



U.S. Department  
of Transportation

Pipeline and Hazardous  
Materials Safety  
Administration

1200 New Jersey Avenue, SE  
Washington, DC 20590

MAR 03 2017

Scott A. Porter  
Senior Project Scientist  
ERM  
555 17<sup>th</sup> Street, Suite 1700  
Denver, CO 80202

Reference No. 16-0144

Dear Mr. Porter:

This letter is in response to your August 19, 2016, email requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to determining the reportable quantity (RQ) of a hazardous substance. You provide a scenario in which nickel powder with a mean particle size of 101.1 micrometers is being shipped in a packaging totaling 1 metric ton. Specifically, you ask whether the mean particle size can be used to determine if the nickel powder meets the RQ of a hazardous substance or whether the amount of nickel powder with a particle size exceeding the threshold size (i.e., 100 micrometers) must be determined.

The answer is no; the mean particle size cannot be used to determine if the nickel powder meets the RQ. When determining whether a material in a package meets the RQ listed in Table 1 to Appendix A of § 172.101 (i.e., the hazardous substances table), the actual particle size must be used. The "ø" symbol associated with the entry "Nickel" in Table 1 denotes that the RQ is limited to metal particles having a diameter smaller than 100 micrometers. To meet the RQ for nickel, a package containing nickel must contain at least 100 pounds of nickel particles less than 100 micrometers. Based on the information you provided, we cannot determine whether your shipment meets the definition of a hazardous substance.

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

Sincerely,

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

*Ciccarone*  
*§ 172.101*  
*Hazardous Substances*  
*16-0144*

**Dodd, Alice (PHMSA)**

---

**From:** INFOCNTR (PHMSA)  
**Sent:** Friday, August 19, 2016 4:34 PM  
**To:** Hazmat Interps  
**Subject:** FW: Request for interoperation

Hi Shante/Alice,

Please submit this as a letter of interpretation. Mr. Porter spoke with Eamonn.

Please let me know if you have any questions.

Thanks,  
Jordan

---

**From:** Scott Porter [<mailto:Scott.Porter@erm.com>]  
**Sent:** Friday, August 19, 2016 2:01 PM  
**To:** INFOCNTR (PHMSA)  
**Subject:** Request for interoperation

Dear Sir or Madam,

When shipping one metric ton sacks of nickel powder with a mean particle size of 101.1  $\mu\text{m}$ , How must RQ requirements be calculated? The nickel powder does not meet any standard hazard classes however nickel with a particle size equal or less than 100  $\mu\text{m}$  is listed as having an RQ of 100 pounds. Can the determination of whether the shipment meets RQ requirements be based on the representative mean particle size? i.e. Since the mean particle size is greater than 100  $\mu\text{m}$  the nickel RQ is not relevant. Or must the actual nickel content with a particle size of 100  $\mu\text{m}$  or less be determined to calculate the weight at which RQ limits are reached or exceeded? i.e. 40% of the nickel powder is 100  $\mu\text{m}$  or less thus any packages weighing 250lbs or more meets the requirement to classify as hazardous due to meeting or exceeding the RQ in Table 1 of Appendix A of 172.101.

Regards,  
Scott Porter

Scott A. Porter

Senior Project Scientist

**ERM**  
555 17<sup>th</sup> Street, Suite 1700 | Denver, Colorado | 80202  
**M** 720 822 7489 | **T** 303 741 5050 | **D** 720 200 7105  
**E** [scott.porter@erm.com](mailto:scott.porter@erm.com) | **W** [www.erm.com](http://www.erm.com)

---

This message contains information which may be confidential, proprietary, privileged, or otherwise protected by law from disclosure or use by a third party. If you have received this message in error, please contact us immediately at (303) 741-5050 and take the steps necessary to delete the message completely from your computer system. Thank you.

Please visit ERM's web site: <http://www.erm.com>