



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

January 29, 2026

Anna Stephens
Sr. Commodity Manager, Logistics
Fluence
1725 Windward Concourse #420
Alpharetta, GA 30005

Reference No. 25-0145

Dear Ms. Stephens:

This letter is in response to your October 3, 2025 email requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to the transport of lithium ion batteries in cargo transport units (CTUs).

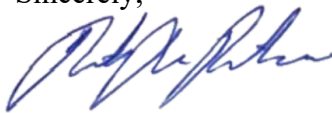
We have paraphrased and answered your questions as follows:

- Q1. Are placards required when shipping an energy storage system classified as “UN3536, Lithium batteries installed in cargo transport unit, 9.” If the answer is yes, what type of placards are required to be placed on the CTU?
- A1. Yes. As provided in Special Provision (SP) 389 in § 172.102, a CTU must display the UN number in a manner in accordance with § 172.332 and be placarded on two opposing sides with a Class 9 placard.
- Q2. If placarded, is the driver of a motor vehicle transporting an energy storage system classified as “UN3536, Lithium batteries installed in cargo transport unit, 9” required to have a hazmat endorsement on his or her commercial driver’s license (CDL).
- A2. The endorsement requirements for a CDL (*see* 49 CFR Part 383.91(a)(3)) are under the purview of the Federal Motor Carrier Safety Administration (FMCSA). FMCSA is the lead federal government agency responsible for regulating and providing safety oversight of commercial motor vehicles. You may wish to contact FMCSA should you require clarification of any requirements relevant to CDLs.
- Q3. Are there any rulemaking proposals to require the placarding of an energy storage system classified as “UN3536, Lithium batteries installed in cargo transport unit, 9” under subpart F of 49 CFR part 172.

- A3. No rulemakings are in progress to revise the placarding requirements applicable to lithium batteries in CTUs. See answer A1.
- Q4. What are the requirements for fire extinguishers that are necessary within the CTU, as provided in SP 389?
- A4. In accordance with SP 389, hazardous materials necessary for the safe and proper operation of the CTU (*e.g.*, fire extinguishing systems and air conditioning systems) must be properly secured to or installed in the CTU and are not otherwise subject to the HMR. However, packagings (*e.g.*, a DOT specification cylinder) represented as meeting requirements of the HMR governing their use in the transportation of a hazardous material must be so maintained unless representative marks are obliterated or covered (see § 171.1(g)).

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

Sincerely,

A handwritten signature in blue ink, appearing to read 'Dirk Der Kinderen', written in a cursive style.

Dirk Der Kinderen
Chief, Standards Development Branch
Standards and Rulemaking Division

From: [Andrews, Steven \(PHMSA\)](#)
To: [Baker, Yul \(PHMSA\)](#)
Cc: [Nickels, Matthew \(PHMSA\)](#)
Subject: FW: Fluence Energy - cargo: enclosures with lithium ion batteries UN3536 class 9 and domestic transportation
Date: Friday, November 14, 2025 6:36:24
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[00SY-SDS-ENC-80-001 Enclosure Safety Datasheet Collection for Gridstack Pro 5000 1.pdf](#)
[Screenshot 2025-10-02 160517.png](#)

Hey Yul,

Can you put this one into the system as well?

Thanks,

Steven Andrews

Acting Senior Regulations Officer
Office of Hazardous Materials Standards
Standards and Rulemaking Division

US Department of Transportation
Pipeline and Hazardous Materials Safety Administration
1200 New Jersey Ave, SE, Washington, D.C. 20590
Office: 202.536.9778

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From: Anna Stephens <US ARL LGS EM> <Anna.Stephens@fluenceenergy.com>
Sent: Friday, October 3, 2025 10:17 AM
To: Andrews, Steven (PHMSA) <steven.andrews@dot.gov>
Subject: Fluence Energy - cargo: enclosures with lithium ion batteries UN3536 class 9 and domestic transportation

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Hello Mr Andrews,

We have another product we ship domestically, which is fully populated enclosure with lithium-ion battery installed in it. Its calling under **UN3536 Class 9**.

We would like to get the answers and interpretation to our questions in a formal way. That will help us to provide the letter to our service providers that move these products for us in case of random inspection while in route.

