ECS types

Pursuant to the authority vested in California Air Resources Board by the 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: That the following equipment produced by the manufacturer is certified as described below. Production equipment shall be in all material respects the same as those for which certification is granted.

ENGINE DESCRIPTION										
	MANUFACTURER	ENGINE FAMIL	Y (E.O. NUMBER)	ENGINE SIZE (cc)	FUEL TYPE (CNG/LNG=compressed/liquefied natural gas LPG=liquefied petroleum gas)					
POWEI	R SOLUTIONS INTERNATIONA INC.	LPSIB.9982GA	A (U-L-011-0097)	970, 998	Gasoline					
S.A. = See Attachment; TBC = To Be Certified EQUIPMENT DESCRIPTION										
MODEL YEAR	EVAPORATIVE FAMILY	FUEL TANK NOMINAL CAPACITY (liters)	EQUIPMENT APPLICATION							
2020	GNECC1	32.88	Other							
EMISSION CONTROL SYSTEMS (ECS)		ENGINE and/or EQUIPMENT MODEL								
	Canister/Co-extruded	See Attachment								
A. ECS TYPE (Venting Control Type/Tank Barrier Type): 1. <u>Venting Control Type and Code</u> :- Canister=C Sealed Tank=S Other=O 2. <u>Tank Barrier Type and</u> <u>Code</u> :- Metal=M Treated HDPE or PE=P Co-extruded=C Selar=L Nylon=N Acetal=A Other=O B. EVAPORATIVE FAMILY 2-Letter CODE (Venting Control Codes =C, S, O); (Tank Barrier Codes = M, P, C, L, N, A, O). Note: Always list venting control type or code first before tank barrier type or code. Do not use abbreviations for										

The following are the evaporative emission standards (Title 13, California Code of Regulations, Section 2433(b)(4)(B), as applicable), and certification levels in g organic material hydrocarbon equivalent day⁻¹ or g ROG·m⁻²·day⁻¹ or grams per liter for this evaporative family or the component Executive Order, as applicable. The running loss emissions control has been demonstrated by the manufacturer.

DIURNAL EMISSION STANDARD (g organic material hydrocarbon equivalent day 1)										
1.20 + 0.056 × Nominal Capacity (L)										
	LINE PERMEATION g ROG·m ⁻² ·day ⁻¹)		ANK PERMEATION ROG·m ⁻² ·day ⁻¹)	CARBON CANISTER BUTANE WORKING CAPACITY (grams per liter)						
STANDARD	TANDARD CERTIFICATION LEVEL OR EXECUTIVE ORDER		STANDARD CERTIFICATION LEVEL OR EXECUTIVE ORDER		CERTIFICATION LEVEL OR EXECUTIVE ORDER					
15	Q-19-153	1.5	Q-19-109B	1.4	Q-20-020					

BE IT FURTHER RESOLVED: That for the listed equipment, the manufacturer has submitted, and the Executive Officer hereby approves, the information and materials to demonstrate certification compliance with 13 CCR Section 2433(d) (certification and test procedures), 13 CCR Section 2759 (labeling), Section 2774 (bond requirements) and 13 CCR Sections 2760 and 2764 (emission control system warranty).

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

This Executive Order is only granted to the evaporative family and model-year listed above. Equipment in this family that is produced for any other model-year is not covered by this Executive Order.

Executed on this <u>lat</u> day of October 2020.

Allen Lyons, Chief Emissions Certification and Compliance Division

For CARB Use Only Executive Order: U-L-065-0003

Attachment ____1 ___ of ____1

Large Off-Road Evaporative Certification Database Form

MODEL SUMMARY

S1.	S2.	S	3.	S4. S5.		S5. S6.	6. S7.	S7.	7. S8.	S9.	S10.	S11.	S12.	S13.	S14.
Worst Case (Check One)	Case (check all (Check appropriate) One)		ck all priate)	Engine Class (I or II)	Fuel System (Fl or CARB)		nk Volume iters)	Fuel Tank Internal Surface Area (m ²)	Fuel Line Type (e.g. Single	ne Fuel Line pe Length ⁽¹⁾ .g. (mm)	Fuel Line Inside Diameter (mm)	Engine Family	Fuel Tank Executive Order	Fuel Line Executive Order	Carbon Canister (or Working Capacity (g/L))/
		CA Only	50- State			Total	Nominal		or Multi- layer)						Other Venting Control Executive Order
N/A	Z34		x	Ш	SFI	43.27	32.88	0.792 m ²	Multi	5638 mm	7.94 mm	LPSIB.9982GA	Q-19-109B	Q-19-153	Q-20-020
N/A	RT69		x	II	SFI	43.27	32.88	0.792 m ²	Multi	9169 mm	7.94 mm	LPSIB.9982GA	Q-19-109B	Q-19-153	Q-20-020

(1) The nominal fuel line lengths can be grouped into increment of \pm 3 inches (76 mm)