



Verification Procedure - Currently Verified

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The following information is provided as a summary of verified diesel emission control strategies. Additional requirements specific to engine compatibility are provided in the Executive Order. The factors outlined in the Executive Order are legal requirements of each verification; therefore, these conditions must be met before determining if a particular device is applicable to the end-users type of engine. The Air Resources Board recommends that you contact the manufacturer, or their authorized distributor, prior to making any purchasing decision. Please click on the manufacturer link for additional information.

Cleaire products have not been available for sale or lease since it ceased operations on January 18, 2013. ESW CleanTech Incorporated (ESW CleanTech) acquired the Cleaire product line on April 18, 2013, and will provide new sales of product under its ownership as well as support for existing Cleaire customers. Vehicles that have the Cleaire devices already installed in a verified configuration will continue to meet applicable in-use fleet rule requirements. Please refer to the following website for additional information: [Cleaire Information Page](#)

PM Level	Product Name	Technology Type	PM Reduction	NOx Reduction	Applicability
LEVEL 3	Boshart Engineering Global DPF	DPF	85%	N/A	1993-2006 on-road; CARB diesel.
	Carrier EES	DOC+DPF	85%	N/A	Carrier Transicold X4-Series and Vector 8500 /8600MT TRUs and UG/RG TRU gensets with Tier 4f engines rated at <25 hp
	Carrier Legacy EES	DOC+DPF	85%	N/A	Carrier Transicold TRU models X2-Series, XT-Series, XTC-series, Genesis TM900, Genesis TM1000, Ultra XL (with and without standby), Vector 6500, and 6600MT equipped with model years 2004 through 2012 Kubota engines.
	Catalytic Exhaust Products Ltd. Dieselytic SXS-SC DPF	DPF	85%	N/A	Stationary prime and emergency standby generators and pumps with Tier 1, Tier 2, or Tier 3 certified off-road engines meeting 0.2 g/bhp-hr or less diesel PM
	Caterpillar DPF for Stationary	DPF	85%	N/A	

				Stationary prime and emergency standby generators. CARB diesel; biodiesel.*
CDTi Purifilter EGR	DPF	85%	N/A	2002-2010 model year; on-road; CARB diesel; biodiesel.*
CDTi Purifilter H (High Load)	DPF	85%	N/A	1993-2006 CA certified engines; Specific 1994-2006 Federally certified engines; on-road; CARB diesel; biodiesel.*
CDTi Purifilter Plus	DPF	85%	N/A	1993 and 2010 on-road; CARB diesel; biodiesel.*
CDTi Purifilter Plus M	DPF	85%	N/A	1993 - 2010 on-road; CARB diesel; biodiesel.*
Clariant Corporation EnviCat®- DPF	DPF	85%	N/A	Stationary prime and emergency standby generators and pumps; CARB diesel; biodiesel.*
CleanAIR Systems PERMIT	DPF	85%	N/A	Stationary emergency and prime generators; CARB diesel; biodiesel.*
DCL International Inc.	DPF	85%	N/A	1996-2011 model year, off-road; CARB diesel; biodiesel.*
DCL International Inc. ROADWARRIOR.	DPF	85%	N/A	1994-2004 model year, on-road; CARB diesel; biodiesel.*
DCL International Inc.	DPF	85%	N/A	Stationary prime and emergency standby generators, pumps, and compressors; Tier 1, 2, or 3 off-road engines certified to < 0.15 g/bhp-hr PM; CARB diesel; biodiesel.*
Diesel Emission Technologies UltraTrap	DPF	85%	N/A	1994-2006 on-road; CARB diesel; biodiesel.*
Dinex DiSiC	DPF	85%	N/A	Most trailer TRUs using 1999-2005 model year engines; CARB diesel.
Donaldson LNF	DPF	85%	N/A	1993-2006 model year on-road; CARB diesel; biodiesel. CARB diesel; biodiesel.*
Donaldson LXF	DPF	85%	N/A	2002-2006 model year on-road; CARB diesel; biodiesel.*
Donaldson SEF	DPF	85%	N/A	1991-2006 model year on-road; CARB diesel; biodiesel.*
Engine Control System Purifilter L (Low Load)	DPF	85%	N/A	1994-2004 on-road; CARB diesel; biodiesel.*
Engine Control System Combifilter	DPF	85%	N/A	2007 or older off-road; CARB diesel; biodiesel.*
ESW CleanTech Horizon	DPF	85%	N/A	Most four-stroke on-road engines through 2006; CARB diesel; biodiesel.*

