



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

June 11, 2026

Mr. Mark Samuels
President
Karmanterra LLC
2011 Palomar Airport Rd. Ste. 101
Carlsbad, CA 92011

Reference No. 25-0065

Dear Mr. Samuels:

This letter is in response to your May 12, 2025, letter requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to the classification of your charcoal-based product, currently classed as a Division 4.2 (Spontaneously Combustible) material. According to your letter, you have conducted United Nation (UN) Test N.4 (Test method for self-heating substances) through an independent International Organization for Standardization (ISO)/ International Electrochemical Commission (IEC) 17025–accredited laboratory to evaluate the self-heating properties of the material. You state that the test results demonstrate your product does not exhibit self-heating behavior as defined in § 173.124(b)(2). You ask whether your testing supports a determination that your pine-derived biocarbon does not meet the definition of a Division 4.2 hazardous material.

As specified in § 173.22 of the HMR, it is the shipper's responsibility to properly class and describe a hazardous material. Such determinations are not required to be verified by this Office. Furthermore, the Pipeline and Hazardous Materials Safety Administration does not certify a shipper's determination of whether a material is a hazardous material. However, based on the information and test results you included in your letter, it is the opinion of this Office that your pine-derived biocarbon would not be considered a Division 4.2 self-heating material when transported within the United States. If your product does not meet any other hazard class as defined in 49 CFR Part 173, and is not a hazardous substance,

hazardous waste, or marine pollutant, it is not subject to the HMR. Please note that international regulations may classify your material differently.¹

I hope this information is helpful. Please contact us if we can be of further assistance.

Sincerely,

A handwritten signature in blue ink that reads "Alexander Wolcott". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Alexander Wolcott
Acting Chief, Regulatory Review and Reinvention Branch
Standards and Rulemaking Division

¹ <https://www.federalregister.gov/d/2026-02575/p-65>

From: [INFOCNTR \(PHMSA\)](#)
To: [Dodd, Alice \(PHMSA\)](#)
Cc: [Hazmat Interps; Baker, Yul \(PHMSA\)](#)
Subject: FW: PHMSA Review Request – Non-Hazardous Determination (UN N.4) for Karmanterra
Date: Monday, May 12, 2025 17:06:35
Attachments: [Karmanterra-PHMSA-Classification-Review-Dossier-051225.pdf](#)

Hi Alice,

Please see the below interpretation request with the attached supporting documentation.

Let us know if you need anything else,

-Breanna

From: Mark Samuels <mark@karmanterra.com>
Sent: Monday, May 12, 2025 2:10 PM
To: Special Permits (PHMSA) <specialpermits@dot.gov>
Cc: John Ryan <john@karmanterra.com>; PHMSA HM InfoCenter <PHMSAHMInfoCenter@dot.gov>
Subject: PHMSA Review Request – Non-Hazardous Determination (UN N.4) for Karmanterra

You don't often get email from mark@karmanterra.com. [Learn why this is important](#)

CAUTION: This email originated from outside of the Department of Transportation (DOT). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Dear PHMSA Office of Hazardous Materials Safety,

I am writing to formally request a classification review of our charcoal-based product, currently listed under UN1361, Division 4.2. We are submitting this request based on the results of a UN Test N.4 (Self-Heating Substances) conducted by an ISO/IEC 17025–accredited laboratory. The test indicates that our material does not exhibit self-heating properties and therefore does not meet the criteria for classification as a Division 4.2 hazardous material under 49 CFR § 173.124(b)(2).

Please find attached a signed request letter outlining the submission, along with the following documentation:

- UN N.4 test report from Stonehouse Process Safety Inc.
- Material Safety Data Sheet (MSDS) and Technical Data Sheet (TDS)
- Product specifications, details, and certificate of analysis

We kindly ask PHMSA to review the data and provide a written determination or letter of interpretation confirming whether the material can be considered non-hazardous under the

HMR. This determination is essential for both domestic and international shipping compliance.

Should you require any additional information or clarification, we would be happy to provide it promptly. Thank you for your time and consideration.

Best regards,

Mark



Mark Samuels
President

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