



MNOSHA Instruction **STD 1-11.1**

October 9, 2019

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## **SUBJECT: Industrial Trucks in Class II, Division 1 and 2 Areas**

### **Purpose:**

To resolve the disparity between Table N-1 and 1910.178(c)(2)(vii) relating to the proper industrial truck designation for Class II, Division 2 hazardous locations and to clarify the proper industrial truck designation for work areas in Grain Handling facilities.

### **Scope:**

This instruction applies MNOSHA-wide.

### **References:**

1. **1910.399** defines a Class II, Division 1 area as a "...location in which combustible dust is or may be in suspension in the air under normal operating conditions, in quantities sufficient to produce explosive or ignitable mixtures; or where mechanical failure or abnormal operation of machinery or equipment might cause such explosive or ignitable mixtures to be produced, and might also provide a source of ignition through simultaneous failure of electric equipment, through operation of protection devices, or from other causes; or in which combustible dusts of an electrically conductive nature may be present." This classification may include areas of grain handling and processing plants, starch plants, sugar-pulverizing plants, malting plants, hay-grinding plants, coal pulverizing plants, areas where metal dusts and powders are produced or processed, and other similar locations that contain dust producing machinery and equipment (except where the equipment is dust-tight or vented to the outside).

**1910.399** defines a Class II, Division 2 area as a "location in which combustible dust will not normally be in suspension in the air in quantities sufficient to produce explosive or ignitable mixtures... but combustible dust may be in suspension in the air as a result of infrequent malfunctioning of handling of processing equipment." This classification includes locations where dangerous concentrations of suspended dust would not be likely, but where dust may accumulate on electrical equipment and become suspended as an ignitable concentration of dust under abnormal operating conditions.

2. **1910.178(a)(7)** defines an approved industrial truck as one "that is listed or approved for fire safety purposes for the intended use by a nationally recognized testing laboratory".
3. **1910.178(a)(3)** requires that powered industrial trucks "bear a label or some other identifying mark indicating approval by the testing laboratory."
4. **1910.178 (c)(2)(vi)(b)** requires that only industrial trucks designated as EX be used in grain handling facilities where dust may normally be in suspension in quantities sufficient to produce explosive or ignitable mixtures.
5. **1910.178(c)(2)(vii)** requires that only industrial trucks designated as DY, EE, or EX be used in Class II, Division 2 areas.
6. **Table N-1** allows industrial trucks designated as DS, ES, GS, and LPS to be used in Class II, Division 2 areas, as well as the DY, EE, and EX designation allowed by 1910.178(c)(2)(vii).
7. **NFPA No. 505 – 2018.** Powered Industrial Trucks.

4.4.1.2 Class II Areas, Division 1, Groups F and G. Power-operated industrial trucks designated as Type DX or EX, and power-operated industrial trucks listed or approved as being suitable for use in the hazardous (classified) locations, shall be permitted to be used.

4.4.2.2 Class II Areas, Division 2, Groups F and G. Power-operated industrial trucks designated as Type CNS, DS, ES, GS, LPS, GS/CNS, or GS/LPS, when approved for use in the hazardous (classified) location, power-operated industrial trucks designated as Type DY, DX, EE, or EX, and power-operated industrial trucks listed as being suitable for use in the hazardous (classified) locations, shall be permitted to be used.

## **Cancellation:**

This directive supersedes STD 1-11.1, dated March 11, 2010.

## **ACTION:**

OSHS will use the following guidelines in determining the proper designation of industrial trucks for Class II, Division 2 areas:

1. Trucks designated as DX, DY, EE, and EX may be used in Groups F & G Class II, Division 2 location.

2. Trucks designated as CNS, GS/CNS, GS/LPS, DS, ES, GS, or LPS may only be used in Groups F & G Class II, Division 2 when approved for use in the hazardous (classified) location.
3. Only trucks designated as EX may be used in grain handling facilities where dust may normally be in suspension in quantities sufficient to produce explosive or ignitable mixtures (Class II, Division 1).

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