Product name: Fully populated enclosures with lithium-ion batteries / **UN No. UN 3536 / Proper Shipping Name: Lithium batteries installed in cargo transport unit / Class: 9 / Special Provision: 389 → MSDS in attachment 2**

Q1: You ask whether placards are required when shipping an energy storage system classified as “UN3536, Lithium batteries installed in cargo transport unit, 9.” And if so what type of placards are required to be placed on units?

Q2: You ask whether the driver of a motor vehicle transporting an energy storage system classified as “UN3536, Lithium batteries installed in cargo transport unit, 9” is required to have a hazmat endorsement on his or her Commercial Driver’s License (CDL).

Q3: You ask whether the Pipeline and Hazardous Materials Administration (PHMSA) have any current proposals to require the placarding of an energy storage system classified as “UN3536, Lithium batteries installed in cargo transport unit, 9” under Subpart F of 49 CFR Part 172.

Q4: During recent random inspection while in route one of the drivers was asked by DOT officer that fire extinguishers are necessary within the unit. Can you elaborate more on how to interpret Attachment 1 (driver was shown the page)? We confirm the enclosures have built cooling system with chiller and HVAC system however they are not operational during transportation.

Thank you for your help as always.

Best regards,
Anna Stephens | Sr. Commodity Manager, Logistics
[Fluence - A Siemens and AES Company](#)
Email: anna.stephens@fluenceenergy.com
Cell#: 404-825-4082
[1725 Windward Concourse #420 | Alpharetta, GA | USA](#)

From: Andrews, Steven (PHMSA) <steven.andrews@dot.gov>
Sent: Wednesday, September 10, 2025 2:00 PM
To: Anna Stephens <US ARL LGS EM> <Anna.Stephens@fluenceenergy.com>
Subject: RE: Fluence Energy - cargo: lithium ion battery modules and cells UN3480 class 9 and domestic transportation

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Hi Anna,

No cost to getting official letters of interpretations, but they do have to get in the queue line with

the other request. May take several weeks. Happy to forward to the interp team if that's the route you want to take,

Thanks,

Steven Andrews

Acting Senior Regulatory Officer
Office of Hazardous Materials Standards
Standards and Rulemaking Division

US Department of Transportation
Pipeline and Hazardous Materials Safety Administration
1200 New Jersey Ave, SE, Washington, D.C. 20590
Office: 202.536.9778

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Know what's below.
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From: Anna Stephens <US ARL LGS EM> <Anna.Stephens@fluenceenergy.com>

Sent: Monday, September 8, 2025 2:19 PM

To: Andrews, Steven (PHMSA) <steven.andrews@dot.gov>

Subject: RE: Fluence Energy - cargo: lithium ion battery modules and cells UN3480 class 9 and domestic transportation

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Hello Sir,

Apologies for delayed response. I was out of packet last week. So does that mean there will be cost associated with it?

I don't have supporting MSDS available yet for Fluence modules but working on it. I suspect it will be needed to support our request, correct?

Best regards,

Anna Stephens | Sr. Commodity Manager, Logistics

[Fluence - A Siemens and AES Company](#)

Email: anna.stephens@fluenceenergy.com

Cell#: 404-825-4082

1725 Windward Concourse #420 | Alpharetta, GA | USA



From: Andrews, Steven (PHMSA) <steven.andrews@dot.gov>
Sent: Wednesday, September 3, 2025 12:22 PM
To: Anna Stephens <US ARL LGS EM> <Anna.Stephens@fluenceenergy.com>
Subject: RE: Fluence Energy - cargo: lithium ion battery modules and cells UN3480 class 9 and domestic transportation

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Hi Anna,

Any formal responses on letterhead would have to be vetted through our letters of interpretation process which goes through a technical and legal review. Would you like me to forward your request to the letters of interpretation team?

Thanks,

Steven Andrews

Transportation Specialist, Regulatory Review and Reinvention Branch
Petitions Coordinator, Information Collection Officer
Office of Hazardous Materials Standards
Standards and Rulemaking Division

US Department of Transportation
Pipeline and Hazardous Materials Safety Administration
1200 New Jersey Ave, SE, Washington, D.C. 20590
Office: 202.536.9778

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From: Anna Stephens <US ARL LGS EM> <Anna.Stephens@fluenceenergy.com>
Sent: Friday, August 29, 2025 3:24 PM
To: Andrews, Steven (PHMSA) <steven.andrews@dot.gov>
Subject: RE: Fluence Energy - cargo: lithium ion battery modules and cells UN3480 class 9 and domestic transportation

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is safe.

