



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 60

[EPA-HQ-OAR-2010-0706; FRL-9912-76-OAR]

RIN 2060-AP06

Standards of Performance for Grain Elevators

AGENCY: Environmental Protection Agency.

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing amendments to the Standards of Performance for Grain Elevators as a result of the 8-year review of the new source performance standards required by the Clean Air Act. We are proposing to clarify certain provisions in the existing subpart DD. The EPA is also proposing a new subpart DDa for grain elevators, which would apply to affected facilities that commence construction, modification or reconstruction after [INSERT DATE OF PUBLICATION IN THE **FEDERAL REGISTER**] and includes the proposed clarifications for subpart DD and several new provisions. In response to Executive Order 13563, Improving Regulation and Regulatory Review, the EPA conducted an analysis of subpart DD. In considering the directives of the Executive Order, the EPA conducted several analyses to determine the effectiveness of subpart DD, to determine whether subpart DD is still relevant, and to determine whether subpart DD is excessively burdensome.

Based on the results of these analyses, the EPA concluded that subpart DD is still effective, relevant and not excessively burdensome.

DATES: Comments. Comments must be received on or before [INSERT DATE 90 DAYS AFTER DATE OF PUBLICATION IN THE **FEDERAL REGISTER**].

Under the Paperwork Reduction Act, comments on the information collection provisions are best assured of having full effect if the Office of Management and Budget receives a copy of your comments on or before [INSERT DATE 30 DAYS FROM DATE OF PUBLICATION IN THE **FEDERAL REGISTER**].

Public Hearing. The EPA will hold a public hearing on this proposed rule if requested. Requests for a hearing must be made by [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE **FEDERAL REGISTER**]. Contact Ms. Virginia Hunt via email

(hunt.virginia@epa.gov) or phone (919-541-0832) by [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE **FEDERAL REGISTER**] to request a public hearing. If a hearing is requested, the EPA will announce the details, including specific dates, times, addresses and contact information for the hearing, in a separate **Federal Register** notice.

ADDRESSES: Submit your comments, identified by Docket ID Number EPA-HQ-OAR-2010-0706, by one of the following methods:

Federal eRulemaking Portal: <http://www.regulations.gov>: Follow the online instructions for submitting comments.

Email: A-and-R-Docket@epa.gov, Include docket ID Number EPA-HQ-OAR-2010-0706 in the subject line of the message.

Fax: (202) 566-9744, Attention Docket ID Number EPA-HQ-OAR-2010-0706.

Mail: Environmental Protection Agency, EPA Docket Center (EPA/DC), Mail Code 28221T, Attention Docket ID Number EPA-HQ-OAR-2010-0706, 1200 Pennsylvania Avenue, NW., Washington, DC 20460. Please include a total of two copies. In addition, please mail a copy of your comments on the information collection provisions to the Office of Information and Regulatory Affairs, Office of Management and Budget (OMB), Attn: Desk Officer for EPA, 725 17th Street, NW, Washington, DC 20503.

Hand/Courier Delivery: EPA Docket Center, Room 3334, EPA WJC West Building, 1301 Constitution Ave., NW, Washington, DC 20004, Attention Docket ID Number EPA-HQ-OAR-2010-0706. Such deliveries are only accepted during the Docket's normal hours of operation and special arrangements should be made for deliveries of boxed information.

Instructions: Direct your comments to Docket ID Number EPA-HQ-OAR-2010-0706. The EPA's policy is that all comments received will be included in the public docket without change and may be made available online at <http://www.regulations.gov>, including any personal information provided, unless the comment includes information claimed to be confidential business information

(CBI) or other information whose disclosure is restricted by statute.

Do not submit information that you consider to be CBI or otherwise protected through <http://www.regulations.gov> or email. Send or deliver information identified as CBI to only the mail or hand/courier delivery address listed above, attention: Docket ID Number EPA-HQ-OAR-2010-0706. The <http://www.regulations.gov> website is an "anonymous access" system, which means the EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an email comment directly to the EPA without going through <http://www.regulations.gov>, your email address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, the EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If the EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, the EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption and be free of any defects or viruses. For additional information about the EPA's public docket, visit the EPA Docket Center homepage at: <http://www.epa.gov/dockets>.

Docket. The docket number for the proposed amendments to the grain elevator new source performance standards (40 CFR part 60, subparts DD and DDa) is Docket ID Number EPA-HQ-OAR-2010-0706. All documents in the docket are listed in the <http://www.regulations.gov> index. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically in <http://www.regulations.gov> or in hard copy at the Air Docket, EPA/DC, EPA West, Room 3334, 1301 Constitution Ave., NW., Washington, DC. The EPA docket facility is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the Air Docket is (202) 566-1742.

FOR FURTHER INFORMATION CONTACT: For information concerning the proposed amendments, contact Mr. Bill Schrock, Natural Resources Group, Sector Policies and Programs Division (E143-03), Research Triangle Park, North Carolina 27711; telephone number (919) 541-5032; fax number (919) 541-3470; email address: schrock.bill@epa.gov.

SUPPLEMENTARY INFORMATION:

World Wide Web. In addition to being available in the docket, an electronic copy of the proposed amendments is available on the Technology Transfer Network (TTN) website. Following signature, the EPA will post a copy of the amendments at <http://www.epa.gov/ttn/atw/eparules.html>. The TTN provides information and technology exchange in various areas of air pollution control.

Acronyms and Abbreviations. The following acronyms and abbreviations are used in this document:

ANSI	American National Standards Institute
ASTM	American Society for Testing and Materials
BACT	Best available control technology
BDT	Best demonstrated technology
BLDS	Bag leak detection systems
BSER	Best system of emission reduction
CAA	Clean Air Act
CBI	Confidential business information
CEDRI	Compliance and Emissions Data Reporting Interface
CFR	Code of Federal Regulation
CDX	Central Data Exchange
EJ	Environmental justice
ERT	Electronic Reporting Tool
FSA	Farm Service Agency
g/dscm	Grams per dry standard cubic meter
gr/dscf	Grains per dry standard cubic foot
gr/dscfm	Grains per dry standard cubic foot per minute
HAP	Hazardous air pollutants
ICR	Information Collection Request
kg	Kilogram
LAER	Lowest achievable emission rate
mg	Milligram
mm	Millimeter
NAICS	North American Industry Classification System
NSPS	New source performance standard
NTTAA	National Technology Transfer and Advancement Act
OECA	Office of Enforcement and Compliance Assurance
OMB	Office of Management and Budget
PM	Particulate matter

RACT	Reasonably available control technology
RBLC	RACT/BACT/LAER Clearinghouse
RFA	Regulatory Flexibility Act
SBA	Small Business Administration
SBREFA	Small Business Regulatory Enforcement Fairness Act
SISNOSE	Significant Economic Impact on a Substantial Number of Small Entities
SSM	Startup, shutdown and malfunction
TSF	Temporary storage facility
tpy	Tons per year
TTN	Technology Transfer Network
UMRA	Unfunded Mandates Reform Act
USDA	United States Department of Agriculture
VCS	Voluntary consensus standards

Organization of This Document. The following outline is provided

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A redline version of the regulatory language that incorporates the proposed changes in this action is available in the docket for this action (Docket ID No. EPA-HQ-OAR-2010-0706)

I. Executive Summary

A. Purpose of Regulatory Action

New source performance standards implement CAA section 111(b) and are issued for categories of sources that EPA has listed because they cause, or contribute significantly to, air pollution, that may reasonably be anticipated to endanger public health or welfare. The primary purpose of the NSPS is to attain and maintain ambient air quality by ensuring application of the best system of emission reduction (BSER) that has been adequately demonstrated, taking into consideration the cost of achieving such emission reductions, and any non-air quality

health and environmental impact and energy requirements. Section 111(b)(1)(B) of the CAA requires the EPA to review and, if appropriate, revise existing NSPS at least every 8 years. The NSPS for grain elevators (40 CFR part 60, subpart DD) were promulgated in 1978 and last reviewed in 1984. As part of the review, the EPA is required to consider what degree of emission limitation is achievable through the application of the BSER, which (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated. The EPA also considers the emission limitations and reductions that have been achieved in practice.

In addition to conducting the NSPS review, the EPA is evaluating the start-up, shutdown and malfunction (SSM) provisions in the rule in light of the D.C. Circuit Court of Appeals decision in Sierra Club v. EPA, 551 F.3d 1019 (D.C. Cir. 2008), which held that the SSM exemption in the General Provisions in 40 CFR part 63 violated the CAA's requirement that some standards apply continuously. In the Sierra Club case, the D.C. Circuit vacated the SSM exemption provisions in the General Provisions of 40 CFR part 63 for non-opacity and opacity standards. The court explained that under section 302(k) of the CAA, emissions standards or limitations must be continuous in nature. The court then held that the SSM

exemption violates the CAA's requirement that some section 112 standards apply continuously. In light of the court's reasoning, all rule provisions must be carefully examined to determine whether they provide for periods when no emission standard applies. The EPA believes that even though the Court in Sierra Club v. EPA was considering a challenge to a section 112 NESHAP standard, the Court's reasoning applies equally to CAA section 111 (NSPS) and section 129 rules. The EPA's general approach to SSM periods has been used consistently in CAA section 111, section 112 and section 129 rulemaking actions, since the D.C. Circuit's decision in Sierra Club. See, e.g., New Source Performance Standards Review for Nitric Acid Plants, Final Rule, 77 FR 48433 (August 14, 2012); New Source Performance Standards for New Stationary Sources and Emission Guidelines for Existing Sources; Commercial and Industrial Solid Waste Incineration Units, Final rule, 76 FR 15704 (March 21, 2011); Oil and Natural Gas Sector: New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants Reviews; Final rules, 77 FR 49490 (August 16, 2012).

To address the NSPS review, SSM exemptions and other changes, the EPA is proposing a new subpart DDa for grain elevators, which would apply to affected facilities that commence construction, modification or reconstruction after [INSERT THE DATE OF PUBLICATION IN THE **FEDERAL REGISTER**]. The

affected facilities at grain elevators under the existing subpart DD and the proposed subpart DDa are each new, modified or reconstructed truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer and all grain handling operations. The EPA is also proposing amendments to subpart DD that will apply to facilities subject to DD to clarify certain definitions and provisions. The EPA is also proposing testing, monitoring, recordkeeping and reporting requirements for subpart DDa that are in some ways different from what is required under subpart DD. Where feasible, the EPA considered ways to reduce the testing, monitoring, recordkeeping, and reporting burden, while making the proposed requirements less ambiguous and more straightforward for determining compliance. The proposed subpart DDa requirements reflect what well-controlled sources are doing within the grain elevator industry since the last review in 1984.

This rulemaking also responds to Executive Order 13563, Improving Regulation and Regulatory Review, which directs federal agencies to "...review existing rules that may be outmoded, ineffective, insufficient, or excessively burdensome, and to modify, streamline, expand, or repeal them in accordance with what has been learned." It also responds to a petition

submitted by a coalition representing the grain elevator industry that, citing the Executive Order, requests the EPA to review and repeal subpart DD. In considering the directives of the Executive Order, the EPA conducted several analyses aimed at determining the effectiveness of subpart DD, determining whether subpart DD is still relevant and determining whether subpart DD is excessively burdensome. Based on the results of these analyses, the EPA concluded that subpart DD is still effective, relevant and not excessively burdensome but we are proposing some amendments to clarify certain provisions.

B. Summary of Major Amendments

Based on the results of the NSPS review, the EPA is proposing the following:

1. Proposed clarifications to subpart DD

We are proposing amendments to subpart DD to clarify the definition of grain unloading station and grain loading station, and to clarify enclosure requirements for barge or ship unloading operations.

2. Proposed new requirements contained in subpart DDa

We are proposing a new subpart DDa that will include the standards of performance and other provisions in subpart DD, as clarified in this proposal which reflect current industry operations, as well as the following additional new standards and provisions based on our review of available information:

- An additional method for determining applicability that includes the storage capacity of temporary storage facilities (TSFs).
- Ten percent opacity standards for barge or ship unloading stations not using an unloading leg and for column dryers using a wire screen.
- Particulate Matter (PM) and opacity standards for affected facilities associated with TSFs consistent with those associated with permanent storage units.
- Particulate Matter performance tests conducted every 60 months, opacity tests conducted annually, and weekly visual inspections for affected facilities, and visual inspections of fabric filters every 6 months.
- Records for the new applicability calculation method, excess emissions events, fabric filter inspections, opacity tests, weekly visual inspections and PM tests, and the type of grain processed during performance tests.
- Requirement to submit electronic copies of performance tests reports to the EPA using the EPA's electronic reporting tool (ERT).
- New definitions for "permanent storage capacity," "temporary storage facility," "wire screen column dryer, and "en-masse drag conveyor."

We are also proposing that the PM standards are applicable at all times.

C. Summary of Costs and Benefits

Table 1 summarizes the costs and benefits of this action.

See section VI of this preamble for further discussion.

Table 1--Summary of the Costs and Benefits of the Proposed Subpart DDa for New, Modified and Reconstructed Affected Sources at Grain Elevators

Requirement	Capital Cost (\$ thousand)	Annual Cost (\$ thousand/yr) ^a	Emission Reductions (tons PM10/yr)	Net benefit

PM control	1,087	350	31	N/A ^b
Emissions testing and monitoring/reporting and recordkeeping	0	849	0	N/A ^b
Total nationwide	1,087	1,199	31	N/A ^b

^a Reporting and recordkeeping costs are in the third year following promulgation. PM control, testing and monitoring costs are in the fifth year after promulgation. For the third year after promulgation, the associated PM capital cost is \$888,000, and annual cost (including annualized PM control cost and emissions testing and monitoring) is \$757,000.

