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-14-012:

IT IS ORDERED AND RESOLVED: The engine and emission control systems produced by the manufacturer are certified as described below for use in on-road motor vehicles with a manufacturer's GVWR over 14,000 pounds. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY		ENGINE SIZES (L)	FUEL TYPE 1	STANDARDS & TEST	INTENDED SERVICE	ECS & SPECIAL FEATURES 3	DIAGNOSTIC 5			
IEAR			512E5 (L)		PROCEDURE	CLASS 2	DDI, TC(2), CAC(2), ECM, EGR,	***************************************			
2017 HNVXH0757		70SB 12.4		Diesel	Diesel	ННОО	DOC, PTOX, SCR-U, AMOX	OBD (\$)			
	' ENGINE'S IDLE NS CONTROL			ADDI	TIONAL IDLE EN	issions co	NTROL ⁵				
	30g	N/A .									
ENGINE (L)			ENGINE MODE	LS / CODES (ra	ted power, in	hp)	-			
12.4				See attachmen	t for engine m	odels and ra	atings				
* =not appl	icable: GVWR=gross	vehicle w	velght rating: 13 CCF	xvz=Title 13. California Code o	f Regulations, Sect	ion xvz: 40 CF	R 86.abc=Title 40, Code of Federal Regulations	Section 86 abo			

L=liter; hp=horsepower; kw=kilowatt; hr=hour;

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;

L/M/H HDD=light/medium/heavy heavy-duty diesel; UB=urban bus; HDO=heavy duty Otto;

ECS=emission control system; TWC/OC=three-way/oxidizing catalyst; NAC=NOx adsorption catalyst; SCR-U / SCR-N=selective catalytic reduction – urea / -- ammonia; WU (prefix) =warm-up catalyst; DPF=diesel particulate filter; PTOX=periodic trap oxidizer; HO2s/O2s=heated/oxygen sensor; HAFS/AFS=heated/air-fuel-ratio sensor (a.k.a., universal or linear oxygen sensor); TBI=throttle body fuel injection; SFI/MFI=sequential/multi-port fuel injection; OGI-direct gasoline injection; GCARB=gaseous carburator; IDI/DDI=indirect/direct diesel injection; TC/SC=turbo/ super charger; CAC=charge air cooler; EGR / EGR-C=exhaust gas recirculation / cooled EGR; PAIR/AIR=pulsed/secondary air injection; SPL=smoke puff limiter; ECM/PCM=engine/powertrain control module; EM=engine modification; 2 (prefix)=parallel; (2) (suffix)=in senses; AMOX=ammonia oxidation catalyst

ESS=engine shutdown system (per 13 CCR 1956.8(a)(6)(A)(1); 30g=30 g/hr NOx (per 13 CCR 1956.8(a)(6)(C); APS =internal combustion auxiliary power system; ALT=alternative method (per 13 CCR 1956.8(a)(6)(D); Exempt=exempted per 13 CCR 1956.8(a)(6)(B) or for CNG/LNG fuel systems; N/A=not applicable (e.g., Otto engines and vehicles); EMD=engine manufacturer diagnostic, system; OBD(F) / (P) / (\$)=full / partial with fine / on-board diagnostic; (2012-08-2

Following are: 1) the FTP exhaust emission standards, or family emission limit(s) as applicable, under 13 CCR 1956.8; 2) the SET and NTE limits under the applicable California exhaust emission standards and test procedures for heavyduty diesel engines and vehicles (Test Procedures); and 3) the corresponding certification levels, for this engine family.

"Diesel" CO, SET and NTE certification compliance may have been demonstrated by the manufacturer as provided under the applicable Test Procedures in lieu of testing. (For flexible- and dual-fueled engines, the CERT values in brackets [] are those when tested on conventional test fuel. For multi-fueled engines, the STD and CERT values for default operation permitted in 13 CCR 1956.8 are in parentheses.).

in	NMHC		NOx		NMHC+NOx		co		PM		нсно	
g/bhp-hr	FTP	SET	FTP	SET	FTP	SET	FTP	SET	FTP	SET	FTP	SET
STD	0.14	0.14	0.20	0.20	*	* .	15.5	15.5	0.01	0.01	*	*
CERT	0.03	0.02	0.14	0.05	*	*	0.3	. 0.04	0.000	0.001	*	*
NTE	0.21		0.3	30		* .	19	9.4	0.	02	1.54	*

g/bhp-hr=grams per brake horsepower-hour; FTP=Federal Test Procedure; SET= supplemental emissions testing; NTE=Not-to-Exceed emission limit; STD=standard or emission test cap; FEL=family emission limit; CERT=ogrification level; NMHC/HC=for_methane/hydrocarbon, NOx=oxides of nitrogen; CO=carbon monoxide; PM=particulate matter; HCHO=formaldehyde;

BE IT FURTHER RESOLVED: The manufacturer has demonstrated compliance with the Greenhouse Gas Emission Standards as specified in Title 13 CCR 1956.8 and the incorporated "California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy Duty Diesel-Engines and Vehicles" (HDDE Test Procedures) adopted Dec. 27, 2002, as last amended Oct. 21, 2014 using the 2014 model year National Heavy-Duty Engine and Vehicle Greenhouse Gas Program as specified in Section 1036.108 of the HDDE Test Procedures. The manufacturer has submitted the required information and therefore has met the criteria necessary to receive a California Executive Order based on the Environmental Protection Agency's Certificate of Conformity for the above listed engine family.

