Pursuant to the authority vested in the Air Resources Board by Health and Safety Code Division 26, Part 5, Chapter 2; and pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: The engine and emission control systems produced by the manufacturer are certified as described below for use in diesel or incomplete medium-duty vehicles with a manufacturer's GVWR from 8501 to 14000 pounds. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	EMISSION STD CATEGORY <sup>2</sup>	FUEL TYPE 1	STANDARDS & TEST PROCEDURE	ENGINE SIZES (L)	ECS & SPECIAL FEATURES 3		OBD COMPLIANCE
2005	5GEPH06.5527	ULEV	Diesel	Diesel	6.5	OC, EGR, IDI, TC	OBD(F)	
ENGINE MODELS / CODES (rated power, in hp)							ENGINE (L)	OBD COMPLIANCE
	L65 / 1 (205)							OBD(F)
			*		,	17-20-27-11-12-27-27-27-27-27-27-27-27-27-27-27-27-27	*	
*								*
			*				*	*

cable; GVWR=gross vehicle weight rating; 13 CCR xyz=Title 13, California Code of Regulations, Section xyz; 40 CFR 86.abc=Title 40, Code of Federal Regulations, Section 86.abc; (2004may26)

L=liter; hp=horsepower; kw=kilowatt;
CNG/LNG=compressed/liquefied natural gas; LPG=liquefied petroleum gas; E85=85% ethanol fuel; MF=multi fuel a.k.a BF=bi fuel; DF=dual fuel; FF=flexible fuel;
SULEV / LEV=super ultra / ultra / ulw emission vehicle;
SUSE=mission control system; TWC/OC=three-way/oxidizing catalyst; WU (prefix) =warm-up catalyst; DPF=diesel particulate filter; HO2S/O2S=heated/oxygen sensor; HAFS/AFS=fuel-ratio sensor (a.k.a., universal or linear oxygen sensor); TBI=throttle body fuel injection; SFI/MFI=sequential/multi port fuel injection; DGI=direct gasoline injection; GCARB=gaseous IDI/DDI=indirect/direct diesel injection; TC/SC=turbo/super charger; CAC=charge air cooler; EGR=exhaust gas recirculation; PAIR/AIR=pulsed/secondary air injection; SPL=smoke puff OBD(F) / (P) / (\$)=full / partial / partial with a fine / on-board diagnostic; ECM/PCM=engine/powertrain control module; EM=engine modification; 2 (prefix)=parallel; (2) (suffix)=in series;

Following are: 1) the FTP exhaust emission standards or family emission limit(s) as applicable under 13 CCR 1956.8; 2) the EURO and NTE limits under the applicable California exhaust emission standards and test procedures for heavy-duty diesel engines and vehicles (Test Procedures); and 3) the corresponding certification levels, in g/bhp-hr, for this engine family. "Diesel" CO, EURO and NTE certification compliance may have been demonstrated by the manufacturer as provided under the applicable Test Procedures in lieu of testing. (For dual- and flexible-fueled engines, the CERT values in brackets [] are those when tested on conventional test fuel.) <sup>4</sup>

	NN	MHC	N	Ox	NMH	C+NOx	(	<del>20</del>	Р	M	нс	НО
	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO
STD	0.5	*	*	*	2.5	•	14.4	*	0.10	*	0.050	*
FEL	*	*	*	*	*	*	*	*	*	*	*	
CERT	0.2	•	. *	*	2.4	*	1.5	*	0.09	*	0.036	*
NTE		*		*		*		*		*		*

4 g/bhp-hr=grams per brake horsepower-hour; FTP=Federal Test Procedure; EURO=Euro III European Steady-State Cycle; NTE=Not-to-Exceed emission limit; STD=standard or emission test cap; FEL=family emission limit; CERT=certification level; NMHC/HC=non-methane/hydrocarbon; NOx=oxides of nitrogen; CO=carbon monoxide; PM=particulate matter; HCHO=formaldehyde;

**BE IT FURTHER RESOLVED**: Certification to the FEL(s) listed above, as applicable, is subject to the following terms, limitations and conditions. The FEL(s) is the emission level declared by the manufacturer and serves in lieu of an emission standard for certification purposes in any averaging, banking, or trading (ABT) programs. It will be used for determining compliance of any engine in this family and compliance with such ABT programs.