^b Under Executive Order 12866, this rulemaking is not an “economically significant regulatory action” because it is not likely to have an annual effect on the economy of \$100 million or more. Therefore, we have not conducted a Regulatory Impact Analysis (RIA) for this rulemaking or a benefits analysis. The proposed requirements of the New Source Performance Standards (NSPS) for Grain Elevators (Subpart DDa) are anticipated to reduce emissions by 31 tons of PM10 each year starting in 2018. While we expect that these PM10 emissions reductions will result in improvements in air quality and reduce health effects associated with exposure to air pollution resulting from these emissions, we have not quantified or monetized the benefits of reducing these emissions for this rulemaking. This does not imply that there are no benefits associated with these emission reductions.

II. General Information

A. Does this action apply to me?

Categories and entities potentially regulated by this proposed rule include those listed in Table 2 of this preamble.

Table 2. Examples of Affected Entities by Category

Category	NAICS ^a code	Examples of potentially regulated entities
Industry	49313	Grain elevators (storage)
Industry	424510	Grain elevators (merchants, wholesalers)

^a North American Industry Classification System.

This table is not intended to be exhaustive but rather provides a guide for readers regarding entities likely to be regulated by the proposed amendments. To determine whether your facility would be regulated by the proposed amendments, you should carefully examine the applicability criteria in 40 CFR 60.300 and 40 CFR 60.300a. If you have any questions regarding the applicability of the proposed amendments to a particular entity, contact the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

B. What should I consider as I prepare my comments?

Submitting CBI. Do not submit information containing CBI to the EPA through <http://www.regulations.gov> or e-mail. Clearly mark the part or all of the information that you claim to be CBI. For CBI information on a disk or CD-ROM that you mail to the EPA, mark the outside of the disk or CD-ROM as CBI and then identify electronically within the disk or CD-ROM the specific information that is claimed as CBI. In addition to one complete version of the comments that includes information claimed as CBI, you must submit a copy of the comments that does not contain the information claimed as CBI for inclusion in the public docket. If you submit a CD-ROM or disk that does not contain CBI, mark the outside of the disk or CD-ROM clearly that it does not contain CBI. Information not marked as CBI will be included in the public docket and the EPA's electronic public

docket without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 Code of Federal Regulations (CFR) part 2. Send or deliver information identified as CBI only to the following address: Roberto Morales, OAQPS Document Control Officer (C404-02), OAQPS, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, Attention Docket ID Number EPA-HQ-OAR-2010-0706.

If you have any questions about CBI or the procedures for claiming CBI, please consult the person identified in the **FOR FURTHER INFORMATION CONTACT** section.

III. Background Information

A. What is the statutory authority for these proposed revisions?

NSPS implement CAA section 111, which requires that each NSPS reflect the degree of emission limitation achievable through the application of the BSER which (taking into consideration the cost of achieving such emission reductions, any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated. This level of control is referred to as BSER and has been referred to in the past as "best demonstrated technology" or BDT. In assessing whether a standard is achievable, the EPA must account for routine operating variability associated with performance of the system on whose

performance the standard is based. See National Lime Ass'n v. EPA, 627 F. 2d 416, 431-33 (D.C. Cir. 1980).

We are also proposing in this rulemaking that existing affected facilities that are modified or reconstructed would be subject to this proposed rule. Under CAA section 111(a)(4), "modification" means any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emission of any air pollutant not previously emitted. Changes to an existing facility that do not result in an increase in the emission rate are not considered modifications (40 CFR 60.14).

Rebuilt emission units would become subject to the proposed standards under the reconstruction provisions, regardless of changes in emission rate. Reconstruction means the replacement of components of an existing facility such that: (1) the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility; and (2) it is technologically and economically feasible to meet the applicable standards (40 CFR 60.15).

Section 111(b)(1)(B) of the CAA requires the EPA to periodically review and revise the standards of performance, as necessary, to reflect improvements in methods for reducing

emissions. The NSPS are directly enforceable federal regulations issued for categories of sources which cause, or contribute significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare. Since 1970, the NSPS have been successful in achieving long-term emissions reductions in numerous industries by assuring that cost-effective controls are installed on new, reconstructed or modified sources.

B. What is the regulatory history for grain elevators?

In 1978, the EPA promulgated "Standards of Performance for Grain Elevators" (40 CFR part 60, subpart DD) (August 3, 1978, 43 FR 34347). Since then, we have conducted one review of the standards, which promulgated minor revisions to clarify certain provisions (March 27, 1984, 49 FR 11750).

The current subpart DD applies to affected facilities at any grain storage elevators or grain terminal elevators storing corn, wheat, sorghum, rice, rye, oats, barley and soybeans which are constructed, reconstructed or modified after August 3, 1978. On August 7, 1977 Congress amended the Clean Air Act with a provision that exempts country grain elevators with less than 2.5 million bushels of grain storage capacity from standards developed under section 111 of the Act. A "grain storage elevator" means any grain elevator located at any wheat flour mill, wet corn mill, dry corn mill (human consumption), rice

mill or soybean oil extraction plant with permanent storage capacity of at least one million bushels. 40 CFR 60.301(f). A "grain terminal elevator" means any grain elevator with permanent storage capacity over 2.5 million bushels, except those located at animal food manufacturers, pet food manufacturers, cereal manufacturers, breweries and livestock feedlots. 40 CFR 60.301(c). A "grain elevator" means any plant or installation at which grain is unloaded, handled, cleaned, dried, stored or loaded. 40 CFR 60.301(b). "Permanent storage capacity" means grain storage capacity which is inside a building, bin or silo. 40 CFR 60.301(d).

The affected facilities at grain elevators are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer and all grain handling operations. 40 CFR 60.300.

The current NSPS, as amended under the 1984 review, include the following emission limits and work practice standards:

Type of Emissions	Affected Facility	Type of Standard	Requirement (40 CFR 60.302)
Process emissions	Truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, and all grain handling operations.	PM limit	0.01 gr/dscf
		Opacity limit	0 %
	Grain dryer	Opacity limit and equipment specification	0% opacity for column dryers equipped with column plate perforations exceeding 0.094 inches, and rack dryers equipped with screen filter coarser than 50 mesh.
Fugitive	Truck loading	Opacity limit	10%
	Truck unloading, railcar loading, railcar unloading	Opacity limit	5%
	Barge/ship loading	Opacity limit	20%
	Barge/ship unloading	Equipment specification	Marine leg enclosed from top to bottom of leg, w/ ventilation flow rate of both leg and receiving hopper of 40 ft ³ per bushel of grain unloaded.

Initial compliance with the PM and opacity emission limits in the current NSPS (subpart DD) is demonstrated by conducting initial performance tests. Subpart DD does not contain any continuous compliance requirements.

IV. Summary of Proposed Amendments

A. What source category is being regulated?

Today's proposed standards would apply to affected facilities at any grain storage elevators or grain terminal elevators storing corn, wheat, sorghum, rice, rye, oats, barley and soybeans which are constructed, reconstructed or modified after [INSERT DATE OF PUBLICATION IN THE **FEDERAL REGISTER**]. We are also proposing clarifications that would apply to affected facilities at any grain storage elevator or grain terminal elevator storing corn, wheat, sorghum, rice, rye, oats, barley and soybeans which are constructed, reconstructed or modified after August 3, 1978. The affected facilities at grain elevators are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer and all grain handling operations. Neither the proposed standards nor the clarifications to the existing standards are changing the rules for currently affected facilities, however the proposed standards will cover a new type of barge unloader and column dryer not contemplated by the existing standards.

B. What pollutants are emitted from these sources?

The primary pollutant emitted and the only pollutant regulated by the grain elevator NSPS is PM. Particle pollution can cause serious health problems. The size of particles is

directly linked to their potential for causing health problems. EPA's national and regional rules to reduce emissions of pollutants that form particle pollution will help state and local governments meet the Agency's national air quality standards. Particulate matter is emitted from grain as it is conveyed from one affected facility to another, unloaded or loaded onto transport vessels and during the drying process. Opacity is regulated to ensure proper operation and maintenance of the PM controls and to control fugitive emissions.

The PM concentration limits are based on filterable PM measured by EPA Method 5. Filterable PM consists of those particles directly emitted by a source as a solid or liquid at the stack (or similar release conditions) and captured on the filter of a stack test train. A fraction of the PM emitted from grain elevator affected facilities is PM with an aerodynamic diameter less than or equal to 2.5 micrometers ($PM_{2.5}$). The EPA is not proposing separate standards for $PM_{2.5}$ in this action because the available emissions test data for $PM_{2.5}$ are limited and not adequate for setting standards.

The PM concentration limits in today's proposed NSPS review are based on filterable PM measured by EPA Method 5 because the majority of PM emissions data available are Method 5 data. Emissions of condensable PM, which is PM that is not directly emitted but is formed in the atmosphere, are measured using EPA

Method 202. These emissions can be added as the "back half" to a Method 5 sampling train. However, the EPA is not proposing separate standards for condensable PM because available emissions test data for condensable PM are limited and not adequate for setting standards.

C. What are the proposed standards?

The EPA is proposing the following actions regarding the NSPS for grain elevators. As summarized in section IV.C.1 of this preamble, we are proposing clarifications to specific requirements in subpart DD. As summarized in section IV.C.2 of this preamble, we are also proposing a new subpart DDa which would only be applicable to affected facilities that commence construction, modification or reconstruction after [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].

1. Clarifications to subpart DD

We are proposing clarifications to three provisions in subpart DD. These proposed clarifications are summarized in Table 3 of this preamble, which presents both the current provision in subpart DD and a description of the proposed clarifications. EPA's rationale for these proposed changes is provided in section V.D. of this preamble. These proposed revisions are intended to keep the meaning and intent of the definitions as originally promulgated while making sure the

definitions encompass the changes in the industry since the last review of subpart DD in 1984.

Table 3. Summary of Proposed Amendments to Subpart DD for Affected Facilities that Have Commenced Construction, Modification, or Reconstruction after August 3, 1978

Current Subpart DD Provision (Subpart DD citation)	Proposed Revision to Subpart DD for Affected Facilities that Have Commenced Construction, Modification, or Reconstruction after August 3, 1978
<p>"Grain unloading station" is defined to be that portion of a grain elevator where the grain is transferred from a truck, railcar, barge or ship to a receiving hopper. (§60.301(j))</p>	<p>"Grain unloading station" is that portion of a grain elevator where the grain is transferred from a truck, railcar, barge or ship to a receiving hopper or to the grain handling equipment that connects the unloading station to the rest of the grain elevator, including all of the equipment, support structures and associated dust control equipment and aspiration systems connected to or required to operate the grain unloading station.</p>
<p>"Grain loading station" is defined to mean that portion of a grain elevator where the grain is transferred from the elevator to a truck, railcar, barge or ship. (§60.301(k))</p>	<p>"Grain loading station" is that portion of a grain elevator where the grain is transferred from the elevator to a truck, railcar, barge or ship, including all of the equipment, support structures and associated dust control equipment and aspiration systems connected to or required to operate the grain loading station.</p>
<p>For affected barge or ship unloading stations, the unloading leg is required to be enclosed from the top (including the receiving hopper) to the center line of</p>	<p>For affected barge or ship unloading stations, the requirements in §60.302 (d)(1) remain the same except that a new provision is proposed to be added to</p>

<p>the bottom pulley and ventilation to a control device is required to be maintained on both sides of the leg and the grain receiving hopper. (§60.302 (d) (1))</p>	<p>clarify that where aspiration of the casing provides dust control at the boot of the conveyor and a receiving hopper is not used, the unloading leg is required to be enclosed from the top to the center line of the bottom pulley, and ventilation to a control device is required to be maintained on both sides of the leg.</p>
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The proposed clarifications are applicable to all affected facilities that commenced construction, modification or reconstruction after August 3, 1978.

2. Proposal of subpart DDa

We are proposing a new subpart DDa for affected facilities that commence construction, modification, or reconstruction after [INSERT DATE OF PUBLICATION IN THE **FEDERAL REGISTER**]. Subpart DDa includes the standards in subpart DD, including the clarifications discussed in Table 3 of this preamble for subpart DD, and new requirements for affected facilities. The proposed new requirements are summarized below. EPA's rationale for these proposed changes is provided in sections V.A through V.D. of this preamble. The new requirements include a new definition of permanent storage capacity that accounts for storage capacity from TSFs; other new definitions; emission standards for two new subcategories; and testing, monitoring, reporting and recordkeeping requirements. We are also proposing a requirement

in subpart DDa that all emission standards in subpart DDa apply at all times, including periods of SSM.

Definitions

We are proposing the following definitions:

“Permanent storage capacity” is proposed to be the grain storage capacity calculated using proposed Equations 1 or 2, as applicable. This proposed definition revises the method used to determine applicability by providing a new method to calculate “permanent storage capacity” using TSF capacity and the grain storage capacity of buildings, other types of bins and silos. Equation 1 is proposed for grain elevators where the grain storage capacity and historical grain throughput for all their grain storage buildings, bins and silos are known.

$$C_{tp} = C_p + \left(\frac{C_p}{T_p} * C_t\right) \quad (\text{Eq. 1})$$

Where:

- C_{tp} = Total permanent storage capacity of all buildings, bins (including TSFs) and silos used to store grain (bushels).
- C_p = Total storage capacity of all buildings, bins (excluding TSFs) and silos used to store grain (bushels).
- T_p = Maximum annual throughput of grain for all buildings, bins (excluding TSFs) and silos used to store grain (bushels per year) over the previous 5 years.
- C_t = Total storage capacity of all TSFs used to store grain (bushels).

Equation 2 is proposed for grain elevators where the grain storage capacity and historical grain throughput for all grain storage buildings, bins or silos are not known. Equation 2 would be used at grain elevators that had at least one storage building, bin, or silo that did not exist prior to the date of construction, modification or reconstruction of the affected facility.

$$C_{tp} = C_p + (0.34 * C_t) \text{ (Eq. 2)}$$

Where:

- C_{tp} = Total permanent storage capacity of all buildings, bins (including TSFs) and silos used to store grain (bushels).
- C_p = Total storage capacity of all buildings, bins (excluding TSFs) and silos used to store grain (bushels).
- C_t = Total storage capacity of all TSFs used to store grain (bushels).
- 0.34 = Default ratio of permanent grain storage capacity to annual throughput

"Grain unloading station" is proposed as specified in Table 3 of this preamble.