	EPA CERTIFICA	ATE OF CONFORMITY	PRIMARY INTENDED SERVICE CLASS TRACTOR / VOCATIONAL				
	HNVXH0	7570SB-001-R01					
In		CO ₂	CU	N.O.			
g/bhp-hr	FTP	SET	CH₄	N₂O			
STD	555	460	0.10	0.10			
FCL	540	474	*	*			
FEL	556	488	0.10	0.10			
CERT	535	474	0.02	0.09			

g/bhp-hr=grams per brake horsepower-hour; FTP=Federal Test Procedure; SET=Supplemental emissions testing; STD = standard or emission test cap; FEL=family emission limit; CH₄=methane; N₂O=nitrous oxide; VOCATIONAL=vocational engine; FCL=family certification level; CERT=certification level; CO2=carbon dioxide;

@ Air Resources Board

BE IT FURTHER RESOLVED: Certification to the FEL(s) / FCL(s) listed above, as applicable, is subject to the following terms, limitations and conditions. The FEL(s) / FCL(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: For the listed engine models the manufacturer has submitted the materials to demonstrate certification compliance with 13 CCR 1965 (emission control labels), 13 CCR 1971.1 (on-board diagnostic, full or partial compliance), and 13 CCR 2035 et seq. (emission control warranty).

BE IT FURTHER RESOLVED: Except in vehicle applications exempted per 13 CCR 1956.8(a)(6)(B), 30g rating engines in this engine family certified under 13 CCR 1956.8(a)(6)(C) [30 g/hr NOx] and section 35.B.4 of the incorporated "California Exhaust Emissions Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles" adopted December 12, 2002, as last amended September 2, 2015, shall be provided with an approved "Certified Clean Idle" label that shall be affixed to the vehicle into which the engine is installed.

BE IT FURTHER RESOLVED: That the manufacturer has elected to include engine models in this engine family which are identified for "emergency vehicle use only". These "emergency vehicle use only" engines are exempt from requirements imposed pursuant to California law and the regulations adopted pursuant thereto for motor vehicle pollution control devices per California Vehicle Code Section 27156.2. The manufacturer must clearly label these engines for "emergency vehicle use only" on the engines' emission control label.

BE IT FURTHER RESOLVED: The listed engine models are conditionally certified in accordance with 13 CCR Section 1971.1(k) (deficiency and fines provisions for certification of malfunction and diagnostic system) because the heavy-duty on-board diagnostic system of the listed engine models has been determined to have eight deficiencies. The listed engine models are approved subject to the manufacturer paying a fine of \$150 per engine for the third through eighth deficiencies in the listed engine family that is produced and delivered for sale in California. On a quarterly basis, the manufacturer shall submit to the Air Resources Board reports of the number of engines produced and delivered for sale in California and pay the full fine owed for that quarter pursuant to this conditional certification. Payment shall be made payable to the State Treasurer for deposit in the Air Pollution Control Fund no later than thirty (30) days after the end of each calendar quarter during the 2017 model-year production period. Failure to pay the quarterly fine, in full, in the time provided, may be cause for the Executive Officer to rescind this conditional certification, effective from the start of the quarter in question, in which case all engines covered under this conditional certification for that quarter and all future quarters would be deemed uncertified and subject to a civil penalty of up to \$5000 per engine pursuant to HSC Section 43154.

BE IT FURTHER RESOLVED: The listed engine models are conditionally certified. These engine models may be sold and or marketed prior to the manufacturer updating the engines with the revised SCR strategies approved by the Executive Officer. The manufacturer shall ensure that engine models produced under this conditional Executive Order are reprogrammed in the field by December 31, 2017 to incorporate the ARB approved revised SCR strategies. The aforementioned reprogramming shall be implemented free of charge based upon a plan approved by the Executive Officer. No later than May 15, 2017 engine models produced shall incorporate the ARB approved revised SCR strategies. Engine models produced after May 15, 2017 not incorporating the ARB approved SCR strategies will be deemed uncertified and shall be subject to penalties authorized by California laws.

