



Greg Cox District 1
Dianne Jacob District 2
Pam Slater-Price District 3
Ron Roberts District 4
Bill Horn District 5

April 3, 2008

# NOTICE OF WORKSHOP

FOR DISCUSSION OF THE ADOPTION OF PROPOSED NEW RULE 27.1 – FEDERAL REQUIREMENTS FOR OWNERS OF MOBILE SOURCES THAT GENERATE CREDITS UNDER THE SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT'S, "ALTERNATIVE MOBILE SOURCE EMISSION REDUCTION PROGRAM FOR REPLACING MEDIUM AND HEAVY HEAVY-DUTY DIESEL POWERED VEHICLES AND REPOWERING OF MARINE VESSELS UNDER RULE 27(c)(1)(vi)", AS APPROVED ON SEPTEMBER 8, 2000, AND CONDITIONS FOR USE OF SUCH CREDITS

The San Diego County Air Pollution Control District (District) will hold a public meeting to consider comments concerning adopting proposed new Rule 27.1, which would allow use of mobile source emission reduction credits (MERCs) created under the District's alternative MERC program entitled, "Alternative Mobile Source Emission Reduction Program for Replacing Medium and Heavy Heavy-Duty Diesel Powered Vehicles and Repowering of Marine Vessels Under Rule 27 (c)(1)(vi)" (Alternative Program), to be used as federal new source review (NSR) offsets. Comments may be submitted in writing before, or made at, the workshop, which is scheduled as follows:

DATE: Wed

Wednesday, May 7, 2008

TIME:

10:00 a.m. to 12:00 Noon

PLACE:

San Diego Air Pollution Control District

Main Conference Room 10124 Old Grove Road San Diego, CA 92131

On September 8, 2000, the District established the Alternative Program, with the concurrence of the California Air Resources Board (ARB), to create mobile emission reductions credits (MERCs) for oxides of nitrogen (NOx) under the provisions of Rule 27(c)(1)(vi). The existing Alternative Program allowed the owners of certain mobile sources — marine vessels, heavy heavy-duty vehicles in refuse collection applications, and medium heavy-duty vehicles —

powered with diesel engines to generate permanent MERCs through actual NOx emission reductions that could be used to offset emission increases at stationary sources. To date, approximately 78.6 tons of such MERCs have been generated. Although the individual MERCs created under the existing Alternative Program have been reviewed by EPA (and ARB), certain elements of the program, in some cases revised to address EPA requirements, must be incorporated in the State Implementation Plan to ensure the MERCs are considered federally enforceable by EPA. Federal enforceability is one prerequisite for the MERCs to be accepted by EPA as offsetting emission increases at a stationary source for purposes of federal new source review.

Therefore, the District is now proposing to adopt new Rule 27.1 to incorporate federal requirements on the creation and use of the MERCs pursuant to the existing Alternative Program, and submit the adopted rule to EPA for inclusion into the SIP. For the most part, the requirements are already substantively contained in the provisions of the existing Alternative Program adopted by the District in 2000.

# Specifically, the proposed rule will:

- Establish limitations and conditions for use of the MERCs to satisfy federal requirements. These limitations and conditions for use include those already contained in the existing Alternative Program and, additionally, an explicit requirement that the MERC be valid for the lifetime of the project for which it is used to provide NSR offsets and that the MERC use be authorized in writing by EPA.
- Require that the original engines that are replaced to create a MERC be destroyed or permanently removed from San Diego County. The engine may be relocated within California only under certain prescribed circumstances, and the engine may not be relocated in Baja California. This requirement is contained in the existing Alternative Program.
- Include requirements to ensure the emission reductions remain permanent if a mobile source used to create a MERC is repowered or replaced. These requirements are contained in the existing Alternative Program.
- Require certain records to be maintained 20 years from the date the MERC is created. In the existing Alternative Program, these same records must be maintained for the lesser of the credit lifetime or 20 years.
- Require that all records be kept for at least five years from the date of their creation, except that activity monitoring records must be kept at least 15 years from the beginning of the 10-year activity monitoring period. The existing Alternative Program requires that all records be kept for at least five years from the date of their creation.
- Require that a letter must accompany all required reports of activity monitoring, that it is signed by the owner of the mobile sources that are the basis of a MERC, and states that all activity monitoring information is true, accurate, and complete.