"Grain loading station" is proposed as specified in Table 3 of this preamble.

"Temporary storage facility" or "TSF" is proposed to be defined as any grain storage bin that: (1) Uses an asphalt, concrete or other improved base material; (2) uses rigid, self-

supporting sidewalls; (3) provides aeration; and (4) provides a covering or tarp.

"Wire screen column dryer" is proposed to be defined to be any equipment used to reduce the moisture content of grain in which the grain flows from the top to the bottom in one or more continuous packed columns between two woven wire screens or between a combination of perforated metal sheets and wire screens.

"En-masse drag conveyor" is proposed to mean a device that uses paddles or flights mounted on a chain to remove grain from a barge or ship.

"Portable equipment" is proposed to mean equipment that includes (but is not limited to) portable augers, portable conveyors and front-end loaders that are not fixed at any one spot and can be moved around the site.

PM Standards

We are proposing the following actions regarding the PM standards:

- Maintain the subpart DD standards for "rack dryers" and "column dryers" and add a provision that "wire screen column dryers" are prohibited from discharging into the atmosphere any gases that exhibit greater than 10-percent opacity.

- Clarify the requirements for barge and ship unloading stations using an unloading leg as specified in Table 3 of this preamble.
- Add an opacity limit of 10 percent for all affected facilities at barge and ship unloading stations that unload grain using en-masse drag conveyors.
- Require that requests for an equivalency determination for alternative controls for barge unloading stations apply only to barge unloading stations that do not use an unloading leg or en-masse drag conveyor.
- Add a requirement that unloading facilities and grain handling operations at TSFs meet the subpart DD requirements for PM (0.01 gr/dscf) and opacity (5 percent for truck unloading and 0 percent for grain handling) if portable equipment is not used.
- Add a requirement that the standards of subpart DDa apply at all times including periods of SSM.

Test Methods and Procedures

We are proposing the following actions to test methods and procedures:

- Annual opacity testing be conducted for each applicable opacity limit for each affected facility (using Method 9).

- PM testing be conducted every 60 months for each applicable PM limit for each affected facility (using Method 5 or 17).

Reporting Requirements

We are proposing that, within 60 days of each performance test, the results of the performance test be submitted electronically to the EPA using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's CDX (<https://cdx.epa.gov/>). Performance test data would be required to be submitted in the file format generated through use of the EPA's ERT (see <http://www.epa.gov/ttn/chief/ert/index.html>). This requirement only applies to the EPA test methods that are ERT-compatible. These methods are listed on the ERT website.

Startup, Shutdown and Malfunction Requirements

The General Provisions in 40 CFR part 60 provide that emissions in excess of the level of the applicable emission limit during periods of SSM shall not be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. See 40 CFR 60.8(c). The General Provisions, however, may be amended for individual subparts. Here, the EPA is proposing standards in subpart DDa that apply at all times as specified in the proposed §60.302a(e). This is discussed further in section V.C.3, and with respect to specific standards in various sections below.

Monitoring Requirements

We are proposing the following new monitoring requirements:

- Fabric filter/baghouse inspections every 6 months.
- Weekly visible emissions checks of affected facilities.

Recordkeeping Requirements

We are proposing the following new records:

- Total storage capacity (bushels) for each building, bin (excluding TSFs), and silo used to store grain.
- Storage capacity for each TSF.
- Calculations documenting the emissions quantification for excess emission events.
- Results of fabric filter/baghouse inspections and any corrective action taken maintained on-site.
- Results of weekly visible emission checks, including any corrective action taken. Records maintained on site for a minimum of 36 months.
- Results of the annual opacity tests.
- The type of grain processed during performance tests at the affected facility.

V. Rationale for Proposed Amendments

CAA section 111(a)(1) requires that standards of performance for new sources reflect the "... degree of emission limitation achievable through the application of the best system

of emission reduction which (taking into account the cost of achieving such reduction, and any nonair quality health and environmental impacts and energy requirements) the Administrator determines has been adequately demonstrated.”

Section 111(b)(1)(B) of the CAA requires the EPA to review and revise, if appropriate, NSPS standards. Accordingly, we conducted the following evaluations as part of our review of subpart DD:

- We conducted a BSER analysis for the grain elevator source category.
- We evaluated the method for determining applicability under subpart DD.
- We evaluated whether any changes are needed to the subpart DD compliance requirements.
- We evaluated subpart DD for any provisions that need clarification.

We are proposing minor revisions to subpart DD that would apply retrospectively to all facilities that currently are subject to subpart DD. We are also proposing a new subpart DDa that would apply to affected facilities that commence construction, modification or reconstruction after [INSERT THE DATE OF PUBLICATION IN THE **FEDERAL REGISTER**]. The proposed requirements in subpart DDa include the clarifications we are proposing to subpart DD as well as some substantive new requirements. Our decision to propose revisions to subpart DD

and propose a new subpart DDa is explained in detail in sections V.A through D of this preamble.

A. How did the EPA conduct the BSER analysis?

A performance standard reflects the degree of emission limitation achievable through the application of the BSER that the EPA determines has been adequately demonstrated, taking into consideration costs, nonair quality health and environmental impacts and energy requirements.

We conducted the BSER review by first assessing changes that have occurred to the grain elevator source category since the last review of the NSPS in 1984. We then identified currently used, new and emerging control systems and assessed whether they represent advances in emission reduction techniques compared to the control techniques used to comply with the existing NSPS. For each new or emerging control option identified, we then evaluated emission reductions, costs, energy requirements and non-air quality impacts. The results of these considerations are presented in section V.A.1 of this preamble.

1. Evaluation of Grain Elevator Source Category for Significant Changes to Emission Sources

The EPA gathered information from various sources to identify significant changes that have occurred to the grain elevator source category since the last NSPS review. We reviewed several sources of information, including responses from an

industry survey, information in the RACT/BACT/LAER Clearinghouse (RBLC), requirements in state rules and additional information collected from the grain elevator industry. Sections V.A.1.a through V.A.1.d of this preamble describe our review of each source of information and section V.A.1.e of this preamble presents the results of the EPA's evaluation of these sources including any significant changes identified.

a. CAA Section 114 Information Collection Request

To characterize the current state of emissions, practices, operations and controls in the industry, we conducted a CAA section 114 ICR in 2009 for grain elevator operations. The survey was addressed to facilities with any grain elevator that would constitute a "grain terminal elevator" or a "grain storage elevator" (as defined in 40 CFR 60.301). To gather general background information about the industry, respondents were required to submit information for facilities based on storage type, grain(s) handled and the EPA region. Survey responses were collected from 121 grain elevators. The survey responses provided information on grain elevator capacity, grain elevator throughputs for three successive years, the use of temporary storage facilities, barge unloading operations, dryer design, general information on facility characteristics and control devices and work practices used to reduce PM emissions from various sources. The survey responses and database developed

from the response information are in the grain elevator docket at EPA-HQ-OAR-2010-0706.

b. Review of the RACT/BACT/LAER Clearinghouse

The EPA established the RBLC as a repository of information on air pollution control technologies required by state air pollution control programs (including past RACT, BACT and LAER decisions). Reasonably Available Control Technology is required on existing sources in areas that are not meeting national ambient air quality standards (i.e., non-attainment areas). Under the New Source Review (NSR) program, BACT is required on new or modified major sources in attainment areas and LAER is required on new or modified major sources in non-attainment areas. We reviewed the RBLC to identify any new control technologies that have been used at grain elevators since the last review of the rule. Results of the RBLC review are discussed in the memorandum, "Evaluation of the Revisions to Grain Elevator Emission Standards" in the grain elevator docket at EPA-HQ-OAR-2010-0706.

c. Review of State Regulations

In order to assess whether state regulations provide more stringent emission limits or additional controls than subpart DD, we conducted a review of the regulations from the 12 states with the most grain storage capacity and the largest number of grain elevators in operation. The 12 states are: Iowa, Illinois,

Minnesota, Nebraska, Kansas, Indiana, North Dakota, South Dakota, Ohio, Texas, Missouri and Wisconsin. We reviewed each state's grain elevator standards and evaluated other state regulations controlling PM, opacity and fugitive dust emissions that may be applicable to grain elevators. The review of state rules is presented in the memorandum, "Evaluation of Grain Elevator Emission Standards in Response to Executive Order 13563" in the grain elevator docket at EPA-HQ-OAR-2010-0706.

d. Other Data Gathering Activities

The EPA conducted several meetings with a coalition representing grain elevator owners and operators. Members of the coalition provided information on current practices and provided technical presentations to the EPA. The technical presentations and coalition submittals are contained in the grain elevator docket at EPA-HQ-OAR-2010-0706.

e. Results of Evaluations

Based on our review of the state rules, we identified no requirements more stringent than those in subpart DD. Our review of the RBLC did not identify any control techniques that are different from the control techniques used by grain elevators to comply with the subpart DD standards. Our review of the survey responses and information gathered at meetings resulted in identifying: (1) emissions test reports and one control technique that we determined not to be BSER for affected

facilities as explained below, and (2) several new emission sources since subpart DD was last reviewed in 1984. Section V.A.e.2 discusses our evaluation of new information collected for existing affected facilities. Section V.A.e.3 discusses our evaluation of the new emission sources. Both evaluations are documented in the memorandum, "Evaluation of the Revisions to Grain Elevator Emission Standards" in the grain elevator docket at EPA-HQ-OAR-2010-0706.

2. BSER Evaluation for Subpart DD Affected Facilities

Subpart DD regulates the following affected facilities: grain dryers, grain handling, grain loading stations (trucks, railcars and barges/ships) and grain unloading stations (trucks, railcars and barges/ships). Subpart DD requires affected facilities, except grain dryers, to meet a PM emission limit of 0.01 gr/dscfm for process emissions (i.e., non-fugitive emissions). All affected facilities are also required to meet opacity limits, specific to each affected facility, to control fugitive dust emissions. As discussed earlier, we did not identify any more stringent state requirements or more advanced emission control technology from the RBLC for these affected facilities.

Some of the grain elevators responding to the 2009 CAA section 114 survey also provided emissions test reports and permit information. We evaluated the PM emissions test reports

to determine whether the PM emission limits in subpart DD were reflective of emissions from well-controlled facilities. The survey responses, permit information and information collected from a literature search provided information on application of mineral oil as a dust suppression technique to reduce fugitive PM emissions. We conducted a BSER analysis for fugitive emissions considering the application of mineral oil to grain.

The results of the BSER analysis showed that for fugitive sources, the limited information available did not indicate any advances in emission control techniques that support changing the current NSPS requirements, including the application of mineral oil. An emission limit developed using the emissions data collected with the survey responses resulted in an achievable limit that is the same as the limit in subpart DD. Our detailed review is discussed in V.A.2.a and V.A.2.b of this preamble.

No other emission control technologies or work practices have been identified for reducing emissions from affected facilities at grain storage or grain terminal elevators. Based on these results, consistent with our obligations under CAA section 111(b), we propose that the control techniques and resultant emission reductions on which the current NSPS is based still represent BSER.

a. Review of PM Emission Limit

We conducted a BSER analysis to determine if we should propose a different PM emission limit for newly constructed, modified, and reconstructed affected facilities at grain elevators. Subpart DD requires process emissions from affected facilities (e.g., truck unloading stations, grain handling operations, etc., but excluding grain dryers) to meet a PM emission limit of 0.01 grains per dry standard cubic foot (gr/dscf). Grain elevators typically meet the standard using fabric filters.

The EPA estimates between 340 and 920 grain elevators could be subject to Subpart DD. In 2009, EPA sent CAA section 114 surveys to 120 grain elevators to characterize the industry and obtain data on PM emission control techniques and associated emissions. Respondents to the survey provided PM emission test reports from 15 grain elevators, which represent only approximately 1.6 percent to 4 percent of the grain elevators potentially subject to subpart DD. We first evaluated the test reports to determine whether sufficient information existed to propose revisions to the PM emission limit. The 15 grain elevators who submitted test reports for PM emissions controlled with fabric filters submitted those reports for the following affected facilities: (1) 7 railcar unloading stations; (2) 4 truck unloading stations; (3) 3 grain handling operations; and (4) 2 barge unloading stations. The survey results indicated

that a typical grain elevator has on average 2 truck unloading stations, 4 grain handling operations, 1 barge unloading station, and 1 railcar unloading station. Information provided in the survey responses also indicated that approximately 75 percent of railcar unloading stations, truck unloading stations, barge unloading stations, and grain handling operations are subject to subpart DD. Applying the typical counts to the estimated range of grain elevators that could be subject to subpart DD, and accounting for the fraction that could be subject to subpart DD, the number of affected facilities potentially subject to subpart DD is between 2,200 and 6,200. Comparing these numbers to the number of tests reports collected, we estimated that the facilities submitting PM emission test reports account for only approximately 0.3 percent to 0.7 percent of the population of railcar unloading stations, truck unloading stations, grain handling operations, and barge unloading stations at grain elevators that could be subject to subpart DD. Additionally, the test reports do not include any tests conducted at barge/ship loading stations, railcar loading stations, or truck loading stations.

We further evaluated the PM emission levels from the available test reports, measured as an average of three test runs, which ranged from 0.01 to 0.00002 gr/dscf. It appears the wide variation in PM emissions is due to the different affected

facilities that were tested, other operational considerations (i.e., speed of the process) and grain characteristics. EPA had previously concluded that the amount of dust emitted during processing of grain in the various affected facilities depends on the type of grain being handled, the quality of the grain, and the moisture content of the grain.¹ The emission test information gathered for the 1978 subpart DD proposal² indicates that the type of grain processed affects the PM emissions, with one to two orders of magnitude difference in PM emissions between affected facilities processing soybeans and corn (higher emissions) than those processing wheat and milo. The PM emission limit in the grain elevator NSPS covers eight different grains. However, it does not appear that the emission tests for the 15 grain elevators cover all the 8 grains. Many of the test reports do not indicate the grain type being processed during the test.