ESW CleanTech LongMile-S	DPF	85%	N/A	1993 - 2010 model year on-road applications; CARB diesel; biodiesel.*
ESW CleanTech Longview	Lean NOx Catalyst and DPF	85%	25%	1993-2006 model year on-road; CARB diesel; biodiesel.*
ESW CleanTech Phoenix	DPF	85%	N/A	Most 1996 - 2014 off-road; CARB diesel; biodiesel.*
ESW CleanTech Skyline	DPF	85%	N/A	Most off-road; CARB diesel; biodiesel.*
ESW CleanTech Vista	DPF	85%	N/A	1993-2010 model year on-road; CARB diesel; biodiesel.*
ESW Technologies ThermaCat	DPF	85%	N/A	1996-2010; off-road; 1993-2006 on-road; CARB diesel; biodiesel.*
ESW Technologies ThermaCat™ e	DPF	85%	N/A	1994-2009; on-road; with EGR; CARB diesel; biodiesel.*
Global Emissions Systems, Inc. (GESI) 6000DPF	DPF	85%	N/A	Stationary prime and emergency standby generators and pumps with Tier 1, Tier 2, or Tier 3 certified off-road engines meeting 0.2 g/bhp-hr or less diesel PM
GTE Industries. Purity DPF	DPF	85%	N/A	Stationary prime and emergency standby generators and pumps with Tier 1, Tier 2, or Tier 3 certified off-road engines meeting 0.2 g/bhp-hr or less diesel PM
HUG Engineering, Inc Mobiclean R	DPF	85%	N/A	Most 1991 - 2006 on-road; CARB diesel; biodiesel.*
HUSS FS-MK Off-Road	DPF	85%	N/A	Most off-road through 2011 MY; CARB diesel; biodiesel.*
HUSS FS-MK On-Road	DPF	85%	N/A	Most on-road diesel engines through 2006 MY and most off-road through 2010 MY; CARB diesel; biodiesel.*
HUSS FS-MK for TRU	DPF	85%	N/A	Verified for 1998 and newer TRU's. CARB diesel; biodiesel.*
Impco Technologies Canada CLEARSKY	DPF	85%	N/A	Select Kubota Z482 diesel engines with model years between 2005 and 2015; CARB diesel; biodiesel.*
Johnson Matthey AdvCCRT	DPF	85%	N/A	Specific 2002-2006; on-road; CARB diesel; biodiesel.*
	DPF	85%	N/A	

