

Federal standards for grain elevators

In an effort to regulate new sources of air pollution and ensure that those sources pollute less than older sources, the U.S. Environmental Protection Agency (EPA) has put forth the New Source Performance Standards (NSPS), affecting a variety of new or modified equipment and facilities. In part, the performance standards place limits on emissions and require performance testing, recordkeeping, reporting, and monitoring.

This fact sheet examines the performance standards affecting grain storage facilities, as found in NSPS subpart DD, Standards of Performance for Grain Elevators, 40 CFR § 60.300 to 60.304.

What is subpart DD?

The subpart DD standards of performance are a set of requirements governing the storage of grain at any grain elevator or grain terminal elevator.

What is meant by the terms “grain storage elevator” and “grain terminal elevator”?

A grain storage elevator is any grain elevator with a permanent storage capacity of one million bushels or more, that is located at any wheat flour mill, wet corn mill, dry corn mill (for human consumption), rice mill, or soybean extraction plant.

A grain terminal elevator is any grain elevator with a permanent storage capacity of more than 2.5 million bushels, except those located at animal food manufacturers, pet food manufacturers, cereal manufacturers, breweries, and livestock feedlots.

Does subpart DD apply to my facility?

Standards in subpart DD apply to any grain terminal elevator or grain storage elevator for which construction, modification, or reconstruction was started after August 3, 1978.

What portions of a grain elevator are subject to subpart DD?

The standard of performance applies to truck, barge, railcar, and ship loading and unloading stations; grain dryers; and all grain handling operations.

Do I have to conduct any performance testing for subpart DD?

Yes. Within 60 days after the affected facility reaches the maximum production rate at which it will be operated, but not later than 180 days after the initial start-up of the facility, the owner or operator must conduct performance test(s) and furnish the Minnesota Pollution Control Agency (MPCA) with the written results. Also, the Commissioner may require additional tests. The testing has to be conducted using EPA Reference Method 9 or Reference Method 5.

Affected facilities that have conducted performance testing should not have to repeat them, but affected facilities that have not conducted the required performance tests should do them as soon as possible.

Is there anything else I should know about the NSPS regulations?

If you are subject to subpart DD, or any other subpart of the NSPS, you are automatically subject to the NSPS General Provisions. The General Provisions describe the performance testing, recordkeeping, reporting, and monitoring provisions that apply to every NSPS affected source. The NSPS General Provisions are found in subpart A of 40 CFR § 60.

The MPCA has a fact sheet on the NSPS General Provisions. If you would like a copy of the fact sheet, contact the Air Quality Document Coordinator at the number listed at the end of this fact sheet.

What particulate matter emission limitations are specified in subpart DD?

Affected facility	Emission limit
Column dryer with column plate perforation exceeding 2.4 mm diameter	not greater than 0% opacity
Rack dryer in which exhaust gases pass through a screen filter coarser than 50 mesh	not greater than 0% opacity
Truck unloading station	fugitive emissions not greater than 5% opacity process emissions not greater than 0% opacity and 0.01 gr/dscf
Railcar unloading station	fugitive emissions not greater than 5% opacity process emissions not greater than 0% opacity and 0.01 gr/dscf
Railcar loading station	fugitive emissions not greater than 5% opacity process emissions not greater than 0% opacity and 0.01 gr/dscf
Truck loading station	fugitive emissions not greater than 10% opacity process emissions not greater than 0% opacity and 0.01 gr/dscf
Barge or ship loading station	fugitive emissions not greater than 20% opacity process emissions not greater than 0% opacity and 0.01 gr/dscf
Grain handling operation	fugitive emissions not greater than 0% opacity process emissions not greater than 0% opacity and 0.01 gr/dscf

What changes can I make to my grain elevator that are not considered modifications under NSPS?

The following physical or operational changes are not considered modifications of an existing facility:

- The addition of gravity loadout spouts to existing grain storage or grain transfer bins.
- The installation of automatic grain weighing scales.
- Replacement of motor and drive units driving existing grain handling equipment.
- The installation of permanent storage capacity with no increase in hourly grain handling capacity.

For complete information regarding NSPS modifications, please read the General Provisions of NSPS (40 CFR § 60, subpart A) or the fact sheet <https://www.pca.state.mn.us/sites/default/files/aq-f9-nspsa.doc>.

Although I am subject to subpart DD, am I still eligible for a Registration Permit?

If the sum of the potential emissions of all units at your facility is below the levels for each pollutant shown in the following table, you may qualify for an Option A Registration Permit.

Pollutant	Tons per year
PM	100
SO ₂	50
VOC	100
A single HAP	10
Combined HAPs	25
PM ₁₀	25
NO _X	100
CO	100
Lead	0.5

If the potential emissions for any one pollutant from all emission units at your facility is above the levels shown in the previous table, you may still be eligible for an Option D Registration Permit if the total actual emissions for the previous 12 months from all emission units is below the thresholds listed in the following table.

Pollutant	Tons per year
PM	50
SO ₂	50
VOC	50
A single HAP	5
Combined HAPs	12.5
PM ₁₀ (attainment areas)	50
PM ₁₀ (nonattainment area)	25
NOX	50
CO	50
Lead	0.5

Who can I contact if I have questions?

For more information contact any of the following:

Business Assistance, Small Business Environmental Assistance Program:

651-282-6143

800-657-3938

Smallbizhelp.pca@state.mn.us

Minnesota Pollution Control Agency:

651-296-6300