In considering the limited data and the limitations of the data, we concluded that the PM emission test reports do not sufficiently characterize the performance of fabric filters controlling PM from the full range of affected facilities subject to subpart DD. Accordingly, we have determined that there is insufficient available information to support proposed

¹ Compilation of Air Pollution Emission Factors. Chapter 9.9.1 Grain Elevators and Processes.

² 1978 BID, Chapter 5.

revisions to the PM emission limits. We are therefore proposing to maintain the PM limit at 0.01 gr/dscf.

We believe the limited number of test reports submitted is due to the current subpart DD only requiring one initial emission test of an affected facility. As discussed in Section V.C.1 of this preamble, EPA believes that additional testing is needed to ensure compliance with the emission limit. We are therefore proposing, in subpart DDa, to require repeat testing of affected facilities every five years. Not only will these tests help the sources determine compliance with the standards, they will provide a more robust set of information for when this rule is next reviewed. We estimate that by the next 8 year review of subpart DDa, initial PM emission tests may be conducted on as many as 300 affected facilities and repeat testing may be conducted on as many as 120 affected facilities, providing approximately 420 PM emission tests to evaluate for determining whether to revise the PM limit. We are also proposing that the emission tests be conducted while processing the highest PM emitting grains to establish PM emissions for all operating scenarios that are expected to occur. We are also proposing to require records of the grain type processed during the testing.

b. Application of Mineral Oil

A few permits submitted with responses to the CAA section 114 surveys indicate that some grain elevators use mineral oil as a fugitive dust suppression technique. Mineral oil application is primarily used to reduce the possibility of a grain elevator explosion caused by dust.

The EPA has previously studied the application of mineral oil at grain elevators, noting that there were several potential benefits, such as reduced dust disposal cost, less grain weight loss, as well as improved safety in the working environment.³ However, compared to currently used technology for controlling process emissions, i.e., fabric filters, the study indicated that oil application systems were not as effective as fabric filters in reducing PM. The EPA also concluded that the emission tests conducted were inadequate for the purpose of determining emissions and developing emission factors because they were pilot studies or controlled tests. Therefore, mineral oil application as a replacement for existing controls has not been demonstrated to be a feasible control option. We do not have information on the appropriateness or effectiveness of using mineral oil in combination with existing technologies, such as fabric filters.

³ Oil Suppression of Particulate Matter at Grain Elevators. U.S. Environmental Protection Agency. EPA-453/R-94-049. July 1994.

The subpart DD fugitive emission standards require meeting a 0 percent opacity limit for grain handling operations and require opacities ranging from 5 to 20 percent for loading and unloading stations. We do not have information on how mineral oil application would affect the fugitive opacity limits, e.g., whether the opacity levels would decrease to 0 percent, stay the same or result in another limit. Additionally, portable grain handling equipment, such as portable augers, portable conveyors and front-end loaders are often used at grain elevators. We do not have information on whether mineral oil application is feasible or would reduce emissions at facilities that use portable grain loading equipment to reduce fugitive emissions. The size and design of these systems may affect both their ability and the time necessary to mix mineral oil thoroughly with grain to be an effective dust suppression technique.

The EPA mineral oil study also noted that there are concerns regarding the effect the oil has on grain quality, and consequently, its price. The EPA study indicates that mills and distilleries are concerned about the long-term effects of oil on grain. For some grains, the use of mineral oil may be more problematic, such as for wheat in the milling process. In addition, grain exported to other countries may be required to meet hydrocarbon levels and grain not meeting those levels may be considered contaminated. For example, the European Union's

code of practices states that any detection of a level of mineral oil above 300 mg/kg is considered to be contaminated by mineral oil. Therefore, mineral oil application might not be economically feasible for all grains and may result in product quality and contamination concerns.

EPA has only limited information on the effectiveness and cost of mineral oil application, and no test information. We have concluded that mineral oil application as a dust suppression technique for limiting emissions from fugitive sources has not been demonstrated. Therefore, we are not proposing a requirement to use mineral oil. We are requesting additional information on the effectiveness of mineral oil in combination with existing controls and when applied at fugitive sources regulated by the NSPS, particularly those associated with portable grain handling equipment. We are also soliciting information on the capital and operating cost of mineral oil application systems and any problems in grain quality associated with using mineral oil.

3. BSER Evaluation for New or Significantly Changed Emission Sources

Our review of the survey responses and presentations by representatives of the grain elevator industry identified the following three significant changes that have occurred to grain elevators since the last review of subpart DD in 1984:

- Use of new barge unloading technologies (e.g., en-masse drag conveyors).
- Use of wire screen column dryers.
- Use of TSFs.

We evaluated each of the changes to determine if they result in new emission sources, and, if so, whether existing subpart DD requirements represent BSER. To assess BSER, we: (1) identified available control measures applicable to each emission source; and (2) evaluated these measures to determine emission reductions achieved, associated costs, nonair environmental impacts, energy impacts and any limitations to their application. The evaluation is presented in sections V.A.3.a through V.A.3.c of this preamble. The BSER analysis is documented in the memorandum, "Evaluation of the Revisions to Grain Elevator Emission Standards" in the grain elevator docket at EPA-HQ-OAR-2010-0706.

a. New Unloading Operation Emission Sources at Barges - En-Masse Drag Conveyors

Barge unloading stations are an affected facility regulated by subpart DD. Subpart DD standards for barge and ship unloading were established for a specific type of unloading mechanism, referred to as either a marine leg or bucket elevator. Under subpart DD, process emissions caused by unloading using a marine leg/bucket elevator must be controlled by enclosing the marine leg/bucket elevator from the top to the bottom of the leg.

Emissions must be vented to a control device using a ventilation flow rate of 40 ft³ per bushel of grain unloaded for both the marine leg/bucket elevator and receiving hopper. Subpart DD also provides for an equivalency determination in situations where it is not possible to meet the design standards. Since the EPA's last review of subpart DD, several new barge unloading mechanisms have been developed and used, at least one of which does not utilize a bucket elevator or marine leg, and, as such, cannot use the design standards.

Some barge unloading stations currently use en-masse drag conveyors, which were not in use the last time we reviewed subpart DD. En-masse drag conveyors operate under a different principle than bucket elevators or marine legs. En-masse drag conveyors are plug-flow drag conveyors that are designed to operate vertically. The conveyor uses paddles or flights mounted on a chain to move grain. The side of the conveyor where the grain is being transferred is filled with grain. This type of unloader is significantly different than a bucket unloading leg which has open space between each bucket and can therefore be enclosed and ventilated to a control device. Therefore, dust aspiration to meet the design ventilation requirement of 40 ft³ per bushel of grain is not feasible for en-masse drag conveyors because there is no headspace for air passage to the grain inlet at the base of the conveyor. Additionally, the normal mode of

operation is to bury the conveyor inlet into the grain being unloaded, which eliminates the need for dust aspiration at this point. These types of unloaders are becoming more common as they are more efficient than the bucket unloaders - both in the movement of more grain in less time and also requiring fewer personnel for the operation. Particulate emissions are controlled by the design of the unloader (burying inlet in grain) without an add-on emission control system. This newer unloading system was developed for a variety of reasons, including faster unloading rates, higher capacity unloading, cost savings and other site-specific reasons.

Section 111 of the CAA makes an allowance for the EPA to subcategorize source categories based on differences in size, type and class. An en-masse drag conveyor is a different type of barge unloading system than the marine leg or bucket elevator due to the differences in the unloading mechanism. As such, en-masse drag conveyors constitute a new subcategory of barge unloading system. All emissions from barge unloading using an en-masse drag conveyor are fugitive in nature because they cannot be captured and ventilated to a control device. Some barges have a small opening where the en-masse drag conveyor enters and those openings can be covered around the en-masse loader, thereby limiting fugitive emissions. Other barges have a large opening where a bulldozer is lowered into the barge to

move grain toward the unloader. This type of application of the en-masse drag conveyor does not allow openings to be covered, due to safety requirements. No other technologies or techniques have been identified to control fugitive emissions from barge unloading.

The EPA collected test results from two one-hour method 9 tests for opacity conducted at one en-masse system (loading into the barges with larger openings) to demonstrate equivalency with the current standards, per the requirements in 60.302(d)(3) of subpart DD. Method 9 requires that opacity readings be recorded to the nearest 5 percent at 15-second intervals. Opacity is determined as an average of 24 consecutive observations, i.e., a set of observations. The average opacity levels during the highest set of observations of each test were 8.75 and 9.79 percent. Because method 9 opacity measurements are taken in increments of 5 percent, a limit based on the opacity tests must be rounded to the nearest multiple of five. For the tests reviewed, the resulting emission limit is 10 percent opacity. The EPA did not receive any information regarding whether there would be any cost associated with meeting the limit (other than testing and recordkeeping and reporting), or receive any information regarding whether there would be any emission reductions. However, a comparison between the opacity limit calculated and the data collected from the en-masse conveyor

show that the 10 percent opacity limit can be met by affected facilities using the en-masse conveyor system to unload barges without additional control, resulting in no cost or emission impacts for meeting the opacity limit. Additionally, we do not expect there to be any non-air quality health and environmental impacts associated with the limit, nor any changes in energy usage or emissions of any other pollutant.

Based on our evaluation, we are proposing a new subcategory for barge unloading stations - barge unloading stations with an en-masse drag conveyor. Based on these results, consistent with our obligations under CAA section 111(b), we are proposing that the 10 percent opacity limit represents BSER for en-masse drag conveyors used to unload grain from barges. We are also proposing that such systems be required to meet an opacity limit of 10 percent at all times.

We expect that en-masse drag conveyor systems that have a small opening could achieve a lower level of opacity if the opening was covered; however, we do not have sufficient data to establish a different opacity limit for these systems. We do not have information on the effectiveness of the cover, costs of the cover, procedures for using the cover or if there are operational or health issues that may occur if the opening is covered. We are requesting additional information to evaluate this control option.

Subpart DD contains provisions that allow for alternative methods of control for barge unloading stations instead of meeting the requirements for unloading legs. We are also proposing similar provisions for subpart DDa. We are proposing that affected barge unloading stations not using an unloading leg or an en-masse drag conveyor may use other methods of emission control that are demonstrated to the Administrator's satisfaction to reduce emissions of PM to the same level or less than the standards for barge unloaders using marine legs or en-mass drag conveyors.

The EPA requests comment on all aspects of the BSER determination for barge unloading using an en-masse drag conveyor. We also request comment on whether there are other types of barge unloading systems that should be considered for subcategorization. If so, the EPA requests information on control technologies that may be used on the unloading system, costs, emission reductions associated with the control and emissions test information for them. The EPA also requests information on technologies or practices that may be used to control emissions from barge unloading using an en-masse conveyor system and additional opacity tests conducted at en-masse conveyor systems.

b. New Wire Screen Column Dryers

Grain dryers are an affected facility under subpart DD. The subpart DD emission limits for dryers were established for two types of grain dryers used at grain elevators: rack dryers and column dryers. Grain column dryers are defined as equipment used for drying the grain in which the grain flows by gravity from the top of the dryer to the bottom in one or more packed columns between two perforated metal sheets. Subpart DD requires that PM emissions from grain dryers be reduced by meeting an opacity limit of 0 percent if a column dryer uses column plate perforations exceeding 0.094 inches, or if a rack dryer passes exhaust gases through a screen filter coarser than 50 mesh.

In its review of the grain elevator industry, the EPA found that an additional type of column grain dryer not addressed in subpart DD is now being used. Most rice dryers currently use column dryers with woven wire mesh screens in place of, or in addition to, perforated plates because perforated plates damage the rice kernel, are less efficient for rice drying and are not durable. All the wire mesh column dryers reported in response to the ICR except one are used for drying rice. The wire screens also allow for air transport from the dryer while entrapping PM from the rice. Information provided by one company drying rice shows that of the 126 dryers they operate, 115 are column dryers; 115 of all the dryers (column and rack) use a wire screen of 24 mesh size, and 9 use a 50 mesh size for controlling

PM emissions (50 mesh is a smaller screen size than 24 mesh). The 50 mesh screens are being replaced over time because of maintenance and plugging problems.

After an evaluation of the differences in size, type and class of column dryers, per CAA section 111, the EPA is proposing that wire screen column dryers constitute a new subcategory of grain dryers because they are a different type of dryer to which subpart DD does not apply.

Emissions from grain dryers are fugitive in nature. It is not possible to fully enclose grain dryers and vent PM emissions to a control device because of the large size of the dryer, the way that PM is emitted (through the side walls of the dryer rather than from a stack or vent), and because the dryer needs sufficient air flow to work properly and an enclosure would restrict the airflow. Therefore, there are no add-on controls that can be applied to control PM emissions from these dryers. The PM emitted is a function of the size of the openings on the dryer sidewalls. Larger openings emit more PM. The current industry practice is to use wire screens of 24 mesh size to reduce the size of the openings, resulting in reducing PM emissions.

The BSEER for rice dryers is to use a wire screen size of 24 mesh, as it reduces PM emissions and also allows proper operation of the dryer. We identified no regulatory options that

are more stringent and are technically viable. Higher mesh sizes (e.g., 50, 100) are available that would have smaller openings, resulting in even more emissions reductions. However, information from one rice facility indicates that the 50 mesh screens cause plugging problems and choke the airflow of the dryers and require substantial maintenance to clean. The EPA also determined, during the development of subpart DD in 1978, that the higher sizes, such as 100 mesh screens, would restrict air flow and result in more plugging of the openings such that there would be an unreasonable cost impact due to the need to clean the screens frequently, reduced drying performance and additional energy requirements. Those determinations are still true today.