**BE IT FURTHER RESOLVED:** The listed engine models have been certified to the optional emission standards and test procedures in 13 CCR 1956.8 applicable to diesel or incomplete medium-duty vehicles with a GVWR from 8501 to 14000 pounds and, therefore, shall be subject to 13 CCR 2139(c) (in-use testing of engines certified for use in diesel or incomplete medium-duty vehicles with a 8501-14000 pound GVWR).

BE IT FURTHER RESOLVED: For the listed engine models the manufacturer has submitted the materials to demonstrate certification compliance with 13 CCR 1965 (emission control labels), 13 CCR 1968.2 (on-board diagnostic, full or partial compliance), and 13 CCR 2035 et seq. (emission control warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations. The Bureau of Automotive Repair will be notified by copy of this Executive Order.

Executed at El Monte, California on this

6TH day of January 2005.

Allen Lyons, Chief Mobile Source Operations Division

**General Engine Products LLC** 

Manufacturer:

Engine category: On-highway HDDE

Cert contact: Michael Kunz 1. Model Year: 2005 8/30/04 17. Estimated Start Production Period: End 12/31/2005 2. Carry over: Yes 18. Sales Area: 50 States If yes, list the previous family: 4GEPH06.5527 3. Process Code: New Submission 19. Plant Contact: Date EPA Fee Paid: 4-7-2004 Jeffrey Dowell 4. EPA Standard Engine Family: (734) 523-8134 5GEPH06.5527 5. Mfr's Family Name: N/A 6. Engine Cycle: Diesel 20. Plant Location: 7. Displacement(s) (CID or Liters) 6.5 Liters General Engines Products LLC 2000 Watkins Glenn Drive 8. Engine Configuration: V-8 Franklin, Ohio 45005 X EGR 9. Emission Control System: Catalyst **Engine Modification** None Electronic Control Other... 21. Program Information: Smoke Puff Limiter OC, GGR, TC, IDI **NCPs AVE** B&T **PM** PM PM 10. Fuel Type: Diesel NOx NOx NOx 11. Fuel System Type: Indirect Diesel Injection NMHC+NOx NMHC+NO<sub>x</sub> NMHC+NO<sub>X</sub> 12. Method Of Aspiration: Turbo-Charged **≻**∕None ➢ None None NΑ NA NA 13 Useful Life Period: 10 years / 120,000 miles 14. Deterioration Factor Type 22. Family Emission Limits: A. Gaseous Exhaust: Multiplicative PM **Additive** B. Smoke: **NOx** N/A ULEV 15. Intended Service Class **CA Medium duty** If CFF, Select which category: NMHC + NOx N/A FED g/bHp-hr Units: 16. Projected Sales: CA 23. Nonroad Engine Equipment Types: TOTAL **Generator Set** Crane Dozer  $\bowtie$  NA Loaders Pump **Tractor** Compressor Other... 24. Auxiliary Emission Control Devices: Does AECD result in reducing effectivness of **AECD PARAMETER** Controlled Sensed emission control device(s): Yes No See General Engine Products No Specification # 007 Yes **AECD Description Document** Yes No Yes No Yes Nο Yes No Yes No Yes No Yes No Yes No

Manufacturer:

**General Engine Products LLC** 

Engine category: On-highway HDDE

Cert contact:

Michael Kunz

1. EPA Standard Engine Family:	5GEPH06.5527	9. Torque (ft-lb) @	440	to the second of		
2. Process Code:	New Submission	Engine RPM:	1800		No. at 1990/95 1818 191	
3. Test Data Set:	1	10. WAIVERs:	CO	PM	Smoke	<u>ldle</u> Co
4. Engine Code:	1		No	NA	NA	NA
5. Engine Model:	L65					
6. Displacement(s)		11. Cold Start?	No			entit (dashdaran militaria manadan m
(cid Or Liters):	6.5 Liters (395 CID)	12. Certification Fuel:	Diesel (Pa	nt89SubDA	ppdxA,Table	4)
7. Engine I.d. Number:	CERT #1		•			
8. Rated HP @	205@	13. Special Test Device	No			and the second s
Rated RPM:	3200	14 Test Procedure:	On-Hwy Diesel			AND THE RESIDENCE OF THE PARTY

