

ANDREAS STIHL

EXECUTIVE ORDER U-U-015-1072 New Zero-Emission Small Off-Road Equipment

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 new zero-emission small off-road 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.

PROFESSIONAL LEVEL ZERO-EMISSION EQUIPMENT									
MODEL YEAR	ENGINE FAMILY NAME	EQUIVALENT ENGINE CLASS	SS EMISSION STANDARD						
2021	MA8XS.0004AC	< 50 cc	ZERO-EMISSION						
DURABILITY HOURS	POWER SOURCE	STANDARD BATTERY PACKAGE	EQUIPMENT APPLICATION						
300	Lithium-ion Battery	1124 Wh (four 281 Wh batteries)	Chainsaw						
EQUIPMENT MODEL	See Attachment								

The following are the hydrocarbon plus oxides of nitrogen (HC+NOx), and particulate matter (PM) emission standards (Title 13, California Code of Regulations, (13 CCR) Section 2403(b)), and family emission levels for this engine family in grams per kilowatt-hour (g/kW-hr).

*=not applicable	HC+NOx (g/kW-hr)	PM (g/kW-hr)		
STANDARD	50	2		
FAMILY EMISSION LEVEL	0	0		

BE IT FURTHER RESOLVED: That the listed equipment models shall meet all applicable requirements specified in 13 CCR Section 2408.1 including the minimum requirements for professional level zero-emission equipment listed in Table 1 of that Section.

BE IT FURTHER RESOLVED: That for the listed zero-emission equipment, the manufacturer has submitted, and the Executive Officer hereby approves, the information and materials to demonstrate certification compliance with 13 CCR Section 2404 (emission control labels) and 13 CCR Sections 2405 and 2406 (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 equipment models and model-year listed above. Equipment models that are produced for any other model-year are not covered by this Executive Order.

Executed on this 7th day of October 2020.

Allen Lyons, Chief

Emissions Certification and Compliance Division

Model Year: 2021 Issued: 08/25/2020

Manufacturer: ANDREAS STIHL AG & Co. KG Revised: ZEE Engine Family: MA8XS.0004AC E.O. Number:

Small Off-Road ZEE Model Summary Form

12. ZEE Model Summary Sheet:

Worst Case	ZEE Model Name	Meets minimum professional-level requirements as specified in CCR 2408.1(D)(1)? (Yes/No)	Durability Test Power Load (kW)	Standard Battery Package for One-Hr Continuous Operation (a)			Additional Batteries Provided (b) (if applicable)		
Durability Model? (mark one)				Total Supplied Battery Capacity (Wh)	Are the # of Individual Batteries ≤4? (Yes/No)	Battery Specific Energy (Wh/kg)	Total Supplied Battery Capacity (Wh)	Battery Specific Energy (Wh/kg)	Comments
X	MSA 160 C	Yes	0.79	1124	Yes	156.1			