The EPA collected opacity information for four column dryers with 24 mesh wire screens for drying rice. The opacity data for these dryers consist of one run of 30 minutes of observation for each dryer. The average opacities for the four dryers ranged from 1.13 to 8.38 percent, with the average opacities for the highest period of observation ranging from 5 to 10 percent. After rounding to the nearest increment of 5 percent, the corresponding opacity limit based on the data from the four rice dryers is 10 percent. Based on the information collected, this level is achievable by all wire screen column dryers using 24 mesh.

Because this limit is achievable by the wire screen column dryers that provided information, and these dryers would be similar or the same as future dryers constructed (i.e., wire screen column dryers using 24 mesh), we estimated there to be no cost or emission impacts from meeting a 10 percent opacity limit (other than testing, recordkeeping and reporting costs). The addition of wire screen of 24 mesh to column dryers is an equipment design feature that reduces PM instead of a separate add-on control device where emissions are vented. The wire screens would not generate secondary pollutant emissions or result in increased energy use. Therefore, the EPA estimated no nonair quality health and environmental impacts associated with the limit nor any changes in energy usage or emissions of any other pollutant.

Based on this evaluation, we are proposing a new subcategory of wire screen column dryers in subpart DDa with an opacity limit of 10 percent for this subcategory. Based on these results, consistent with our obligations under CAA section 111(b), we propose that an opacity limit of 10 percent represents BSER for wire screen column dryers and are proposing standards for wire screen column dryers in subpart DDa.

We have information from one Method 9 test conducted during filling and emptying operations for one wire screen column dryer drying rice. The average opacity for one run of 30 minutes was

15.6 percent, with the average opacity for the highest period of observation during the run at 28.75 percent. We are soliciting additional emissions test information and descriptions for emptying and filling activities to fully understand this process and set, if appropriate, a standard of performance.

We request comment on all aspects of the BSER analysis for wire screen column dryers. We also request additional emission test information for this subcategory of grain dryer.

c. Temporary Storage Facilities

Subpart DD does not regulate grain storage units (buildings, bins, silos). Instead, subpart DD regulates each affected facility (e.g., loading and unloading stations, grain dryers, grain handling operations) at any grain terminal elevator or any grain storage elevator. Under subpart DD, grain terminal elevators and grain storage elevators are defined in part by their permanent grain storage capacity. "Grain terminal elevator" means any grain elevator that has a permanent storage capacity of more than 2.5 million bushels (excluding elevators located at animal food manufacturers, pet food manufacturers, cereal manufacturers, breweries and livestock feedlots). "Grain storage elevator" means any grain elevator located at any wheat flour mill, wet corn mill, dry corn mill used for human consumption, rice mill or soybean extraction plant that has a permanent grain storage capacity of 1 million bushels.

Temporary storage facilities have been used by the grain elevator industry since the early 1990s. They are intended for bulk storage of grain on a temporary basis, i.e., they are intended to handle intermittent surges and surpluses and are not used necessarily every year. Under the U.S. Warehouse Act, TSFs are licensed and are defined by the following criteria:

- Use of asphalt, concrete or other approved base material.
- Use of rigid self-supporting sidewalls.
- Use of aeration.
- Use of an acceptable covering (e.g., tarp).

In 2007, the EPA received a letter from the National Grain and Feed Association requesting clarification about whether a TSF would constitute "permanent storage capacity" as defined in subpart DD for the purpose of determining applicability under subpart DD. On November 21, 2007, the EPA issued a letter indicating that TSFs should be included in "permanent storage capacity" when determining the applicability of subpart DD. The EPA conducted additional reviews of TSFs and decided that changes to the definition of "permanent storage capacity" were more appropriately made as part of this NSPS review.

Consequently, the EPA issued letters in July 2014 to the National Grain and Feed Association and the National Oilseed Processors Association, rescinding the November 21, 2007,

letter. These letters can be found at Docket ID Number EPA-HQ-OAR-2010-0706

Information collected in responses to surveys the EPA sent to grain elevators, gathered at site visits, and at industry meetings indicate that while grain stored in TSFs is kept on a temporary basis, the TSF structures are generally in place on a long-term basis and not dismantled, and may be used for multiple crops. Considering the length of time the structure is in place, the TSF structure then serves the same purpose as a permanent structure, even though the materials of construction and storage times are different. Therefore, we are proposing that the definition of "permanent storage capacity" include TSF capacity. However, we recognize that emissions from TSFs are significantly different than emissions from permanent structures due to the differences in grain throughputs. Therefore, we are also proposing a methodology to prorate the TSF storage capacity for the applicability determination. Our discussion of this methodology is provided in section V.B of this preamble.

We also evaluated BSER for affected facilities associated with TSFs. Information from site visits and survey responses indicate that only truck unloading and loading stations and grain handling operations are used at TSFs. Based on the survey responses and information provided by the industry, we determined that there are two types of grain handling and

loading/unloading operations associated with TSFs: (1) those associated with portable grain handling and loading/unloading equipment; and (2) those associated with fixed grain handling and loading/unloading equipment.

Portable grain handling/loading/unloading equipment include (but are not limited to) portable augers, portable conveyors and front-end loaders that are not fixed at any one spot and can be moved around the site. These pieces of equipment are typically not enclosed due to potential fine dust explosion risk and are therefore not vented to a control device. This explosion risk, combined with the portable nature of the equipment and associated emissions does not permit the capture and routing of the emissions through a stack for control. As such, their emissions are fugitive in nature. The EPA does not have any emission test information on portable grain handling, unloading stations and loading stations. We also have identified no technically viable emission control options for portable equipment. We considered application of mineral oil for dust suppression, but determined in section A.2.b of this preamble that application of mineral oil was not an appropriate emission control technique. Consequently, we propose to determine that BSER for portable grain handling, loading and unloading equipment associated with TSFs is no control. We request comment on our proposed determination. We are also soliciting emissions

test data for these sources, as well as information on the types of emission controls that are feasible and the cost of the controls.

Fixed grain handling and loading/unloading equipment are constructed to be stationary and directly connected to the storage facilities for ease of transferring grain. Fixed equipment can also be enclosed and emissions can be vented to a control device. Fixed equipment at TSFs are similar to those associated with permanent storage units. To control emissions from affected facilities associated with TSFs, we identified one regulatory option to be equal to the subpart DD requirements for affected facilities for permanent storage units. These requirements include: (1) meeting a PM emission limit of 0.023 g/dscm and an opacity limit of 0 percent for process emissions; and (2) meeting fugitive emission standards of a 5 percent opacity limit for truck unloading stations, and 0 percent opacity for grain handling operations. Loading operations from TSFs are typically done with portable equipment, which we propose the BSER to be no control. No other regulatory options were identified that are more stringent than the subpart DD requirements. As discussed in section A.2.b of this preamble, we evaluated test information submitted with the grain elevator survey responses and determined that the emission limit that has been demonstrated to be achievable is the same as the current

subpart DD standards. Controls used at grain elevators are well-operated fabric filters and no controls more effective than fabric filters were identified.

We conducted a BSER analysis for meeting the subpart DD requirements by evaluating the costs and emission reductions over a 5 year period to be consistent with the economic impacts analysis. We identified three scenarios at grain elevators that would be affected by adding TSFs: (1) a greenfield facility that exceeds the subpart DDa applicability criteria due to the capacity of TSFs; (2) an existing facility that is below the subpart DDa applicability criteria, but then adds a TSF and exceeds the criteria; and (3) an existing facility already subject to subpart DD (because it exceeds the subpart DD applicability criteria) that then adds a TSF. The additional costs associated with these scenarios include a shed to limit fugitives from unloading stations to meet the applicable opacity standard, and in certain situations, new fabric filters to meet PM limits. In other situations, the EPA concluded that PM emissions from the affected facility could be vented to an existing fabric filter at the grain elevator. Emission reductions were estimated based on routing PM emissions from grain sent to the TSF (and using truck unloading and grain handling affected facilities) to a fabric filter.

We estimated the capital costs to be \$1.09 million and the total annual cost (including testing and monitoring costs) to be \$0.616 million. The emission reductions were estimated to be 31 tons of PM₁₀ per year. Our analysis of BSER is documented in the memorandum "Evaluation of Revisions to Grain Elevator Emission Standards." We determined that these costs and emission reductions were reasonable and BSER is compliant with the proposed subpart DDa PM and opacity limits for fixed equipment. We request comment on our determination and additional cost and emissions information on these systems specific to TSFs.

B. How did the EPA evaluate changes to the methodology for determining applicability of the grain elevator NSPS?

Information collected in responses to surveys the EPA sent to grain elevators shows that TSFs are intended for bulk storage of grain on a temporary basis, i.e., they are intended to handle intermittent surges and surpluses and are not used necessarily every year, even though the structure may be in place for several years. The survey responses show that, on average, TSFs have one turnover per year. Specifically, they are filled one time in a year and emptied once each year. Other types of storage facilities (buildings, bins (not including TSFs) and silos) have, on average, nine turnovers a year, and throughput a significantly higher amount of grain in a year than TSFs. The same amount of grain stored in TSFs could be stored in smaller-

sized permanent storage facilities that are turned over more frequently. Due to the uncertainties in crop forecasts and fluctuations in crop yields and economics, TSFs are used rather than constructing other types of structures that are more costly and may not be warranted in the future.

Emissions from affected facilities at grain elevators are proportional to the amount of grain throughput. Consequently, affected facilities associated with TSFs have significantly less emissions than affected facilities associated with other types of storage.

Based on the information collected in the surveys and the EPA's understanding of the different uses between TSFs and other types of storage facilities, the EPA has concluded that the capacity of TSFs, as an indicator of emissions, is not a one-to-one equivalency to the capacity of other types of grain storage units. As a result, the EPA analyzed the survey information and developed a method for calculating an adjusted TSF storage capacity that would be equivalent to the storage capacity of other types of grain storage units (i.e., buildings, silos and bins). This adjusted storage capacity for TSFs would then be used to calculate "permanent storage capacity" by summing the adjusted TSF capacity with the capacity for all other types of structures.

For subpart DDa, the EPA is proposing a method for determining the adjusted TSF storage capacity for a given grain elevator by: (1) establishing the ratio of total annual storage capacity of all other types of storage facilities (excluding TSFs) to the total grain throughput for those storage facilities; and (2) applying that ratio to the total TSF capacity, thereby factoring down the TSF capacity.

For example, consider a grain elevator has 2,000,000 bushels of storage capacity in silos and an average annual throughput of 16,000,000 bushels through the silos. The ratio of permanent storage capacity to throughput is 0.125. If a TSF is constructed with a storage capacity of 1,000,000 bushels, the TSF capacity would be multiplied by the 0.125 ratio resulting in an equivalent permanent capacity of 125,000 bushels. The total permanent capacity of the grain elevator would be 2,125,000 bushels.

The EPA is proposing that grain elevators with new affected facilities use this method to calculate "permanent storage capacity" for determining applicability of subpart DDa. The EPA is proposing that, when historical throughput data are available for all storage facilities, grain elevators would be required to use the historical data to calculate a site-specific adjusted TSF storage capacity, and use the following equation to calculate "permanent storage capacity:"

$$C_{tp} = C_p + \left(\frac{C_p}{T_p} * C_t\right)$$

Where:

C_{tp} = Total permanent storage capacity of all buildings, bins (including TSFs) and silos used to store grain (bushels).

C_p = Total storage capacity of all buildings, bins (excluding TSFs) and silos used to store grain (bushels).

T_p = Maximum annual throughput of grain for all buildings, bins (excluding TSFs) and silos used to store grain (bushels per year) over the previous 5 years.

C_t = Total storage capacity of all TSFs used to store grain (bushels).

For situations where at least one grain storage building, bin or silo did not exist prior to the date that construction, modification or reconstruction of the affected facility commenced (i.e., the grain elevator does not have historical throughput data for the storage facilities), the EPA is proposing that grain elevators use a default factor to calculate the adjusted TSF capacity. The following equation would be used to then calculate the "permanent storage capacity":

$$C_{tp} = C_p + (0.34 * C_t)$$

Where:

C_{tp} = Total permanent storage capacity of all buildings, bins (including TSFs) and silos used to store grain (bushels).

C_p = Total storage capacity of all buildings, bins (excluding TSFs) and silos used to store grain (bushels).

- C_t = Total storage capacity of all TSFs used to store grain (bushels).
- 0.34 = Default ratio of permanent grain storage capacity to annual throughput

We request comment on this proposed approach. Refer to the memorandum, "Determination of Permanent Storage Capacity Equivalents for Temporary Storage Facilities" in the grain elevator docket at EPA-HQ-OAR-2010-0706 for further details.

C. How did the EPA evaluate the compliance requirements in the grain elevator NSPS?

In subpart DDa, we are proposing new monitoring, reporting and recordkeeping requirements and new provisions for startup, shutdown and malfunctions.

1. Testing and Monitoring Requirements

The EPA evaluated the monitoring requirements currently required in subpart DD to determine if they are adequate for determining compliance. Currently under subpart DD, grain elevators are required to conduct an initial PM and opacity performance test but are not required to perform follow-on testing to demonstrate continuous compliance. In light of our understanding that equipment need to be periodically maintained and checked for operational performance to ensure compliance with the emission standards, the EPA concluded that additional compliance requirements are needed in the proposed subpart DDa

rule. In subpart DDa, the EPA is proposing to require periodic compliance testing for affected facilities. We are proposing that PM performance tests using EPA Method 5 or Method 17 be conducted every 60 months and opacity tests using Method 9 be conducted annually. We are proposing that operators perform weekly visual emissions checks on affected facilities and maintain records of these checks, including any corrective action taken as a result of visible emissions. The proposed requirements are expected to ensure that emission control systems are properly maintained over time, ensure continuous compliance with standards and improve data accessibility. For fabric filter and baghouse control devices, we are proposing that affected facilities perform periodic visual inspections of the inside of the baghouse or fabric filter at intervals of 6 months. Corrective action must be taken if the baghouse is in need of repair or replacement.

