State of California

AIR RESOURCES BOARD

Executive Order G-04-050

Pursuant to the authority vested in the Air Resources Board (ARB) by Health and Safety Code (HSC), Division 26, Part 5, Chapter 2; and pursuant to the authority vested in the undersigned by HSC Section 39515 and 39616 and the Executive Order; G-04-050

Relating to Executive Officer Compliance Extension under Section 2021.2(d)(2)(A) of Title 13 of the California Code of Regulations (CCR)

Solid Waste Collection Vehicles (collection vehicles) with 1988 to 2002 Model Year Engines in Group 1

In September 2003 the ARB adopted a new rule requiring owners of collection vehicles to phase-in the use of best available diesel particulate matter control technology on collection vehicles with 1960-2006 model year engines between 2004 and 2010 according to the following schedule from Section 2021.2, Title 13, CCR (Table 1):

Table 1- Implementation Schedule for Collection Vehicles.

Group	Engine Model Years	Percentage of Group to Use Best Available Control Technology	Compliance Deadline
1	1988 – 2002	10 25 50 100	December 31, 2004 December 31, 2005 December 31, 2006 December 31, 2007
2a[a]	1960 – 1987 (Total fleet ≥ 15 collection vehicles)	15 40 60 80 100	December 31, 2005 December 31, 2006 December 31, 2007 December 31, 2008 December 31, 2009
2b	1960 – 1987 (Total fleet < 15 collection vehicles)	25 50 75 100	December 31, 2007 December 31, 2008 December 31, 2009 December 31, 2010
3	2003 – 2006 (Includes dual-fuel and bi-fuel engines)	50 100	December 31, 2009 December 31, 2010

[a]Group 2a: An owner may not use Level 1 technology as best available control technology on Group 2a engines or collection vehicles.

One method of control is the use of a diesel emission control strategy (DECS) verified to reduce diesel particulate matter by the greatest amount, or highest verified level according to Sections 2700 through 2710, Title 13, CCR. As of February 29, 2004, DECS have been verified by ARB for use on collection vehicles (Attachment 1). These are listed by engine make and model year, but are engine family specific.

IT IS ORDERED AND RESOLVED: The owner is granted a one-year compliance extension to December 31, 2005 for the following engines:

- Any 1988 – 1990 model year engine.
- Any 1991 – 2002 model year engine not on the attached referenced list.

The owner must first apply best available control technology to all applicable engines in Group 1 of their fleet as required before using this extension. The solid waste collection vehicle owner is expected to comply with the regulatory requirements of Section 2021 and 2021.1 as otherwise required.

Executed at El Monte, California, this 21 day of July 2004

Robert H. Cross, Chief
Mobile Source Control Division

Attachment 1 Diesel Emission Control Strategies Verified for Use on Solid Waste Collection Vehicle Engines by Engine Make and Model Year.

VERIFIED DEVICES WHICH MAY BE APPLICABLE FOR SOLID WASTE COLLECTION VEHICLES

Devices verified as of February 29, 2004 that may be applicable for use in solid waste collection vehicles are listed below. These products are verified for use with four-stroke diesel engines certified in California, per the table below, and may have operational restrictions that apply. You must check with the device manufacturer to ensure that the device is verified for use with your particular engine and your vehicle's specific duty cycle.

Model Year	Make	Product	Contact
1993 through 2002	Cummins (M11, ISM, C8.3, ISC, or ISL), Navistar DT466	Cleaire Longview	http://www.cleaire.com
1998 through 2002	Caterpillar Bi-Fuel	Clean Air Partners DPX	http://www.cleanairpartners.com
1996 through 2002	Power Systems Associates		
1991 though 1993	Caterpillar, Cummins, DDC, Ford, GM, Hino, Isuzu, MB, Mack, Mitsubishi, Navistar, Nissan, Perkins, Renault, Volvo	Donaldson DCM 6000 Series + Spiracle; DCM 6100 Series + Spiracle	http://www.donaldson.com
1994 though 2002	Caterpillar, Cummins, DDC, GM, Hino, Isuzu, MB, Mack, Mitsubishi, Navistar, Nissan, Volvo	Donaldson DCM 6100 Series; DCM 6000 Series + Spiracle, DCM 6100 Series + Spiracle	
1994 through 2000	Renault		
1994 through 1996	Perkins		
1994 through 2002	Caterpillar, Cummins, DDC, General Engine, GM, Hino, Isuzu, MB, Mack, Mitsubishi, Navistar, Nissan, Perkins, Renault, Volvo	Donaldson DPM Filter	
1994 through 2002	Caterpillar, DDC, Mack, Volvo,	Lubrizol ECS Purifilter DPF	http://www.lubrizol.com
1994-2003	Cummins, Navistar		
2003	Daimler Chrysler, Hino, Isuzu, Mitsubishi		