## 15. Official Test Results

Date:

16	Dote	orio	ratio	n Fa	ctors
10.	Deu	2110	alio	II 6	CLOIS

HC/OMHCE
NMHC/OMNMHCE
HC + NOx
CARBON MONOXIDE
OXIDE OF NITROGEN
PARTICULATE
FORMALDEHYDE
ACCELERATION (%opacity)
LUGGING (Gen) (%opacity)
PEAK (%opacity)
IDLE CO %
CO2

Test 1	Test 2	Test 3
0.213		
0.183		
1.269		
2.253	E. C.	
0.088		
0.027		
2.53	ende ander de l'ambient de describe demokrit des al part . Implif 2000 des completes destructivations pri a ac	AND EAST COMMISSION AND AND AND AND AND AND AND AND AND AN
1.87		
5.27		

	1.047
	1.000
	<b>##</b> 7
	1.176
	1.000
	1.064
	1.351
(mamor minutano)	0.000
	0.000
	0.000
CONTRACTOR	anning the second of the secon

17.	Certifi	catio	n Le	vels
(Ro	unded	Test	Res	ults)

**HC/OMHCE** NMHC/OMNMHCE

NMHC + NOx

**CARBON MONOXIDE** 

OXIDE OF NITROGEN

PARTICULATE

FORMALDEHYDE

ACCELERATION (%opacity)

LUGGING (Gen) (%opacity)

PEAK (%opacity)

**IDLE CO%** 

Units	-	-Units		Ds	FELs
			g/BHP-hr	g/kvv-nr	•
0.183		The state of the s			
2.4			2.5		N/A
1.5	pennyky dia anaton a mandronen a Hel Nykonon (jene a myko di a manada a ku jaya a mandro		14.4	***************************************	
2.253	Market in a familia and a second and a second and a				N/A
0.09	Commence of the commence of th	A STATE OF THE STA	0.10		N/A
0.036		the state of the s	0.050	-	
4 004 40 40 40 40 40 40 40 40 40 40 40 4					
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2					

## **Engine Model Summary Form**

4-341-0015

Manufacturer: General Engine Products LLC

Engine category: On-highway HDDE

EPA Engine Family. 5GEPH06.5527

Mfr Family Name: N/A

Process Code: New Submission

8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930	OC,TC,ECM,EGR±OI
8.Fuel Rate: (lbs/hr)@peak torq	62.7
7.Fuel Rate: mm/stroke@peak torque	78.5
6.Torque @ RPM (SEA Gross)	440 @ 1800* *SAE NET
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	94.5
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	89
3.BHP@RPM (SAE Gross)	205 @ 3200* *SAE NET
Engine Code 2.Engine Model	Te5
1.Engine Code	<b>-</b>

5744430 5744911 5744030 6015124 18000466

Air Int Temp Crnk Shft Pos Eng cool temp MAF Meter

Baro Pressure

## Part Number Summary Form

4-341-0015

**General Engine Products LLC** Manufacturer:

On-highway HDDE EPA Engine Family. 5GEPH06.5527 Engine category:

Mfr Family Name: N/A

**New Submission** Process Code:

	Sensor Assemblies	escription Part Number	18000410	
	Sensor A	Description	MAP	
Smoke Puff Limiter			A/N	
	After Treatment	Device (Specify)	CATALYST	6008247
Electronic	Control	Module	18001020	
		Turbo Charge	18000464	
		Injector	5743223	
		Injection Pump	18000423	
		Engine Code Engine Model	L65	
		<b>Engine Code</b>	_	

## Part Number Summary Form

General Engine Products LLC Manufacturer:

On-highway HDDE EPA Engine Family: 5GEPH06.5527 Engine category:

Mfr Family Name: N/A

**New Submission** Process Code: EGR cooler Wstgate Solnd 18000405 5745247 EGR valve 18000404 Glw plg cntrlr C/case reg valv 5745246 5714132 Glow plug 5745281 Engine Code Engine Model 1 L65