We are requesting comment on whether to require bag leak detection systems (BLDS) at affected facilities controlled with fabric filters and baghouses. Bag leak detectors are one method that has been used in other source categories for ensuring proper performance of fabric filter and baghouses. The EPA has estimated the capital cost of BLDS to be \$24,000 per application. We are soliciting comments on whether BLDS can be used for affected facilities in this source category, problems

that may occur specific to their use in this source category and the reasonableness of the cost for this source category.

2. Recordkeeping and Reporting Requirements

In subpart DDa, we are proposing that the following records be maintained:

- The total storage capacity (bushels) for each building, bin (excluding TSFs) and silo used to store grain.
- The storage capacity of each TSF.
- Records quantifying emissions over the applicable standards for excess emissions events.
- Results of 6 month baghouse and fabric filter inspections, including any corrective action.
- Weekly visual emissions checks and any corrective action taken as a result of positive visual emissions checks.
- Results of annual opacity tests.
- The type of grain processed during the performance test at the affected facility.

In subpart DDa, we are proposing that the following records be reported:

- Results of performance tests, including Method 5, 17 and 9.
- Reports required to be submitted by part 60 general provisions.

The storage capacities of the various storage units are inputs to the calculation of equivalent permanent storage capacity, which is an input to the calculation of equivalent permanent storage capacity for TSFs. They are necessary to

verify compliance with the applicability of the standard. Records quantifying the emissions for excess emission events provide the EPA information on the magnitude of the emissions release.

As discussed in section V.C.1 of this preamble, we are proposing that grain elevators conduct PM compliance testing every 60 months and opacity testing annually and conduct weekly visual inspections of affected facilities. We are proposing that the Method 5 (or Method 17) and the Method 9 test results be reported to the EPA. Results of the visual inspections are proposed to be maintained on site. The type of grain processed during performance tests allows EPA to better characterize the emissions measured.

Electronic Reporting Tool

Through this proposal, the EPA is describing a process to increase the ease and efficiency of performance test data submittal and improve data accessibility. Specifically, the EPA is proposing that owners and operators of grain elevators submit electronic copies of required performance test reports to the EPA's WebFIRE database. Data will be entered through an electronic emissions test report structure called the ERT. The ERT will generate an electronic report which will be submitted using the CEDRI. The submitted report will be stored in both EPA's CDX and in the WebFIRE database making access to data very

straightforward and easy. A description of the ERT can be found at <http://www.epa.gov/ttn/chief/ert/index.html> and CEDRI can be accessed through the CDX website (www.epa.gov/cdx). A description of the WebFIRE database is available at: <http://cfpub.epa.gov/oarweb/index.cfm?action=fire.main>.

The proposal to submit performance test data electronically to the EPA applies only to those performance tests conducted using test methods that will be supported by the ERT. The ERT contains a specific electronic data entry form for most of the commonly used EPA reference methods. A listing of the pollutants and test methods supported by the ERT is available at: <http://www.epa.gov/ttn/chief/ert/index.html>.

We believe that industry will benefit from this proposed approach to electronic data submittal. The EPA believes, through this approach, industry will save time in the performance test submittal process. Additionally, the standardized format that the ERT uses allows sources to create a more complete test report resulting in less time spent on data backfilling if a source did not know which data elements were required to be submitted. Also through this proposal, industry would only need to submit a report once to meet the requirements of the applicable subpart. This means that the report would be accessible on the WebFIRE database by any stakeholder who requested a copy from the facility resulting in a time saving

for industry. This also benefits industry by cutting back on recordkeeping costs as the performance test reports that are submitted to the EPA using CEDRI are no longer required to be kept on-site. Thus, staff time needed to coordinate these records would be reduced.

Another benefit to industry is that since the EPA will already have performance test data in hand, fewer or less substantial data collection requests in conjunction with prospective required technology reviews will be needed. This would result in a decrease in staff time needed to respond to data collection requests.

State, local and tribal agencies will also benefit from more streamlined and accurate review of electronic data submitted to them. For example, the ERT would allow for an electronic review process rather than a manual data assessment; thus making review and evaluation of the source-provided data and calculations easier and more efficient. In addition, the public stands to benefit from electronic reporting of emissions data because the electronic data will be easier for the public to access and it will be available shortly after it is submitted in the system. For example, the WebFIRE database is easily accessible and provides a user friendly interface for any stakeholder to find and review any report submitted.

One major shared advantage of the proposed submittal of performance test data through the ERT is a standardized method to compile and store much of the documentation required to be reported by this rule. The ERT clearly states what testing information would be required by the test method and has the ability to house additional data elements required by a delegated authority. Another important proposed benefit of submitting these data to the EPA at the time the source test is conducted is that it should substantially reduce the effort involved in data collection activities in the future. Having these data allows the EPA to develop improved emission factors, make fewer information requests and promulgate better regulations.

In addition, the EPA must have performance test data to conduct effective reviews of CAA sections 112 and 129 standards, as well as for many other purposes including compliance determinations, emission factor development and annual emission rate determinations. In conducting these required reviews, the EPA has found it ineffective and time consuming, not only for us, but also for regulatory agencies and source owners and operators, to locate, collect and submit performance test data because of varied locations for data storage and varied data storage methods. In recent years, however, stack testing firms have typically collected performance test data in electronic

format, making it possible to move to an electronic data submittal system that would increase the ease and efficiency of data submittal and improve data accessibility.

A common complaint heard from industry and regulators is that emission factors are outdated or not representative of a particular source category. With timely receipt and incorporation of data from performance tests, the EPA would be able to ensure that emission factors, when updated, represent the most current range of operational practices. Finally, another benefit of the proposed data submittal to WebFIRE electronically is that these data would greatly improve the overall quality of existing and new emissions factors by supplementing the pool of emissions test data for establishing emissions factors

In summary, in addition to supporting regulation development, control strategy development and other air pollution control activities, having an electronic database populated with performance test data would save industry, state, local, tribal agencies and the EPA significant time, money and effort while also improving the quality of emission inventories and, as a result, air quality regulations.

3. Startup, Shutdown and Malfunction Provisions

The general provisions in 40 CFR part 60 provide that emissions in excess of the level of the applicable emissions

limit during periods of SSM shall not be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard (see 40 CFR 60.8(c)). In its 2008 decision in Sierra Club v. EPA, 551 F.3d 1019 (D.C. Cir. 2008), 130 S. Ct. 1735 (U.S. 2010), the U.S. Court of Appeals for the District of Columbia Circuit vacated portions of two provisions in the EPA's CAA section 112 regulations governing the emissions of HAP during periods of SSM. Specifically, the Court vacated the SSM exemption contained in 40 CFR 63.6(f)(1) and 40 CFR 63.6(h)(1), holding that under section 302(k) of the CAA, emissions standards or limitations must be continuous in nature and that the SSM exemption violates the CAA's requirement that some section 112 standards apply continuously. We are proposing the elimination of the SSM exemption in this rule. Consistent with Sierra Club v. EPA, the EPA is proposing standards in this rule that apply at all times, including periods of startup or shutdown. The EPA has attempted to ensure that the provisions we are proposing to eliminate are inappropriate, unnecessary or redundant in the absence of the SSM exemption. We are specifically seeking comment on whether we have successfully done so.

a. Periods of Startup and Shutdown

In proposing the standards in this rule, the EPA has taken into account startup and shutdown periods and does not have any

information that indicates that emissions during startup and shutdown are different from emissions during steady-state operation; therefore, the EPA proposes to apply the proposed standards during all periods of operation.

If you believe that the EPA's conclusion is incorrect or that the EPA has failed to consider any relevant information on this point, we encourage you to submit comments, including test data during periods of startup and shutdown. In particular, we note that the general provisions in part 60 require facilities to keep records of the occurrence and duration of any SSM (40 CFR 60.7(b)) and either report to the EPA any period of excess emissions that occurs during periods of SSM (40 CFR 60.7(c)(2)) or report that no excess emissions occurred (40 CFR 60.7(c)(4)). Thus, any comments that contend that sources cannot meet the proposed standard during startup and shutdown periods should provide these data and other specifics supporting their claim.

b. Periods of Malfunction

Periods of startup, normal operations and shutdown are all predictable and routine aspects of a source's operations. However, by contrast, malfunction is defined as "any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not

malfunctions." (40 CFR 60.2). The EPA has determined that section 111 does not require that emissions that occur during periods of malfunction be factored into development of CAA section 111 standards. Nothing in CAA section 111 or in case law requires that the EPA anticipate and account for the innumerable types of potential malfunction events in setting emission standards. CAA section 111 provides that the EPA set standards of performance which reflect the degree of emission limitation achievable through "the application of the best system of emission reduction" that the EPA determines is adequately demonstrated. A malfunction is a failure of the source to perform in a "normal or usual manner" and no statutory language compels EPA to consider such events in setting standards based on the "best system of emission reduction." The "application of the best system of emission reduction" is more appropriately understood to include operating units in such a way as to avoid malfunctions.

Further, accounting for malfunctions in setting emission standards would be difficult, if not impossible, given the myriad different types of malfunctions that can occur across all sources in the category and given the difficulties associated with predicting or accounting for the frequency, degree and duration of various malfunctions that might occur. As such, the performance of units that are malfunctioning is not "reasonably"

foreseeable. See, e.g., Sierra Club v. EPA, 167 F. 3d 658, 662 (D.C. Cir. 1999) ("The EPA typically has wide latitude in determining the extent of data-gathering necessary to solve a problem. We generally defer to an agency's decision to proceed on the basis of imperfect scientific information, rather than to 'invest the resources to conduct the perfect study.'"). See also, Weyerhaeuser v. Costle, 590 F.2d 1011, 1058 (D.C. Cir. 1978) ("In the nature of things, no general limit, individual permit, or even any upset provision can anticipate all upset situations. After a certain point, the transgression of regulatory limits caused by 'uncontrollable acts of third parties,' such as strikes, sabotage, operator intoxication or insanity, and a variety of other eventualities, must be a matter for the administrative exercise of case-by-case enforcement discretion, not for specification in advance by regulation."). In addition, emissions during a malfunction event can be significantly higher than emissions at any other time of source operation and thus accounting for malfunctions could lead to standards that are significantly less stringent than levels that are achieved by a well-performing non-malfunctioning source. It is reasonable to interpret section 111 to avoid such a result. The EPA's approach to malfunctions is consistent with section 111 and is a reasonable interpretation of the statute.

In the event that a source fails to comply with the applicable CAA section 111 standards as a result of a malfunction event, the EPA would determine an appropriate response based on, among other things, the good faith efforts of the source to minimize emissions during malfunction periods, including preventative and corrective actions, as well as root cause analyses to ascertain and rectify excess emissions. The EPA would also consider whether the source's failure to comply with the CAA section 111 standards was, in fact, "sudden, infrequent, not reasonably preventable" and was not instead "caused in part by poor maintenance or careless operation." 40 CFR 60.2 (definition of malfunction).

Further, to the extent the EPA files an enforcement action against a source for violation of an emission standard, the source can raise any and all defenses in that enforcement action and the federal district court will determine what, if any, relief is appropriate. The same is true for citizen enforcement actions. Similarly, the presiding officer in an administrative proceeding can consider any defense raised and determine whether administrative penalties are appropriate.

In several prior rules, the EPA had included an affirmative defense to civil penalties for violations caused by malfunctions in an effort to create a system that incorporates some flexibility, recognizing that there is a tension, inherent in

many types of air regulation, between ensuring adequate compliance and simultaneously recognizing that despite the most diligent of efforts, emission standards may be violated under circumstances entirely beyond the control of the source. Although the EPA recognized that its case-by-case enforcement discretion provides flexibility in these circumstances, it included the affirmative defense language to provide a more formalized approach and more regulatory clarity. See Weyerhaeuser Co. v. Costle, 590 F.2d 1011, 1057-58 (D.C. Cir. 1978) (holding that an informal case-by-case enforcement discretion approach is adequate); but see Marathon Oil Co. v. EPA, 564 F.2d 1253, 1272-73 (9th Cir. 1977) (requiring a more formalized approach to consideration of "upsets beyond the control of the permit holder."). Under the EPA's regulatory affirmative defense provisions, if a source could demonstrate in a judicial or administrative proceeding that it had met the requirements of the affirmative defense in the regulation, civil penalties would not be assessed. Recently, the United States Court of Appeals for the District of Columbia Circuit vacated such an affirmative defense in one of the EPA's Section 112(d) regulations. NRDC v. EPA, No. 10-1371 (D.C. Cir. April 18, 2014) 2014 U.S. App. LEXIS 7281 (vacating affirmative defense provisions in Section 112(d) rule establishing emission standards for Portland cement kilns). The court found that the

EPA lacked authority to establish an affirmative defense for private civil suits and held that under the CAA, the authority to determine civil penalty amounts lies exclusively with the courts, not the EPA. Specifically, the Court found: "As the language of the statute makes clear, the courts determine, on a case-by-case basis, whether civil penalties are 'appropriate.'" See NRDC, 2014 U.S. App. LEXIS 7281 at *21 ("[U]nder this statute, deciding whether penalties are 'appropriate' in a given private civil suit is a job for the courts, not EPA.").⁴ In light of NRDC, the EPA is not including a regulatory affirmative defense provision in this rulemaking. As explained above, if a source is unable to comply with emissions standards as a result of a malfunction, the EPA may use its case-by-case enforcement discretion to provide flexibility, as appropriate. Further, as the D.C. Circuit recognized, in an EPA or citizen enforcement action, the court has the discretion to consider any defense raised and determine whether penalties are appropriate. Cf. NRDC, 2014 U.S. App. LEXIS 7281 at *24. (arguments that violations were caused by unavoidable technology failure can be made to the courts in future civil cases when the issue arises).