It is important to note that the existing Alternative Program will remain unchanged by this action and continue to be applicable to the creation and use of MERCs under that program. Consequently, both the requirements of the existing Alternative Program and those of proposed new Rule 27.1 would be applicable to the creation and use of such MERCs if Rule 27.1 is adopted.

If you would like a copy of proposed new Rule 27.1 or the existing Alternative Program, please visit the District's website at <a href="https://www.sdapcd.org">www.sdapcd.org</a>, under Rules & Regulations, Public Workshop, or call Janet McCue at (858) 586-2712. If you have any questions concerning the rule, please contact Steven Moore at (858) 586-2750.

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ROSA MARIA S. ABREU, Assistant Director Air Pollution Control District

RMA:SBM:jlm

#### SAN DIEGO AIR POLLUTION CONTROL DISTRICT

PROPOSED RULE 27.1—FEDERAL REQUIREMENTS FOR OWNERS OF MOBILE SOURCES THAT GENERATE CREDITS UNDER THE SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT'S "ALTERNATIVE MOBILE SOURCE EMISSION REDUCTION PROGRAM FOR REPLACING MEDIUM AND HEAVY HEAVY-DUTY DIESEL POWERED VEHICLES AND REPOWERING OF MARINE VESSELS UNDER RULE 27 (C)(1)(VI)" AS APPROVED ON SEPTEMBER 8, 2000, AND CONDITIONS FOR USE OF SUCH CREDITS

## (a) Applicability

The requirements of this document shall apply to owners of mobile sources that form the basis of a mobile source emission reduction credit (MERC) created under the San Diego County Air Pollution Control District's (District) program entitled, "Alternative Mobile Source Emission Reduction Program for Replacing Medium and Heavy Heavy-Duty Diesel Powered Vehicles and Repowering of Marine Vessels under Rule 27 (c)(1)(vi)" as approved on September 8, 2000 (Alternative Program), and to the use of such credits by owners or operators of stationary sources to satisfy federal New Source Review (NSR) offset requirements. Owners of the mobile sources that form the basis of a MERC shall satisfy all applicable requirements before a MERC is eligible to be used as a NSR offset.

#### (b) Conditions for Use as NSR Offsets

Mobile source emission reduction credits (MERCs) shall be eligible for use to meet federal requirements under the Alternative Program only if all of the following conditions are satisfied:

- (1) The owner of the mobile source that generates the credit applied for the credit;
- (2) Credit has been granted only for emission reductions of oxides of nitrogen (NOx) determined according to Sections (d) and (e) of the Alternative Program;
- (3) The credit is generated by mobile sources that operate solely in San Diego County or Near-Shore San Diego Coastal Waters;
- (4) The credit is generated by one of the following mobile source emission reduction projects:
  - (i) Replacement of existing medium heavy-duty (MHD) vehicles that are powered with diesel-fueled compression-ignition engines with new MHD vehicles powered with spark-ignition or compression-ignition engines that are fueled with gaseous fuel;
  - (ii) Replacement of existing heavy heavy-duty (HHD) vehicles in refuse collection applications that are powered with diesel-fueled compression-ignition engines with new HHD vehicles powered with spark-ignition or compression-ignition engines that are dual fueled or fueled with gaseous fuel; or

- (iii) Repowering of marine vessels that are powered with diesel-fueled compressionignition engines with new compression-ignition engines that are fueled with diesel or an alternative clean fuel;
- (5) The credit is not used to satisfy any federal requirement except to provide offsets for NOx emission increases as set forth at Clean Air Act §173, as implemented by District Rule 20.3—Major Stationary Sources and PSD Stationary Sources—Subsection (d)(5), as adopted on November 4, 1998, or subsequent implementations of federal NSR by the District and approved by the U. S. Environmental Protection Agency;
  - (6) The credit is not used as an interpollutant offset;
- (7) The credit is valid for the lifetime of the project for which it is surrendered to provide federal NSR offsets; and
- (8) The credit is only used pursuant to written authorization from the Air Division Director, United States Environmental Protection Agency, Region IX, to the Air Pollution Control Officer, or their legal successors, finding that the credit is based on emission reductions that are real, quantifiable, surplus, permanent, and enforceable.