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

day of March 2017.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

Attachment 1/2

Engine Model Summary Template

A-004-0450 3-7-2017

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HF (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torqu	9.Emission Control eDevice Per SAE J1930
HNVXH07570SB	A475	A475	475@1700	290	165	1700@1000	313	105 DD	PI, ECM, TC(2), OC DOC
many minde moon in monimism and of the delication of the second and the second and the second and the second and		otti aavatuurigaga karjalla joljalista jolka ja ja saahasa on muotika ohtaksi faron juugaga.	con september con Anna Parada de Senta de Andréa de 100 Marie (SE 20 Maio) de 100 Maio (SE 2	o en especiale e la processa de la constantina del Estapor de persona de la constantina del processo del const				CA	C(2), EGR, SCR-U
and the state of t				Notacia di Nassoumini de 1840 il Notacia del Sindi Constitució de Sindi que la como constitució de sindicio de	are way, it and was suited cannot be a resident out with proper property or your whole was transfer the carry of			attanga anga anga kabupat anga manang kabupat ang kabupat kabu	PTOX, AMOX
HNVXH07570SB	A450H	A450H	450@1700	272	155	1700@1000	313	105	SAME
	nessent (14 an 18 an		waterlangs; Massacrizers on contemporary and say from his before the most find a facility and the contemporary	DALENG SYNDRY OVER A HEAD AND COLUMN A LANGERS COUNCED, LINEA & South of Doll Synthey cold in syndry of				The comment of the co	nnan had tel kommenten og hjelste foll myt til det 100 til til som og blevkram og brever og brever og blevkram
HNVXH07570SB	A450MT	A450MT	450@1700	272	155	1700/1550	313-286	105-96	SAME
a-party-water of the contraction		nti Villa VIII venne sipres promotomente i con espone se constitución de sentir se constitución	e na anakana kana kana kana kana kana ka			@ 1000	STORTE PT The a transmission and make it may properly the entire transmission before the destroyed at the con-		ner njene voji kratena fradu omrabije višinjeliči Nariči i Mass, na usver pamojanjam u ma voju voju voju se sv
HNVXH07570SB	A430	A430	430@1700	260	148	1550@1000	287	96	SAME
		hadd no root the constraint is the first of the constraint of the	atagani mayaramanin makibi dari makibigi darakibi disirka kakib Mahasan Makibi Mahasan Makigaya adaki			otto karastilli karistilli liiki kaasadanaassa maakaassa karistili ja ee	andra constitutiva por prima sua successiva	The second control of the second seco	
HNVXH07570SB	A430MT	A430MT	430@1700	260	148	1700/1550	313-287	105-96	SAME
	PPONESTING THE STATE OF THE STA					@ 1000			
HNVXH07570SB	A410	A410	410@1700	248	141	1450@1000	266	89	SAME
					Marie dade die dominio 1900 (1900 (1900) de la companio del la companio de la companio del la companio de la companio del la companio de la companio de la companio del la companio de la companio del la companio	: эм сементата дистигет бигуринуу обликторият эмерет эментерия какен исключителен и менений объекти	жегден арализатын арализатын аралын көстөн аралын аралын аралын аралын аралын аралын аралын аралын аралын аралы		
HNVXH07570SB	A390	A390	390@1700	235	134	1450@1000	266	89	SAME
						anteres and environment subsequences appeals to the environment section of the environment of the environment	efter felfelt galangage ann man er som en en militer en mell en e sambel (1931 e la 181 1).	#79 mayoo gaaraan ahaan ah	
HNVXH07570SB	A370	A370	370@1700	223	127	1350@1000	245	82	SAME
HNVXH07570SB	A365	A365	365@1700	219	125	1250@1000	227	76	SAME
EMERGENCY	VEHICLES						objectivity or supplementation and an extraordinate		
HNVXH07570SB	F2897	- \ A475	475@1700	290	165	1700@1000	. 313	105	SAME
AND A THE PARTY OF							familia de la granda		
HNVXH07570SB	F2898	A430	430@1700	260	148	1550@1000	287	96	SAME
		V		:					
HNVXH07570SB	F2970	A410	410@1700	248	141	1450@1000	266	89	SAME
HNVXH07570SB	F2969	A390	390@1700	235	134	1450@1000	266	89	SAME
						a diskapa minimum salahan salah	VIII VIII Ja 		
HNVXH07570SB	F2968	A370	370@1700	223	127	1350@1000	245	82	SAME

Attachment 2/2

Engine Model Summary Template

A-004-0450 3-7-2017

				4.Fuel Rate:	5.Fuel Rate:		7.Fuel Rate:		
			3.BHP@RPM	mm/stroke @ peak HP	(lbs/hr) @ peak HP	6.Torque @ RPM	mm/stroke@peak	8.Fuel Rate:	9.Emission Control
Engine Family	1.Engine Code	2.Engine Model	(SAE Gross)	(for diesel only)	(for diesels only)	(SEA Gross)	torque .	(lbs/hr)@peak torqu	eDevice Per SAE J1930
SOURCE AND THE PROPERTY OF THE									
			reactions are not considered and the same plantages of the colours						
HNVXH07570SB	F2967 -	A 365	365@1700	219	125	1250@1000	227	76	SAME
ya haraba wasanin kamanin da salami ay ga sa haraba wa sa ka sa				en e	CAL SPACE PLEASE AND A COMMITTEE CONTRACT OF THE SPACE AND A COMMITTEE COMMI				
				amente, en parallito se mineralmente esperato tra dese tradema a canacamente masamente esperatorios este tradem		A STATE OF THE PROPERTY OF THE			

Emergency Vehicles Only