⁴ The court's reasoning in *NRDC* focuses on civil judicial actions. The Court noted that "EPA's ability to determine whether penalties should be assessed for Clean Air Act violations extends only to administrative penalties, not to civil penalties imposed by a court." *Id.*

The same logic applies to EPA administrative enforcement actions.

D. How did the EPA evaluate additional changes for the grain elevator NSPS?

As summarized in section IV of this preamble, we are proposing revisions to three provisions in subpart DD to clarify applicability of the standards for grain elevators under subpart DD. These proposed revisions are intended to keep the meaning and intent of the definitions as originally promulgated while making the definitions applicable to the changes in the industry since the last review of subpart DD in 1984. The same clarifications are being proposed in subpart DDa. These proposed clarifications would apply to all affected facilities that commence construction, modification or reconstruction after August 3, 1978 (i.e., all affected facilities under both subpart DD and proposed subpart DDa). None of these clarifications would increase the cost of the rule or result in a change in PM emissions.

1. Revision to the Definition of "Grain Unloading Station"

We are proposing to revise the definition of "grain unloading station" to clarify which components of the unloading station are part of the affected facility.

The background information document (BID) (EP-450/2-77-001a) for the original grain elevator NSPS does not define each

piece of equipment included in the term "grain unloading station". However, throughout the BID, in the description of the grain elevator emission sources and processes in chapter 2, and in Figures 2-2 through 2-4, and Figures 4-1 through 4-4, the unloading process is described and shown to terminate at a hopper. Grain is then transported from the hopper via a conveyor to a bucket elevator. Based on the information in the BID, we concluded that at the time the NSPS was proposed and later finalized, the standard practice of the grain elevator industry was to have the hopper be the ending piece of equipment at the truck, rail, and barge/ship unloading stations. We received information from the grain elevator industry that since the last review of subpart DD in 1984, some grain unloading stations no longer use a hopper as the end of the unloading station, and instead use another storage unit, or transfer grain directly onto the grain conveyor. Industry white papers that serve as the basis for this conclusion can be found at Docket ID Number EPA-HQ-OAR-2010-0706. Because of these changes, we are proposing to better define the outer boundaries of a "grain unloading station" where the termination point of the unloading operation is not a hopper. The NSPS and the BID also do not specify the types of equipment included in grain unloading stations, resulting in the boundaries of the "unloading station" affected facilities being unclear to the regulated community. We received

input from the grain industry on the types of equipment that are included in the "grain unloading station". Consequently, we are also proposing to clarify in the definition all the types of equipment involved in unloading, up to the point that the grain is transferred to either storage or to grain handling operations. Industry white papers that serve as the basis for this conclusion can be found at Docket ID Number EPA-HQ-OAR-2010-0706.

We are therefore proposing revisions to the definition of "grain unloading station" to clarify that a "grain unloading station" encompasses the portion of a grain elevator where the grain is transferred from a truck, railcar, barge or ship to a receiving hopper, or to the grain handling equipment that connects the unloading station to the rest of the grain elevator. This definition includes all of the equipment, support structures and associated dust control equipment and aspiration systems required to operate or are otherwise connected to the grain unloading station. We are requesting comment on our interpretation of the intent of the original NSPS definition of "grain unloading station" and our proposed revisions to the definition.

2. Revision to Definition of "Grain Loading Station"

We are proposing to revise the definition of "grain loading station" to clarify all the types of equipment involved in

unloading, up to the point that the grain is transferred to either storage or to grain handling operations. As discussed in section V.D.1 of this preamble, the background information document (BID) (EP-450/2-77-001a) for the original grain elevator NSPS does not define each piece of equipment included in the term "grain loading station". Because the NSPS and the BID do not specify the types of equipment included in grain unloading stations, the boundaries of the "grain loading station" affected facilities are unclear to the regulated community. We also received input from the grain industry on the types of equipment that are included in the "grain loading station". Consequently, we are proposing to clarify in the definition all the types of equipment involved in loading. Industry white papers that serve as the basis for this conclusion can be found at Docket ID Number EPA-HQ-OAR-2010-0706. The proposed revision also maintains consistency with the proposed revision to the definition of "grain unloading station". These changes are supported by representatives of the grain elevator industry in their white papers.

3. Revision to the Operating Requirements for Barge and Ship Unloading Stations

Current §60.302(d)(1) requires that the unloading leg be enclosed from the top, including the receiving hopper, to the center line of the bottom pulley. However, not all barge and

ship unloading stations currently use a hopper. More recently, new technologies have been developed such that a hopper is not required. We are proposing to revise §60.302(d)(1) to clarify the provision for affected barge and ship unloading stations for which aspiration of the casing provides dust control at the boot of the conveyor and a receiving hopper is not used. The proposed revision clarifies that, in such cases, the unloading leg is required to be enclosed from the top to the center line of the bottom pulley and ventilation to a control device is required to be maintained on both sides of the leg.

VI. Summary of Cost, Environmental, Energy and Economic Impacts of These Proposed Standards

In setting standards, the CAA requires us to consider emission control approaches, taking into account the estimated costs and emission reductions, as well as impacts on energy, solid waste and other effects.

A. What are the impacts for subpart DDa?

The cost, environmental and economic impacts presented in this section are expressed as incremental differences between the impacts of grain elevators complying with the proposed subpart DDa and the current NSPS requirements of subpart DD. The impacts are presented for future grain elevators that are projected to commence construction, reconstruction or modification over the 5 years following proposal of the revised

NSPS. Costs are based on 2012 dollars. The analyses and the documents referenced below can be found at Docket ID Number EPA-HQ-OAR-2010-0706.

In order to estimate the incremental impacts of the proposed subpart DDa requirements, we first identified the potential scenarios where grain elevators may be constructed, reconstructed or modified and subject to subpart DDa. Seven different scenarios were identified and are summarized in Table 4 of this preamble.

Table 4. Scenarios Used to Estimate Impacts of Proposed Subpart DDa Requirements.

Scenario	Description
1a	Greenfield grain elevator with capacity (based on permanent storage only) > DDa cutoffs
1b	Greenfield grain elevator with capacity > DDa cutoffs due to TSF capacity
2	Existing grain elevator with capacity < DDa cutoffs, but then adds TSF capacity and exceeds cutoffs
3	Existing grain elevator with capacity < DDa cutoffs, but then adds permanent storage capacity and exceeds cutoffs
4	Existing grain elevator with capacity > DDa cutoffs, but then adds TSF capacity
5	Existing grain elevator with capacity > DDa cutoffs, but then adds permanent storage capacity
6	Existing grain elevator with capacity > DDa cutoffs, and does modification or reconstruction

We then estimated the number of potential grain elevators, and affected facilities within grain elevators, that would incur an incremental cost and emission reduction for each scenario. The estimates were developed by reviewing responses to a 2009 CAA

section 114 survey and extrapolating the results over the next 5 years. For further detail on the methodology of these calculations, see the memorandum, "Impacts of Grain Elevator NSPS Review," at Docket ID Number EPA-HQ-OAR-2010-0706.

The requirements in the proposed subpart DDa that differ from subpart DD are a revised applicability determination by incorporating TSF capacity, control of affected facilities associated with TSFs, annual opacity testing for affected facilities, PM testing every 60 months for affected facilities, weekly visual inspection of affected facilities, inspection of fabric filters and baghouses every 6 months, new recordkeeping requirements, reporting in ERT, a new opacity limit for wire screen column dryers and a new opacity limit for barge unloading stations using an en-masse conveyor system. These proposed requirements would be incurred only by affected facilities that commence construction, modification or reconstruction after [INSERT DATE OF PUBLICATION IN THE **FEDERAL REGISTER**] (i.e., they would not be incurred by all affected facilities at a grain elevator). Barge unloading stations using an en-masse conveyor and wire screen column dryers are not expected to incur a cost or emissions impact because data collected indicate that sources should be able to meet the standards without additional controls. Particulate matter testing every 5 years for affected facilities would occur outside of the 5-year period analyzed

because most construction, reconstructions and modifications for grain elevators are expected to occur after the first or second year following promulgation. The cost for Method 5 PM testing is contained in the memorandum, "Impacts of Grain Elevator NSPS Review," at Docket ID Number EPA-HQ-OAR-2010-0706. Based on information provided in the responses to the 2009 survey, including permits, we believe grain elevators are already keeping the records that we are proposing in subpart DDa, except for those associated with visual monitoring. The only incremental cost estimated for subpart DDa would be for control of affected facilities using fixed equipment associated with TSFs, initial testing at affected facilities that meet the subpart DDa applicability criteria due to TSFs, annual opacity testing at affected facilities, weekly visual inspection of affected facilities, inspection of fabric filters for affected facilities every 6 months, the recordkeeping associated with visual monitoring and inspections, and reporting in ERT. Eighty-eight grain elevators, with 221 affected facilities, are projected to be subject to the NSPS in the next 5 years, in one of the seven scenarios, because they will construct, reconstruct or modify an affected facility. Table 5 summarizes the costs of this action. Capital costs are estimated to be \$1,087,000 to comply with the proposed requirements. We estimate that the total increase in nationwide annual costs for the 221 affected

facilities at 88 grain elevators is \$1,116,000 for the number of affected facilities that are projected to be constructed, reconstructed or modified by the fifth year following promulgation of subpart DDa. Recordkeeping and reporting annual costs are estimated to be \$83,000 for the number of affected facilities that are projected to be constructed, reconstructed or modified by the third year following promulgation of subpart DDa. We determined that the projected compliance costs are reasonable as they are not expected to result in a significant market impact, whether they are passed on to the purchaser or absorbed by firms. Incremental emissions reductions of PM₁₀ for complying with subpart DDa using a fabric filter are estimated to be 31 tpy.

Table 5--Summary of the Costs of the Proposed Subpart DDa for New, Modified and Reconstructed Affected Sources at Grain Elevators

Requirement	Capital Cost (\$ thousand)	Annual Cost^a (\$ thousand/yr)
PM control	1,087	350
Emissions testing and monitoring/reporting and recordkeeping	0	849
Total nationwide	1,087	1,116

^a For the third year after promulgation, the associated annual cost (including annualized PM control cost and emissions testing and monitoring) is \$757,000.

In addition to reducing emissions, there are several benefits to today's proposed rulemakings. The proposed subpart

DDa rule eliminates the startup, shutdown and malfunction exemption. The removal of SSM is meant to ensure continuous compliance with the final standards. The rule establishes a 5-year repeat emissions testing requirement. The repeat testing requirement was established in a way that minimizes the costs for testing and reporting while still providing the source and the agency the necessary information needed to ensure continuous compliance with the final standards. We are adding a requirement for electronic submittal of performance test data. This simplifies submittal for affected sources and having such data publicly available enhances transparency and accountability through better public access to pollution control data.

B. What are the secondary impacts for subpart DDa?

We do not expect any indirect or secondary incremental air quality impacts associated with subpart DDa. No additional control technologies or operating standards are necessary to comply with the new proposed standards for barge unloading stations and wire screen column dryers. Additional solid waste impacts due to controlling total PM emissions from grain sent to TSFs are estimated to be 116 tpy. Energy impacts are estimated to be negligible.

C. What are the economic impacts for subpart DDa?

The total costs associated with subpart DDa's proposed control requirements and testing and monitoring requirements are

\$1.11 million over five years for the total number of affected facilities that are projected to be constructed, reconstructed or modified by the fifth year following promulgation.

The EPA also performed a screening analysis for impacts on all affected small entities by comparing compliance costs to average sales revenues. This is known as the cost-to-revenue or cost-to-sales ratio, or the "sales test." The use of a "sales test" for estimating small business impacts for a rulemaking is consistent with guidance offered by the EPA on compliance with SBREFA and is consistent with guidance published by the U.S. SBA's Office of Advocacy that suggests that cost as a percentage of total revenues is a metric for evaluating cost increases on small entities in relation to increases on large entities.

These projected compliance costs are reasonable as they are not expected to result in a significant market impact, whether they are passed on to the purchaser or absorbed by firms. The small business screening analysis results indicated that approximately 98% of all affected small facilities would have a cost-to-sales ratio of less than 1%, with a minimum cost-to-sales ratio of less than 1%, an average cost-to-sales ratio of less than 1%, and a maximum cost-to-sales ratio of 2.4%. The small business screening analysis results indicated that the NSPS for Grain Elevators will not have a significant economic impact on a substantial number of small entities (SISNOSE).

VII. Other Considerations

Executive Order 13563: Improving Regulation and Regulatory Review

Executive Order 13563, Improving Regulation and Regulatory Review, requires federal agencies to "...review existing rules that may be outmoded, ineffective, insufficient, or excessively burdensome, and to modify, streamline, expand, or repeal them in accordance with what has been learned." A coalition representing the grain elevator industry submitted a petition for the EPA to review and repeal the existing NSPS for grain elevators in 40 CFR part 60, subpart DD. In considering the directives of the Executive Order and the coalition petition, the EPA conducted several analyses aimed at determining the effectiveness of the existing subpart DD standard, determining whether the standard is still relevant and determining whether the standard was excessively burdensome. The analyses and results are discussed in detail in the memorandum, "Evaluation of Grain Elevator Emission Standards in Response to Executive Order 13563," in the grain elevator docket at EPA-HQ-OAR-2010-0706.

To address questions on the necessity and value of the standard, the effectiveness of subpart DD in reducing emissions was evaluated. Since the development of the original standard, the EPA has focused PM emission control programs on limiting direct emissions of PM₁₀ (the smaller size fraction of PM)

rather than total PM. As a result, we analyzed the effectiveness of the NSPS for controlling PM₁₀. Three scenarios were assessed: (1) emissions assuming no regulatory requirements (no subpart DD or state rules), (2) emissions assuming compliance with the subpart DD standards, and (3) emissions assuming no subpart DD, but with state rules in place. A comparison between these three scenarios indicates how effective subpart DD is in controlling PM₁₀ and whether repeal of the standard could potentially effect emissions, considering state rules for PM that are in place.

