCRAP - REPLACE)}}{454 \times \text{DF}}$$

Where:

MSERC = Mobile Source Emission Reduction Credit (pounds of pollutant)

SCRAP = Emission rate of scrapped vehicle in grams per mile, according to Section 4.1.2 below, based on the model-year of the scrapped vehicle.

MILES = Average annual mileage corresponding to model-year of scrapped vehicle, according to subdivision Section 4.1.2 below.

REPLACE = Average in-use vehicle emission rate in grams per mile for year in which vehicle is scrapped, according to subdivision Section 4.1.2

DF = Discount Factor, equal to 1.2

4.1.2 Values for SCRAP, REPLACE, and MILES in the equation in Section 4.1.1 shall be derived from the versions of ARB's EMFAC emission factor model and BURDEN vehicle activity model in effect at the time the MSERC is approved pursuant to Section 4.2. The District will publish the values and periodically update them based on revisions to the ARB models.

4.2 Approval of Credits

A certified scrapper seeking approval of MSERCs generated through a vehicle buy-back program which complies with this Part shall submit a request in writing within three months after the scrapping of the old vehicles for which credit is sought. At the time of the request, the certified scrapper shall make the information specified in Sections 3.6.1 and 3.6.2 available to the APCO. The APCO shall provide the certified scrapper with a written response approving, denying, or modifying the credits.

4.3 Use of Credits

4.3.1 The MSERC calculated for each vehicle pursuant to Section 4.1.1 shall be valid for five years from the date of approval by the APCO, but shall have no validity or effect beyond the five-year period. The MSERC may be used at any time during the five year period, with the limitations that no more than one-third of the MSERC may be used by one year from the date of approval and no more than two-thirds of the MSERC may be used by two years from the date of approval.

4.3.2 MSERCs generated by vehicle buy-back programs pursuant to this Part may be used for purposes set forth in this Volume and in District Rules and Regulations.

4.3.3 MSERCs generated by vehicle buy-back programs pursuant to this Part may be used by the certified scrapper or by any other person to whom they have been transferred for a use authorized by Section 4.3.2.

VOLUME VIII
PROCEDURES FOR CALCULATING AND GENERATING MOBILE SOURCE
EMISSION REDUCTION CREDITS

INDEX

PART 1 – INTRODUCTION

PART 2 – VEHICLE BUY-BACK PROGRAMS

1. Introduction

2. Definitions

- 2.1 BAAQMD Certified Scrapper
- 2.2 Light-Duty Truck
- 2.3 Mobile Source Emission Reduction Credits (MSERCs)
- 2.4 Nitrogen Oxides (Nox)
- 2.5 Old Vehicles
- 2.6 Organic Compound
- 2.7 Organic Compound, Non-Precursor
- 2.8 Organic Compound, Precursor (POC)
- 2.9 Passenger Vehicle
- 2.10 Scrapping
- 2.11 Vehicle Buy-Back Program

3. Administrative Requirements

- 3.1 BAAQMD Scrapper Certification Requirements
- 3.2 Notice Requirements for Vehicle Scrapping
- 3.3 Vehicle Selection Requirements
- 3.4 Vehicle Visual and Functional Inspection
- 3.5 Vehicle Disposal Requirements
- 3.6 Recordkeeping Requirements

4. Calculation, Approval, and Use of Credits

- 4.1 Calculation of Credits
- 4.2 Approval of Credits
- 4.3 Use of Credits