Hello mr Andrews,

I hope all is well. Is it possible to get your response on your letter head regarding exemptions for **lithium-ion battery modules** and **cells** UN3480 class 9 not considered hazardous for domestic transportation?

We would like to have it for our record retention specifying our cargo.

Q1: Are placards required when shipping Lithium-ion batteries and cells under UN3480, class 9 ? if so what type of placards should be used?

Q2: Is driver of a motor vehicle transporting a Lithium-ion batteries under UN3480, class 9 required to have a hazmat endorsement on his or her Commercial Driver's License (CDL).

Best Regards,

Anna Stephens <US ALP LGS EM>

From: Andrews, Steven (PHMSA) <steven.andrews@dot.gov>

Sent: Monday, May 5, 2025 10:39 AM

To: Anna Stephens <US ARL LGS EM> <Anna.Stephens@fluenceenergy.com>

Subject: RE: Fluence Energy - cargo: lithium ion battery modules and cells UN3480 class 9 and domestic transportation

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Good Morning Anna,

See attached. We have letters of interpretation stating that Class 9 materials do not trigger CDL requirements.

Thanks,

Steven Andrews

Transportation Specialist, Regulatory Review and Reinvention Branch
Petitions Coordinator, Information Collection Officer
Office of Hazardous Materials Standards
Standards and Rulemaking Division

US Department of Transportation
Pipeline and Hazardous Materials Safety Administration
1200 New Jersey Ave, SE, Washington, D.C. 20590
Office: 202.366.6199

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From: Anna Stephens <US ARL LGS EM> <Anna.Stephens@fluenceenergy.com>

Sent: Friday, May 2, 2025 12:51 PM

To: Andrews, Steven (PHMSA) <steven.andrews@dot.gov>; PHMSA Public Affairs <PHMSAPublicAffairs@dot.gov>

Subject: Fluence Energy - cargo: lithium ion battery modules and cells UN3480 class 9 and domestic transportation

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Hello mr Andrews,

I am reaching out to you to get your clarification about transporting over the road lithium-ion battery modules and battery cells under UN3480 Class 9.

Is this commodity exempt from being considered as hazmat and driver is not required to hold a hazmat endorsement on his or her Commercial Driver's License (CDL), or this type of commodity is not exempt and considered as hazardous for the domestic transportation.

MSDS for the mentioned commodity is attached.

Thank you for your comments.

Best Regards,
Anna Stephens <US ALP LGS EM>

From: Andrews, Steven (PHMSA) <steven.andrews@dot.gov>

Sent: Thursday, March 20, 2025 6:52 PM

To: Anna Stephens <US ARL LGS EM> <Anna.Stephens@fluenceenergy.com>
Subject: RE: Fluence Energy - cargo: lithium ion batteries UN3536 class 9 and domestic transportation

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Hi Anna,

Good to hear from you. No recent changes in the HMR would change anything in the 2021 letter of interpretation or email I sent last year.

Feel free to reach out in the future for any updates. In addition if we release a rule that changes anything concerning "UN3536, Lithium batteries installed in cargo transport unit, 9" I'll try to remember to email you about it.

Thanks,

Steven Andrews

Transportation Specialist, Regulatory Review and Reinvention Branch
Petitions Coordinator, Information Collection Officer
Office of Hazardous Materials Standards
Standards and Rulemaking Division

US Department of Transportation
Pipeline and Hazardous Materials Safety Administration
1200 New Jersey Ave, SE, Washington, D.C. 20590
Office: 202.366.6199

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From: Anna Stephens <US ARL LGS EM> <Anna.Stephens@fluenceenergy.com>
Sent: Thursday, March 20, 2025 12:35 PM
To: Andrews, Steven (PHMSA) <steven.andrews@dot.gov>; PHMSA Public Affairs <PHMSAPublicAffairs@dot.gov>
Subject: RE: Fluence Energy - cargo: lithium ion batteries UN3536 class 9 and domestic transportation

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Good day,

I connected with officer Andrews last year asking to get an update on lithium-ion batteries UN3536 class 9 and domestic transportation. And we had received back in 2021 official letter, the letter couldn't be updated last year so we used attached email supporting the letter from 2021.