#### (c) Definitions

- (1) "Activity Metric" means a parameter that is representative of the extent of a mobile source's use and, in conjunction with an emission factor, used to quantify emission reductions during a period of time. Activity metrics are vehicle miles traveled (VMT), volume or mass of fuel burned, or time of operation.
- (2) "Baseline Activity Level" means the quantity of an activity metric used to quantify annual emissions generated within the District or Near-Shore San Diego County Waters by a mobile source during a baseline period.
- (3) "Compression-Ignition" means relating to a type of engine with operating characteristics that are significantly similar to the theoretical Diesel combustion cycle. The absence of a throttle to regulate intake air flow for controlling power during normal operation is indicative of a compression-ignition engine.
- (4) "Diesel Fuel" means any fuel that is commonly or commercially known, sold, or represented as diesel fuel No. 1-D or No. 2-D.
- (5) "Dual-Fuel Vehicle" means a vehicle designed to be operated simultaneously on gaseous fuel and diesel fuel, or diesel fuel alone.
- (6) "**Equivalent Mobile Sources**" means a group of mobile sources owned by the same person or persons for which a single MERC certificate has been issued representing the combined emission reductions of all the mobile sources in the group.

- (7) "Gaseous Fuel" means fuel existing as a gas at standard conditions including, but not limited to, natural gas, methane, ethane, propane, butane, and gases stored as a liquid at high pressure such as liquefied petroleum gas.
- (8) **Heavy-Duty Vehicle**" means any motor vehicle having a manufacturer's gross weight rating greater than 6,000 pounds, except passenger cars.
- (9) "**Heavy Heavy-Duty Vehicle**" means a heavy-duty vehicle that is propelled by a heavy heavy-duty engine as defined in 40 CFR § 86.085-2, as amended November 16, 1983.
- (10) "Low NOx Rebuild Engine" means a Low NOx Rebuild Engine, as defined in the applicable Settlement Agreement.
- (11) "Low NOx Rebuild Kit" means a Low NOx Rebuild Kit, as defined in the applicable Settlement Agreement.
- (12) "Low NOx Rebuild Program" means the Low NOx Rebuild Program, as described in the applicable Settlement Agreement, except that the date by which a vehicle must be equipped with a Low NOx Rebuild Kit is modified under this alternative program to the sooner of the date an engine is deployed outside of San Diego County or the date the accumulated mileage or service event criteria specified in the applicable Settlement Agreement is satisfied.
- (13) "**Medium Heavy-Duty Vehicle**" means a heavy-duty vehicle that is propelled by a medium heavy-duty engine, as defined in 40 CFR § 86.085-2, as amended November 16, 1983.
- (14) "MERC Activity Monitoring Period" means the ten year period that a MERC is subject to activity monitoring. The MERC activity monitoring period begins on the first day of the first calendar quarter following the date the MERC is granted by the District.
- (15) "MERC Creation Date" means the date on which the action is taken to create the emission reductions on which the MERC is based. For replacement of medium or heavy heavy-duty diesel powered vehicles, the MERC creation date is the date that the replacement vehicle is delivered to the owner of the vehicle that is being replaced. For repowering of marine vessels, the MERC creation date is the date that the vessel first takes to sea under the power of the replacement engine.
- (16) "MERC Project" means one or more MERCs that are based on equivalent mobile sources.
- (17) "Mobile Sources that Form the Basis of the MERC" means the mobile source, or group of equivalent mobile sources, that generates the emission reductions that are represented by the MERC, including all subsequent replacements or repowerings of those mobile sources.

