State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER Q-19-057

Small Off-Road Engine Evaporative Emissions System Components

Chonqing Baitech Plastics Co., Ltd.
Fluorinated HDPE Fuel Tank

WHEREAS, pursuant to California Health and Safety Code, sections 39600, 39601, and 43013, the California Air Resources Board (CARB) has established a certification process for evaporative emissions system components designed to control gasoline emissions from small off-road engines (SORE), as described in California Code of Regulations, title 13, section 2767.1;

WHEREAS, pursuant to California Health and Safety Code, section 43013, CARB has established criteria and test procedures for determining the compliance of evaporative emissions system components with the design requirements in Cal. Code Regs., tit. 13, § 2755;

WHEREAS, pursuant to Cal. Code Regs., tit. 13, § 2767.1, CARB Executive Officer may issue an executive order (EO) if he or she determines that SORE evaporative emissions system components conform to the applicable performance requirements set forth in Cal. Code Regs., tit. 13, § 2755; and

WHEREAS, pursuant to California Health and Safety Code, sections 39515 and 39516, CARB Executive Officer issued EO G-05-008 delegating to the Chief of CARB Monitoring and Laboratory Division (MLD) the authority to certify SORE evaporative emissions system components.

NOW, THEREFORE, I, Catherine Dunwoody, Chief of MLD, find that the Chongqing Baitech Plastics Co., Ltd. fuel tank family representative model F2335 constructed of Fluorinated High Density Polyethylene (HDPE) conforms to the 2.0 grams/meter^2/day permeation performance requirement set forth in Cal. Code Regs., tit. 13, section 2755, when tested at a constant temperature of 40 °C pursuant to test procedure TP-901 Amended September 18, 2017 and using an approved test fuel of United States Environmental Protection Agency (EPA) E10 Certification Fuel as defined in 40 CFR §1065.710.

IT IS ORDERED AND RESOLVED that the Chongqing Baitech Plastics Co., Ltd. Fluorinated HDPE fuel tank models listed in Table 1 with a minimum wall thickness of 1.2 millimeters, a fluorine concentration of at least 300 µg/cm^2, and a minimum volume/internal surface area ratio of 9.98 liters/meter^2 are certified for use in SORE equipment with engine displacement sizes equal to or less than 80 cc in which the fuel tank internal pressure remains at atmospheric pressure during both engine operation and equipment storage.

Table 1

Specifications and Models for Chongqing Baitech Plastics Co., Ltd. Fluorinated HDPE Fuel Tanks		
Minimum Wall Thickness (millimeters)	Minimum Volume/Internal Surface Area Ratio (liters/meter^2)	Test Emission Rate (grams/meter^2/day)
1.2	9.98	1.1

Fluorinated HDPE Fuel Tank Models and Specifications			
Model Number	Internal Surface Area (meters^2)	Nominal Capacity (Liters)	Total Capacity (Liters)
F2335*	0.050	0.45	0.50
LF065A	0.063	0.65	0.76
RT260A	0.128	2.60	2.70
RT280A	0.140	2.80	3.00
CSTFT2000A	0.172	3.70	3.80
DK400A	0.169	4.00	4.10
HSD400A	0.196	4.00	4.10
ZDF-4.0-A	0.180	4.00	4.10
RT400B	0.184	4.00	4.20
RT420A	0.182	4.20	4.40
RT400A	0.184	4.00	4.60
ZDF-4.4-A	0.210	4.40	4.60
RT480A	0.170	4.80	4.90

IT IS FURTHER ORDERED that Chongqing Baitech Plastics Co., Ltd. shall provide a warranty to equipment manufacturers purchasing a Chongqing Baitech Plastics Co., Ltd. fuel tanks listed in Table 1. The warranty must conform to the requirements of Cal. Code Regs., tit. 13, § 2760.

IT IS FURTHER ORDERED that the Chongqing Baitech Plastics Co., Ltd. fuel tanks listed in Table 1 shall be installed in accordance with the manufacturer's installation and use instructions for the Chongqing Baitech Plastics Co., Ltd. fuel tanks listed in Table 1. A copy of this EO and the fuel tank installation and use instructions shall be provided to original equipment manufacturers purchasing any Chongqing Baitech Plastics Co., Ltd. fuel tanks listed in Table 1 for installation on small off-road engines and equipment introduced into commerce in California.

IT IS FURTHER ORDERED that the Chongqing Baitech Plastics Co., Ltd. fuel tank models listed in Table 1 introduced into commerce in California shall be clearly identified by a permanent identification showing the manufacturer's name, model number, and EO number.

IT IS FURTHER ORDERED that any alteration to Chongqing Baitech Plastics Co., Ltd. fuel tanks listed in Table 1 and certified hereby is prohibited. Any alteration or modification of the designs approved by this EO will require the manufacturer to apply for a new EO.

IT IS FURTHER ORDERED that the Chongqing Baitech Plastics Co., Ltd. fuel tank models listed in Table 1 shall be compatible with fuels in common use in California at the time of certification, and any modifications to comply with future California fuel requirements shall be approved in writing by the Executive Officer or Executive Officer's delegate.

IT IS FURTHER ORDERED that the component certification of the Chongqing Baitech Plastics Co., Ltd. fuel tank models listed in Table 1 can be referenced in certification applications for small off-road engines and equipment that use small off-road engines through model year 2022 unless the Executive Officer finds that the Chongqing Baitech Plastics Co., Ltd. fuel tank models listed in Table 1 no longer meet the design requirements set forth in Cal. Code Regs., tit. 13, § 2755, when tested pursuant to Cal. Code Regs., tit. 13, § 2765.

Executed at Sacramento, California, this 11th day of June 2019.

Catherine Dunwoody, Chief
Monitoring and Laboratory Division

* Manufacturer-designated representative for the fuel tank family.