Today, we have a new product (lithium-ion batteries installed in cargo transport unit) that still falls under the same class, so we just wanted to get an update from your side regarding exemptions for transporting these units without drivers holding a hazmat license.

Also, if PHMSA has any implemented any new ruling that requires the placarding of an energy storage system classified as "UN3536, Lithium batteries installed in cargo transport unit, 9" under Subpart F of 49 CFR Part 172.

Thank you in advance for your feedback.

Best Regards,
Anna Stephens <US ALP LGS EM>

From: Andrews, Steven (PHMSA) <steven.andrews@dot.gov>
Sent: Wednesday, March 20, 2024 9:28 AM
To: Anna Stephens <US ALP LGS EM> <Anna.Stephens@fluenceenergy.com>
Subject: RE: Fluence Energy - cargo: lithium ion batteries UN3536 class 9 and domestic transportation

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Anna,

Just FYI, I got some word that we do want to investigate this Letter of Interpretation a little further. I will let you know as soon as I can that my statement below is still true. One person in my office saw your request and just wants to doublecheck that we stand by this letter entirely.

Thank you,

Steven Andrews

Acting Chief, Regulatory Review and Reinvention Branch
Office of Hazardous Materials Standards
Standards and Rulemaking Division

US Department of Transportation
Pipeline and Hazardous Materials Safety Administration
1200 New Jersey Ave, SE, Washington, D.C. 20590
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From: Anna Stephens <US ALP LGS EM> <Anna.Stephens@fluenceenergy.com>
Sent: Tuesday, March 19, 2024 4:59 PM
To: Andrews, Steven (PHMSA) <steven.andrews@dot.gov>
Subject: RE: Fluence Energy - cargo: lithium ion batteries UN3536 class 9 and domestic transportation

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Thank you Sir. I will use your email then.

Best Regards,
Anna Stephens <US ALP LGS EM>

From: Andrews, Steven (PHMSA) <steven.andrews@dot.gov>
Sent: Tuesday, March 19, 2024 3:05 PM
To: Anna Stephens <US ALP LGS EM> <Anna.Stephens@fluenceenergy.com>
Subject: RE: Fluence Energy - cargo: lithium ion batteries UN3536 class 9 and domestic transportation

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CAUTION: This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Anna,

We don't typically issue reprints of the same letter. That being said I can put everything in a email below that you can print. I am the acting chief right now, so I'll add my signature block to the end of this email so people can see that I confirmed this is current for PHMSA/OHMS.

See PHMSA's answers to the following questions as they related to Letter of Interpretation 21-0099. PHMSA is repeating the questions and answers below and noting that as of **March 19, 2024** these answers are still current:

Q1: You ask whether placards are required when shipping an energy storage system classified as “UN3536, Lithium batteries installed in cargo transport unit, 9.”

A1: The answer is yes. Special provision 389 is assigned to that proper shipping name and states that “the cargo transport unit shall display the UN number in a manner in accordance with § 172.332 of this subchapter and be placarded on two opposing sides.”

Q2: You ask whether the driver of a motor vehicle transporting an energy storage system classified as “UN3536, Lithium batteries installed in cargo transport unit, 9” is required to have a hazmat endorsement on his or her Commercial Driver’s License (CDL).

A2: The answer is no. For purposes of 49 CFR Part 383 and the applicability of the CDL hazmat endorsement, a “hazardous material” is defined in 49 CFR 383.5 as a material that has been designated as hazardous under 49 U.S.C. 5103 and is required to be placarded under Subpart F of 49 CFR Part 172; or any quantity of a material listed as a select agent or toxin in 42 CFR Part 73. In your scenario, the cargo transport unit does not require placards under Subpart F of 49 CFR Part 172 (see § 172.504(f)(9)).

Q3: You ask whether the Pipeline and Hazardous Materials Administration (PHMSA) has any current proposals to require the placarding of an energy storage system classified as “UN3536, Lithium batteries installed in cargo transport unit, 9” under Subpart F of 49 CFR Part 172.

