



U.S. Department
of Transportation
**Research and
Special Programs
Administration**

MAY 21 2003

400 Seventh St., S.W.
Washington, D.C. 20590

Mr. Mike O'Connor
The Toro Company
8111 Lyndale Avenue South
Bloomington, Minnesota 55420-1196

Ref. No. 02-0229

Dear Mr. O'Connor:

This responds to your letter regarding requirements for shipping lawn maintenance equipment, such as commercial and residential lawn mowers, various commercial turf equipment, utility vehicles, and a full line of snow throwers, operated by a gasoline-powered, internal combustion engine under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). You enclosed catalogs of your company's products. We apologize for the delay in responding and hope it has not caused any inconvenience.

You asked whether the exceptions in § 173.220(e) for an internal combustion engine apply to lawn and maintenance equipment containing an internal combustion engine when transported in commerce by motor vehicle, rail car, aircraft or vessel. Toro's products are as follows:

1. Utility Vehicle
2. Compact Utility Loader
3. Consumer Power Lawn Mowers
4. Commercial Power Lawn Mowers
5. Lawn and Garden Tractors
6. Edgers, Trimmers and Blowers
7. Single and Two Stage Snow Throwers
8. Commercial Turn Equipment

An internal combustion engine, self-propelled vehicle, or mechanized equipment containing an internal combustion engine is subject to the requirements of the HMR if the engine or fuel tank contains a liquid or gaseous fuel, it is equipped with a wet electric storage battery, or it contains other hazardous materials subject to the requirements of the HMR. A battery powered vehicle or equipment is subject to the HMR if it is equipped with a wet electric storage battery or it contains other hazardous material subject to the requirements of the HMR.

In accordance with § 173.220(b)(1), a fuel tank containing a flammable liquid fuel (e.g., gasoline) must be drained and securely closed, except that up to 500 mL (17 ounces) of residual fuel may remain in the tank engine components or fuel lines provided they are securely closed to prevent leakage of fuel during transportation. For transportation by motor vehicle or rail car, flammable liquid fuel greater than



020229

173.220

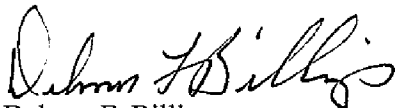
500 mL may remain in self-propelled vehicles and mechanical equipment, provided the fuel tanks are securely closed. For transportation by vessel and aircraft, flammable liquid fuel greater than 500 mL may remain in self-propelled vehicles and mechanical equipment, provided the shipments conform to §§ 176.905 or 175.305, respectively. Wet batteries in vehicles, machinery or equipment must be securely installed and fastened in an upright position and must be protected against short circuits and leakage or removed and packaged separately under § 173.159. (see § 173.220(c)).

An internal combustion engine or mechanized equipment containing an internal combustion engine that is transported in accordance with the provisions of § 173.220 is not subject to any other requirements of the HMR when transported by motor vehicle or rail car. An internal combustion engine or mechanized equipment containing an internal combustion engine that is transported in accordance with the provisions of § 173.220 is excepted from the marking, labeling and placarding requirements of the HMR and § 172.604 when transported by aircraft or vessel. All other applicable requirements of the HMR, including shipping papers, must be met. For transportation by vessel, additional exceptions are specified in § 176.905.

Battery powered vehicles, machinery or equipment are excepted from the requirements of the HMR when transported by rail, highway or vessel when the wet batteries are: (1) securely installed and fastened in an upright position; and (2) protected against short circuits and leakage or the battery is removed and packaged separately under § 173.159. Battery powered vehicles, machinery or equipment that are transported in accordance with the provisions of § 173.220 are excepted from the marking, labeling and placarding requirements of the HMR and § 172.604 when transported by aircraft. All other applicable requirements of the HMR, including shipping papers, must be met.

I hope this satisfies your inquiry. If we can be of further assistance, please contact us.

Sincerely,



Delmer F. Billings
Chief, Standards Development
Office of Hazardous Materials Standards



The Toro Company

8111 Lyndale Avenue South, Bloomington, Minnesota 55420-1196
• Phone 952/888-8801 • www.toro.com • Fax 952/887-8258

August 27, 2002

Mr. Ed. Mazzullo
Director
Office of Hazardous Materials Standards
Department of Transportation
RSPA-HM10
400 Seventh Street SW
Washington D.C. 20590

Re: Interpretation of C.F.R. §173.220

Dear Mr. Mazzullo:

Toro manufactures a wide variety of lawn maintenance equipment, such as commercial and residential lawn mowers, various commercial turf equipment, utility vehicles, as well as a full line of snow throwers. A majority of these products require a gas-powered, internal combustion engine for operation.

Recently, United Parcel Services ("U.P.S.") has informed Toro that it will no longer ship or deliver any of Toro's internal combustion engines which contain, or have previously contained, gasoline because U.P.S. considers these engines to be hazardous materials unless we provide a written interpretation from the Department of Transportation that Toro is in compliance with the applicable regulations. By taking such a position, U.P.S. has severely hindered Toro and its distributors from quickly and efficiently repairing and returning these engines to Toro customers.

In order to continue to meet Toro's customer needs, Toro is requesting a determination from the Office of Hazardous Material Standards on the hazardous material classification of the following Toro Products:

1. Utility Vehicle
2. Compact Utility Loader
3. Consumer Power Lawn Mowers
4. Commercial Power Lawn Mowers
5. Lawn and Garden Tractors
6. Edgers, Trimmers, and Blowers
7. Single and Two Stage Snow throwers
8. Commercial Turf Equipment

Engram
§173.220
Engines
02-0229

To further assist you, I have enclosed various Toro catalogs that accurately depict and describe the products for which the interpretation would apply.

We believe these products, when shipped by motor vehicle or rail car, meet the exception listed at C.F.R. §173.220(e)(1) and are not subject to any requirements of subchapter 49 C.F.R., Subchapter C, Hazardous Materials Regulations.

Additionally, we believe these products, when shipped by vessel or aircraft, are not subject to the requirements of this subchapter, provided that the following conditions are met:

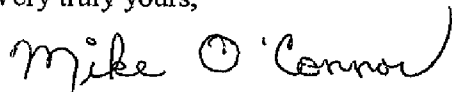
1. The fuel tanks, engine compartments, and fuel lines are completely drained, sufficiently cleaned of residue, and purged of vapors to remove any potential hazard and the engine will not release any liquid fuel no matter what position the product is held in is held in. C.F.R. §173.220(a)(1); or
2. A fuel tank, engine components, or fuel line may contain 500 ml (17 ounces) of residual fuel provided they are securely closed to prevent leakage. C.F.R. §173.220(b)(1); and
3. The batteries are securely fastened in an upright position and protected against short circuits and leakage. C.F.R. §173.220(c).

Toro has procedures set up to ensure that these exceptions to the regulations are followed. Please provide written confirmation that Toro is correctly interpreting these regulations so that we can in turn provide this to U.P.S.

If you have any questions regarding Toro, its products, or this request, please do not hesitate to contact me at (952) 887-8313.

Thank you for your time and I look forward to your response.

Very truly yours,



Mike O'Connor
Environmental, Health and
Safety Compliance Manager
The Toro Company