- (18) "Near-Shore San Diego Coastal Waters" means the area water lying within all harbors, bays, inlets, and estuaries in the jurisdiction of the San Diego County Air Pollution Control District, and the area of water bounded by latitude N 33° 20' 10" on the north and by the oceanward extension of the United States-Mexico International Boundary on the south, and lying within 25 English statute miles oceanward of lines drawn in front of all harbors along the outermost works and installations thereof; 25 English statute miles oceanward of lines drawn from headland to headland across the mouth of each bay, inlet, and estuary, regardless of the length of lines; and, where there are no harbors, bays, estuaries, or inlets, 25 miles oceanward of the lowest low-water mark on the shore.
- (19) "Ongoing Activity Metric" means an activity metric that is not expected to change in magnitude between baseline operations and projected operations in a MERC Project, if the nature and operational mode of a mobile source's use does not change. Ongoing activity metrics include hours of operation and vehicle miles traveled.
- (20) "Projected Activity Level" means the quantity of an activity metric that is used to quantify forecast annual emissions generated within the District or Near-Shore San Diego County Waters by a mobile source during its use in a proposed MERC Project.
- (21) "Settlement Agreement" means one of the following, as applicable: Settlement Agreement Between the California Air Resources Board and Caterpillar Inc., as signed on December 15, 1998; Settlement Agreement Between the California Air Resources Board and Cummins Engine Company, Inc., as signed on December 15, 1998; Settlement Agreement Between the California Air Resources Board and Detroit Diesel Corporation, as signed on December 15, 1998; Settlement Agreement Between the California Air Resources Board and Mack Truck, Inc. & Renault V. I., s. a., as signed on December 15, 1998; Settlement Agreement Between the California Air Resources Board and Volvo Truck Corporation, as signed on December 15, 1998; or Settlement Agreement Between the California Air Resources Board and Navistar International Transportation Company, as signed on October 22, 1998.

#### (d) Disposal of Original Engines

In all cases, the original engine of a mobile source that is repowered or replaced as part of a MERC project shall not be operated in San Diego County and shall be permanently removed from San Diego County or destroyed. For engines that are destroyed, the engines must be destroyed and disposed of in a manner that complies with all applicable federal, state, and local laws. For engines that are not destroyed, the engine shall be disposed of as specified in Subsections (d)(1)-(d)(2).

- (1) For an original engine that is a Low NOx Rebuild Engine, the engine shall be sold and/or permanently relocated, separately or as part of a mobile source, to a location:
  - (i) Outside of California and Baja California;

- (ii) Within California but outside the boundaries of the South Coast Air Basin, provided that prior to beginning operations outside of San Diego County, the engine is equipped with a Low NOx Rebuild Kit in accordance with the applicable Low NOx Rebuild Program; or
- (iii) Within the boundaries of the South Coast Air Basin, provided that prior to beginning operations outside of San Diego County, the engine is equipped with a Low NOx Rebuild Kit in accordance with the applicable Low NOx Rebuild Program, and the mobile source's owner provides a demonstration approved by the Air Pollution Control Officer, the Air Resources Board, and the U. S. Environmental Protection Agency that the air quality of the South Coast Air Basin will not be degraded from the relocation and operation of the mobile source.
- (2) For an original engine that is not a Low NOx Rebuild Engine, the engine shall be sold and/or permanently relocated, separately or as part of a mobile source, to a location:
  - (i) Outside of California and Baja California;
  - (ii) Within California but outside the boundaries of the South Coast Air Basin; or
  - (iii) Within the boundaries of the South Coast Air Basin, provided that the engine was manufactured after October 1, 2002, and is certified to be in compliance with all applicable South Coast Air Quality Management District, state, and federal emission standards, and the mobile source's owner provides a demonstration approved by the Air Pollution Control Officer, the Air Resources Board, and the U. S. Environmental Protection Agency that the air quality of the South Coast Air Basin will not be degraded from the relocation and operation of the mobile source.