A3: The answer is no, PHMSA has no such proposals under consideration at this time. If you believe a rulemaking change is warranted, we invite you to file a petition for rulemaking in accordance with 49 CFR 106.95, 106.100, and 106.105, including all information needed to support your petition. Your request will be evaluated for consideration in a future upcoming rulemaking. For regulations in 49 CFR Parts 171 through 180, please submit the petition to: Standards and Rulemaking Division, Pipeline and Hazardous Materials Safety Administration, PHH-10, U.S. Department of Transportation, East Building, 1200 New Jersey Avenue, SE, Washington, DC 20590-0001. Please contact Mr. Steven Andrews in the Regulatory Review and Reinvention Branch of the Standards and Rulemaking Division at 202-366-8553 for more information.

Steven Andrews

Acting Chief, Regulatory Review and Reinvention Branch
Office of Hazardous Materials Standards
Standards and Rulemaking Division

US Department of Transportation
Pipeline and Hazardous Materials Safety Administration
1200 New Jersey Ave, SE, Washington, D.C. 20590
Office: 202.366.6199

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From: Anna Stephens <US ALP LGS EM> <Anna.Stephens@fluenceenergy.com>
Sent: Tuesday, March 19, 2024 2:55 PM
To: Andrews, Steven (PHMSA) <steven.andrews@dot.gov>
Subject: RE: Fluence Energy - cargo: lithium ion batteries UN3536 class 9 and domestic transportation

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Dear Mr Andrews,

Thank you very much for your prompt response. Since we are conducting an annual RFQ with our transportation providers will it be possible to ask for updated letter from you covering the same? I will greatly appreciate it.

Best Regards,
Anna Stephens <US ALP LGS EM>

From: Andrews, Steven (PHMSA) <steven.andrews@dot.gov>
Sent: Tuesday, March 19, 2024 2:49 PM
To: Anna Stephens <US ALP LGS EM> <Anna.Stephens@fluenceenergy.com>
Subject: RE: Fluence Energy - cargo: lithium ion batteries UN3536 class 9 and domestic transportation

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Hi Anna,

There have been no changes to the HMR that would change the answers to the letter we provided you in 2021. The same answers in your email apply as they applied in the 2021 letter. We have not implemented any revisions to the HMR since then that would change these answers.

Let me know if you have any other questions.

Thanks,

Steven Andrews

Acting Chief, Regulatory Review and Reinvention Branch
Office of Hazardous Materials Standards

Standards and Rulemaking Division

US Department of Transportation

Pipeline and Hazardous Materials Safety Administration

1200 New Jersey Ave, SE, Washington, D.C. 20590

Office: 202.366.6199

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From: Anna Stephens <US ALP LGS EM> <Anna.Stephens@fluenceenergy.com>

Sent: Tuesday, March 19, 2024 1:50 PM

To: PHMSA Public Affairs <PHMSAPublicAffairs@dot.gov>

Subject: Fluence Energy - cargo: lithium ion batteries UN3536 class 9 and domestic transportation

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Good day,

My name is Anna Stephens and I am with Fluence Energy, the energy storage company. We are the owners of lithium-ion batteries under UN3536 class 9 that we ship individually but also as built into cubes as battery storage units.

Our company previous management reached out to your officials back in 2021 for clarification around this commodity and its domestic transportation.

Please see attached response letter from DOT PHMSA department with answers to Fluence questions. We would like to ask if someone can provide an update on transportation this commodity today.

Fluence questions are:

1. If placards are required when shipping an energy storage system classified as "UN3536, Lithium batteries installed in cargo transport unit, 9.
2. If the driver of a motor vehicle transporting an energy storage system classified as "UN3536, Lithium batteries installed in cargo transport unit, 9" is required to have a hazmat endorsement on his or her Commercial Driver's License (CDL).
3. If PHMSA has any implemented any new ruling that requires the placarding of an energy storage system classified as "UN3536, Lithium batteries installed in cargo transport unit, 9" under Subpart F of 49 CFR Part 172.

Thank you in advance for your comments.

Best regards,

Anna Stephens | Sr. Commodity Manager, Logistics

[Fluence - A Siemens and AES Company](#)

Email: anna.stephens@fluenceenergy.com

1725 Windward Concourse #420 | Alpharetta, GA | USA