Johnson Matthey CRT reformulated				1994 - 2006; on-road; CARB diesel; biodiesel.*
Johnson Matthey CRT	DPF	85%	N/A.	Stationary emergency/standby generators; conditionally verified for stationary prime generators. CARB diesel; biodiesel.*
Johnson Matthey EGRT	EGR/DPF	85%	40%	2000 International DT-466, 2000 Cummins ISM 2001 Cummins ISB, 1998-2002 Cummins ISC, 2001 Cummins ISL, 2001 MY DDC - 50, and 2001 DDC - 60. on-road; CARB diesel.
MIRATECH Corporation combiKat	DPF	85%	N/A	Stationary emergency and prime generators with a PM emission rate of 0.2 g/bhp-hr or less.
MIRATECH® LTR™ DOC/DPF System	DPF	85%	N/A	Stationary emergency standby generators with a PM emission rate of 0.22 g/bhp-hr or less.
Nett Technologies. NETT GreenTRAP™ DPF	DPF	85%	N/A	Stationary prime and emergency standby generators and pumps with Tier 1, Tier 2, or Tier 3 certified off-road engines meeting 0.2 g/bhp-hr or less diesel PM
Nett BlueMAX™ NOVA 300e System	DPF SCR	85%	85%	Stationary prime generators with a PM emission rate of 0.2 g/bhp-hr or less.
Nett Technologies VorTEQ	DPF	85%	N/A	Off-Road; CARB diesel.
Proventia EHDPF	DPF	85%	N/A	Thermo King Tripac APU, powered by select model year 2007 to 2013 Yanmar TK270M or TK270VFM diesel engines with a diesel particulate matter certification of 0.2 grams per kilowatt hour or less.
RYPOS, Inc. ActiveDPF/C3+™	DPF	85%	N/A	Verified for both diesel-electric and diesel-hydraulic rubber tired gantry (RTG) cranes; CARB diesel; biodiesel.*
RYPOS DPF/ULETRU	DPF	85%	N/A	2003 and newer Carrier and ThermoKing TRU's.
Rypos, Inc. HDPF/C™	Hybrid DPF	85%	N/A	1996-2007 stationary emergency standby generators and pumps with a PM emission rate of 0.2 g/bhp-hr or less and certified to Tier 1, Tier 2, or Tier 3 off-road diesel engine standards; CARB diesel; biodiesel.*
SK Energy Co. Econix DPF -A	DPF	85%	N/A	1994-2006; on-road; CARB diesel.
Thermo King eDPF	DPF	85%	N/A	2006-2013 Thermo King auxiliary power units; CARB diesel.

	Universal Emissions Technologies GreenShield® DPF	DPF	85%	N/A	Stationary prime and emergency standby power generators and pumps with Tier 1, Tier 2, or Tier 3 certified off-road engines.
L E V E L 2	Engine Control System AZ Purimuffler/Purifier	DOC + Alt Fuel	50%	20%	1996-2002 off-road; PuriNOx
	Lubrizol PuriNOx	Emulsified Fuel	50%	15%	1988-2003 on-road.
	Proventia FTF™	FTF	50%	N/A	Most Thermo King trailer TRUs using 1985 through 2003 model year engines; CARB diesel; biodiesel.*
	Proventia Bobtail FTF™	FTF	50%	N/A	Select Thermo King truck TRUs using 1987 to 2004 model year engines or Carrier Transcold truck TRUs using 1994 to 2004 model year engines. CARB diesel; biodiesel*
	Rypos ADPF	DPF	50%	N/A	1996-2008 stationary engines (certified to Tier 1, 2, or 3 off-road PM emission level); CARB diesel; biodiesel*; no EGR, DOC or pre-existing DPF.
	Rypos, Inc. DPF/LETRU™	DPF	50%	N/A	Applicability: Most trailer TRUs using 2003 and older model year engines; ULSD CARB diesel (less than 15 ppm sulfur).
	Rypos, Inc. ADPF	DPF	50%	N/A	Marine Harbor Craft
	Rypos ActiveDPF/C™	DPF	50%	N/A	Both diesel-electric and diesel-hydraulic rubber tired gantry (RTG) cranes; CARB diesel; biodiesel.*
L E V E L 1	Donaldson DCM 6000	DOC	25%	N/A	1988-1990 on-road; CARB diesel; biodiesel.*
	Donaldson 6000 + Spiracle	DOC + crankcase filter	25%	N/A	1988-2002 on-road; CARB diesel; biodiesel.*
	Donaldson 6000 + Spiracle (off-road)	DOC + crankcase filter	25%	N/A	Off-road port equipment; CARB diesel; biodiesel.*
	Donaldson DCM 6100	DOC	25%	N/A	1994-2002; CARB diesel; biodiesel.*
	Donaldson DCM 6100 + Spiracle	DOC + crankcase filter	25%	N/A	1991-2002; CARB diesel; biodiesel.*
			25%	N/A	1985-1995 off-road; CARB diesel.

Viscon California, LLC	Fuel Additive			
Vycon REGEN System	Energy Storage System	25%	30%	Pre-1996 model year or Tier 1, 2, or 3 certified off-road diesel engines on rubber-tired gantry cranes; biodiesel. *

* These systems have been verified for use with biodiesel blends subject to certain requirements.