## HD HYUNDAI INFRACORE CO., LTD.

EXECUTIVE ORDER: U-R-019-0212 New Off-Road Compression-Ignition Engines Page 1 of 1

Pursuant to the authority vested in the California Air Resources Board by Health and Safety Code Division 26, Part 5, Chapters 1 and 2; and pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-19-095;

**IT IS ORDERED AND RESOLVED:** The engines and emission control systems produced by the manufacturer as described below are certified for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

Model Year	Engine Family	Combustion Cycle	Fuel Operation	Fuel Type(s)	Engine Operation
2024	RDICL01.8LEA	Diesel	Dedicated	Diesel	Variable and Constant Speed

Emission Control Systems						
[1]: Exhaust Gas Recirculation (EGR), Diesel Oxidation Catalyst (DOC), Electronic Direct Injection (DFI), Turbocharger (TC), Charge Air Cooler (CAC), Electronic Control Module (ECM)	None					

The certified engine models are attached.

The listed engine models comply with the following: 1) emission standard limits (STD) and Not-To-Exceed (NTE) limits, as applicable, for criteria pollutants non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM), and for smoke opacity as demonstrated during the Acceleration (ACL) and Lugging (LUG) modes, and the peak value (PEAK) in either mode of the Smoke Opacity cycle, as set forth in 13 CCR 2423 and the applicable California test procedures for off-road compression-ignition engines, and 2) family emission limits (FEL) declared by the manufacturer as allowed by the applicable California test procedures, stated in units of gram per kilowatt-hour (g/kW-hr) and percent opacity (%opacity), respectively, except as noted, or designated as not applicable (\*).

	Crit	Smoke Opacity					
Applicable Standard	NMHC+NOx	СО	PM	ACL	LUG	PEAK	
	STD	4.7	5.5	0.03	*	*	*
Tier 4 Final 19 ≤ kW < 37	FEL	*	*	*	*	*	*
10 = KVV × 07	NTE	5.9	6.9	0.04	*	*	*

**BE IT FURTHER RESOLVED:** Any declared FEL is the emission limit to which all engines must comply in lieu of the standard limit for certification purposes, subject to the restrictions of averaging, banking, or trading (ABT) programs allowed by the applicable California test procedures.

**BE IT FURTHER RESOLVED:** For the listed engine models, the manufacturer has submitted materials to demonstrate certification compliance with 13 CCR 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control warranty).

**BE IT FURTHER RESOLVED:** The listed engine models may only be installed in or on equipment such that engine operation is consistent with off-road compression-ignition engines as defined in 13 CCR 2421(a)(39).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

Executed on this /4th day of December 2023.

Robin U. Lang, Chief

**Emissions Certification and Compliance Division** 

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## ATTACHMENT: ENGINE MODELS

Family: RDICL01.8LEA EO Number: U-R-019-0212 Date Applicable: 11/20/2023

Model		Trim	Config		Peak Power		ı	Peak Torque						
	Code			Displacement	Power	Speed Fueling	Torque	Speed	Fueling	ECS Num	GHG		Notes	
-	-	-	-	L	kW	rpm	mm3/stroke	N-m	rpm	mm3/stroke	-	-		-
DL01-LEL00	D18NAP	N/A	13	1.794	36.4	2800	45.7	165	1800	54	1	N/A	N/A	
DL01-LER02	D18NAP	N/A	13	1.794	36.2	2600	45.2	165	1800	54	1	N/A	N/A	
DL01-LER03	D18NAP	N/A	13	1.794	36.4	2600	45.5	165	1800	53.5	1	N/A	N/A	
DL01-LEG01	D18PP	29 kW	13	1.794	29	1800	48.3	156	1800	48.3	1	N/A	N/A	
DL01-LEG01	D18PP	26 kW	13	1.794	26	1500	51.3	166	1500	51.3	1	N/A	N/A	
DL01-LER00	D18NAP	N/A	13	1.794	36.4	2800	45.7	165	1800	54	1	N/A	N/A	
DL01-LEG00	D18PP	29 kW	13	1.794	29	1800	48.3	156	1800	48.3	1	N/A	N/A	
DL01-LEE00	D18NAP	N/A	13	1.794	24.6	2400	36.9	110	1600	36.6	1	N/A	N/A	
DL01-LEG00	D18PP	26 kW	13	1.794	26	1500	51.3	166	1500	51.3	1	N/A	N/A	
DL01-LER01	D18NAP	N/A	13	1.794	24.6	2400	36.9	110	1600	36.6	1	N/A	N/A	