# (e) Subsequent Replacement or Repowering of Mobile Sources that Form the Basis of MERC

If a mobile source that forms the basis of a MERC granted under this alternative program is itself replaced or repowered at any time during the period of time a credit has been surrendered, or is eligible to be surrendered, to provide NSR offsets, the replacement or repowered mobile source must have an emission factor that is less than or equal to the smaller of the following two emission factors:

- (1) The most stringent emission factor derived from any federal or California standard applicable to a new engine for the model year corresponding to the date of the replacement of the engine powering the replacement or repowered mobile source; or
  - (2) The emission factor of the mobile source that is replaced or repowered.

## (f) Recordkeeping and Reporting

(1) For all replacement or repowered mobile sources that form the basis of a MERC, for 20 years following the first time the MERC is eligible to be surrendered to provide NSR offsets the owner of the mobile source shall maintain calendar quarterly records of:

- (i) Location(s) where the mobile source is parked, garaged, or docked when not in operation.
- (ii) Mobile source and mobile source engine identifications such as Vehicle Identification Number or Hull Number, engine manufacturer model designation, and engine serial number;
- (iii) Identification of key engine components such as turbocharger, injectors, fuel pump, and electronic control program version;
  - (iv) Engine modifications;
- (v) Sale, lease, accidental loss, repowering, or replacement, including the identity of the mobile source and mobile source engine involved, and the identity of any mobile source and mobile source engine replacing or repowering the mobile source;
  - (vi) Source testing results and supporting information; and
  - (vii) Engine maintenance.

Except for engine maintenance records, on or before the last day of the month following each calendar quarter, the owner of the mobile source shall provide copies of these records for the preceding calendar quarter to the District and any owner of the MERC, or portion thereof, and any owner or operator of any stationary source for which the MERC, or a portion thereof, has been surrendered to provide a new source review offset. In addition, for any mobile sources that are subject to an approved enhanced maintenance program, the owner of the mobile source shall provide copies of these records in the manner specified in the enhanced maintenance program.

- (2) For all replacement or repowered mobile sources that form the basis of a MERC, beginning at the start of the MERC activity monitoring period and for each of the succeeding ten years, the owner of the mobile source or group of equivalent mobile sources shall maintain calendar quarterly records of:
  - (i) Activity level in a metric specified in the MERC, as approved by the Air Pollution Control Officer:
    - (ii) Fuel use;
    - (iii) Hours of operation for each mobile source in San Diego County; and
  - (iv) Number, duration, and nature of any trips outside of San Diego County and Near Shore San Diego Coastal Waters for each mobile source.

On or before the last day of the month following each calendar quarter, the owner of the mobile source shall provide copies of these records for the preceding calendar quarter to the District and any owner of the MERC, or portion thereof, and the owner or operator of any stationary source for which the MERC, or a portion thereof, has been surrendered to provide a new source review offset. A cover letter signed by the owner of the mobile sources(s) must accompany the information and must state that the information is true accurate and complete.

- (3) Beginning with the MERC creation date, for the period of time the MERC is eligible to be surrendered to provide NSR offsets, or would have been eligible for such surrender if it had not already been surrendered, the owner or operator of any mobile source that forms the basis of a MERC granted under this alternative program shall make the mobile source available for source testing upon written request of the Air Pollution Control Officer, the Air Resources Board, or the U. S Environmental Protection Agency.
- (4) Each mobile source that forms the basis of a MERC shall be equipped with a nonresettable totalizing clock hour meter, a nonresettable totalizing odometer—except for marine vessels, and any other device specified by the Air Pollution Control Officer that is necessary to monitor ongoing emission reductions or mobile source employment.
- (5) All records shall be maintained at the location the mobile source is parked, garaged, or docked, or, with the advanced written approval of the Air Pollution Control Officer, an alternative location. All records shall be maintained for a period of at least five years from the date of the record except that records required pursuant to Subsection (f)(2) shall be maintained for at least 15 years from the start of the on-going activity monitoring period.