As a first step in the analyses, we assembled a database of grain elevators from: (1) Responses to a 2009 CAA section 114 survey sent to grain elevators; (2) information gathered from state regulatory agencies and (3) information gathered from the EPA's OECA and from the USDA FSA. Uncontrolled PM₁₀ emissions from this population of grain elevators in the dataset were estimated using emission factors from EPA's AP-42 document. Emissions after compliance with subpart DD were estimated based on the typical controls that facilities use to comply with the standards. In order to assess whether state requirements are as protective as subpart DD, we reviewed the PM₁₀ control requirements in the 12 states with the highest grain storage. These states are Iowa, Illinois, Minnesota, Nebraska, Kansas, Indiana, North Dakota, South Dakota, Ohio, Texas, Missouri and

Wisconsin. The review evaluated how each state implemented subpart DD and also evaluated state regulations controlling PM₁₀, opacity and fugitive dust emissions that may be applicable to grain elevators.

We concluded that the NSPS achieves a substantial emission reduction (approximately 85,000 tpy) of PM₁₀ in these states and significantly less emission reduction would be achieved if subpart DD were to be rescinded and only the requirements in state rules were applicable. The state PM rules that are applicable to grain elevators are in most cases significantly less stringent than the NSPS.

To assess whether the subpart DD standards are still relevant, grain production projections from the USDA were evaluated to determine if crop production is expected to increase in the future and consequently increase the demand for grain storage. The USDA provides crop production projections from 2010 through 2021 for corn, sorghum, barley, oats, wheat, rice and soybeans, which are the typical crops stored at grain elevators. A review of the projections shows that production of wheat, sorghum, oats and rice is expected to remain unchanged or decrease between 2010 and 2015, and between 2010 and 2021. The production of corn, soybeans and barley is expected to increase during these time intervals. The increases in corn, soybeans and barley offset the decreases in the other grains and total

production of grain is projected to increase by 1.46 billion bushels (7.7 percent) by 2015, and 2.79 billion bushels (14.8 percent) by 2021.

A review also was conducted to identify if any new grain elevators have been constructed in the last 5 years. We found that over the past 5 years three grain elevators with capacities greater than 2.5 million bushels have been constructed and would likely be subject to subpart DD. The results of the search show that grain elevators are continuing to be constructed. Based on the pattern of information in the survey responses and other information collection, some are replacements for facilities that were shutdown and some are completely new facilities. Given the high crop production, excepting the 2012 drought year, many units added capacity, either as permanent or temporary storage, if a new greenfield facility was not constructed. It is not known how many of these grain elevators with increased capacity are subject to subpart DD. While it cannot be determined how many new grain elevators will be constructed in the future, or whether capacities at existing facilities will be increased, the projections show that there will be a significant increase in the demand for grain storage. Based on activities of the previous years in the grain elevator industry, a combination of new elevators and increased capacities for existing elevators is expected.

To address whether the standard is overly burdensome, we reviewed the cost of complying with the subpart DD standards. Grain elevators meet the PM emission limit using fabric filters. Fabric filters are also routinely used for dust control for health and safety reasons (e.g., prevent fugitive dust explosions); fabric filters that are used for health and safety will meet the NSPS requirements. Therefore, for most affected facilities, the specific cost that is associated only with subpart DD is compliance testing. Subpart DD requires only an initial Method 5 test for PM and an initial Method 9 test for opacity. The cost for each initial Method 5 PM test is \$12,200 and each initial Method 9 opacity test is \$2,500. Annualized over 5 years, the costs are \$3,000 and \$610, respectively. There are no monitoring, recordkeeping and reporting requirements for subpart DD. Based on an evaluation of these one-time costs associated with compliance, the EPA concluded that the subpart DD standards do not impose an excessive burden on grain elevators.

Based on the results of these analyses, the EPA concluded that the subpart DD standards are still effective, relevant and not excessively burdensome.

VIII. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a "significant regulatory action" under the terms of Executive Order 12866 (58 FR 51735, October 4, 1993) and is therefore not subject to review under the Executive Orders 12866 and 13563 (76 FR 3821, January 21, 2001).

As described in section VII., the EPA prepared an analysis of the potential costs and benefits associated with this action. This analysis is contained in the memorandum, "Estimated Impacts of Revisions to the Grain Elevator NSPS" in the grain elevator docket at EPA-HQ-OAR-2010-0706. The total cost of the revisions to the NSPS is estimated to be \$0.22 million per year over the next 5 years, totaling \$1.11 million in the fifth year.

B. Paperwork Reduction Act

The information collection requirements in this proposed rule have been submitted for approval to the OMB under the Paperwork Reduction Act, 44 U.S.C. 3501, et seq. The ICR document prepared by the EPA has been assigned the EPA ICR number 2497.01 for 40 CFR part 60, subpart DDa.

The operating, monitoring and recordkeeping requirements in this proposed rule would be based on the information collection requirements in CAA section 111, the EPA's NSPS General Provisions (40 CFR part 60, subpart A), as well as state

operating permits. The recordkeeping and reporting requirements in the General Provisions are mandatory pursuant to CAA section 114 (42 U.S.C. 7414). All information other than emission data submitted to the EPA pursuant to the information collection requirements for which a claim of confidentiality is made is treated according to CAA section 114(c) and the EPA's implementing regulations at 40 CFR part 2, subpart B.

The annual average burden associated with the proposed revisions to NSPS requirements is estimated to involve 3,300 labor hours at \$110,000 and operation and maintenance costs of \$265,000. The annual average burden for the designated administrator is estimated to involve 810 labor hours at \$54,000. Burden is defined at 5 CFR 1320.3(b).

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for the EPA's regulations in 40 CFR are listed in 40 CFR part 9.

To comment on the agency's need for this information, the accuracy of the provided burden estimates and any suggested methods for minimizing respondent burden, the EPA has established a public docket for this rule, which includes this ICR, under Docket ID Number EPA-HQ-OAR-2010-0706. Submit any comments related to the ICR to the EPA and OMB. See the

ADDRESSES section at the beginning of this notice for where to submit comments to the EPA. Send comments to OMB at the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, DC 20503, Attention: Desk Office for EPA. Since OMB is required to make a decision concerning the ICR between 30 and 60 days after [INSERT DATE OF PUBLICATION IN THE **FEDERAL REGISTER**], a comment to OMB is best assured of having its full effect if OMB receives it by [INSERT DATE 30 DAYS AFTER PUBLICATION IN THE **FEDERAL REGISTER**]. The final rule will respond to any OMB or public comments on the information collection requirements contained in this proposal.

C. Regulatory Flexibility Act

The RFA generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedures Act or any other statute unless the agency certifies that the proposed rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations and small government jurisdictions.

For purposes of assessing the impacts of today's proposed rule on small entities, small entity is defined as: (1) A small business as defined by the SBA's regulations at 13 CFR 121.201; (2) a small governmental jurisdiction that is a government of a

city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of today's proposed rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. The small entities directly regulated by this proposed rule are small grain elevators, cooperative elevators and small grain processors. We have determined that 2 percent of all affected small grain elevators, or two facilities, may experience an impact in total revenue of 2 percent.

Although the proposed rule will not have a significant economic impact on a substantial number of small entities, the EPA nonetheless has tried to reduce the impact of this rule on small entities by minimizing testing, monitoring, recordkeeping and reporting requirements to be only those essential to assuring compliance with the NSPS.

D. Unfunded Mandates Reform Act

This rule does not contain a federal mandate that may result in expenditures of \$100 million or more for state, local and tribal governments, in the aggregate, or the private sector in any 1 year. While there are hundreds of grain elevators in use, the new testing, monitoring, recordkeeping and reporting

requirements of subpart DDa apply only to new affected facilities that commence construction on or after [INSERT DATE OF PUBLICATION IN THE **FEDERAL REGISTER**]. The EPA projects that only 88 grain elevators will be subject to the new requirements, and based on the burden estimate, believes the costs to be minimal. Thus, this rule is not subject to the requirements of sections 202 or 205 of UMRA.

This rule is also not subject to the requirements of section 203 of UMRA because it contains no regulatory requirements that might significantly or uniquely affect small governments. Grain elevators are not operated by government entities.

E. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. This proposed action will not impose substantial direct compliance costs on state or local governments and will not preempt state law. Thus, Executive Order 13132 does not apply to this action.

In the spirit of Executive Order 13132, and consistent with EPA policy to promote communications between the EPA and state

and local governments, the EPA specifically solicits comment on this proposed action from state and local officials.

F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

This action does not have tribal implications, as specified in Executive Order 13175, (65 FR 67249; November 9, 2000). The EPA is not aware of any grain elevators owned or operated by Indian tribal governments. Thus, Executive Order 13175 does not apply to this action.

The EPA specifically solicits comments from tribal officials on any potential impact on tribes from this proposed action.

G. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks

The EPA interprets Executive Order 13045 (62 F.R. 19885, April 22, 1997) as applying to those regulatory actions that concern health or safety risks, such that the analysis required under section 5-501 of the Executive Order has the potential to influence the regulation. This action is not subject to Executive Order 13045 because it is based solely on an analysis of the degree of emission reduction that is achievable through the application of the best system of emissions reduction, as provided in CAA section 111.

H. Executive Order 13211: Actions that Significantly Affect Energy Supply, Distribution or Use

This action is not a "significant energy action" as defined in Executive Order 13211 (66 FR 28355 (May 22, 2001)), because it is not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer and Advancement Act

Section 12(d) of the NTTAA of 1995, Public Law No. 104-113 (15 U.S.C. 272 note) directs the EPA to use (voluntary consensus standards) VCS in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. VCS are technical standards (e.g., materials specifications, test methods, sampling procedures and business practices) that are developed or adopted by VCS bodies. The NTTAA directs the EPA to provide Congress, through OMB, explanations when the agency decides not to use available and applicable VCS.

This proposed rulemaking involves technical standards. We conducted searches for Performance Standards for Grain Elevators (40 CFR part 60, subparts DD and DDa) through the enhanced National Standards Service Network database managed by the ANSI. We also contacted VCS organizations and accessed and searched their databases. Searches were conducted for EPA Methods 5 and 9 of 40 CFR part 60, Appendix A. During the search, if the title

or abstract (if provided) of the VCS described technical sampling and analytical procedures that are similar to the EPA's reference method, we considered it as a potential equivalent method. All potential standards were reviewed to determine the practicality of the VCS for this rule. This review requires significant method validation data which meets the requirements of EPA Method 301 for accepting alternative methods or scientific, engineering and policy equivalence to procedures in EPA reference methods. We may reconsider determinations of impracticality when additional information is available for particular VCS.

One VCS was identified as an acceptable alternative to EPA test methods for the purpose of this rule. The VCS ASTM D7520-09, "Standard Test Method for Determining the Opacity of a Plume in the Outdoor Ambient Atmosphere" is an acceptable alternative to Method 9 if operated under specific conditions, documented in the memorandum, "Voluntary Consensus Standard Results for Performance Standards for Grain Elevators (40 CFR Part 60, Subparts DD and DDa)", in the grain elevator docket in EPA-HQ-OAR-2010-0706. The search identified five VCS that were potentially applicable for this rule in lieu of EPA reference methods. After reviewing the available standards, EPA determined that five candidate VCS (ASME B133.9-1994 (2001), ISO 9096:1992 (2003), ANSI/ASME PTC-38-1980 (1985), ASTM D3685/D3685M-98

(2005), CAN/CSA Z223.1-M1977) identified for measuring emissions of pollutants or their surrogates subject to emission standards in the rule would not be practical due to lack of equivalency, documentation, validation data and other important technical and policy considerations. The EPA welcomes comments on this aspect of the proposed rulemaking and specifically invites the public to identify potentially-applicable VCS and to explain why such standards should be used in this regulation.

J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

Executive Order 12898 (59 FR 7629, February 16, 1994) establishes federal executive policy on EJ. Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make EJ part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies and activities on minority populations and low-income populations in the United States.

The EPA has concluded that it is not feasible to determine whether there would be disproportionately high and adverse human health or environmental effects on minority, low income or indigenous populations from the proposal of this rule because it is unknown where new facilities will be located and the EPA does

not have specific location information for sources that would be affected by this NSPS. The agency is seeking comment on the location of sources covered by the proposed standards and on the potential impacts of this rule on minority, low income and indigenous populations. The additional information that will be collected from the increase in testing requirements is expected to better inform the agency of the emissions associated with this source category and their significance, and will ensure better compliance with the proposed rule, and thus will result in the proposed rule being more protective of human health.

List of Subjects in 40 CFR Part 60

Environmental protection, Administrative practice and procedure, Air pollution control, Intergovernmental relations, Reporting and recordkeeping requirements.

Dated: June 27, 2014.

Gina McCarthy,
Administrator.

For the reasons stated in the preamble, title 40, chapter I, of the Code of Federal Regulations is proposed to be amended as follows:

PART 60—[AMENDED]

1. The authority citation for part 60 continues to read as follows:

Authority: 42 U.S.C. 7401, et seq.

Subpart DD—[AMENDED]

2. Section 60.300 is amended by revising paragraph (b) to read as follows:

§60.300 Applicability and designation of affected facility.

* * * * *

(b) Any facility under paragraph (a) of this section which commences construction, modification, or reconstruction after August 3, 1978, and on or before [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER], is subject to the requirements of this part.

3. Section 60.301 is amended by revising paragraphs (j) and (k) to read as follows:

§60.301 Definitions.

* * * * *

(j) Grain unloading station means that portion of a grain elevator where the grain is transferred from a truck, railcar, barge, or ship to a receiving hopper or to the grain handling

equipment that connects the unloading station to the rest of the grain elevator. A grain unloading station includes all of the equipment, support structures, and associated dust control equipment and aspiration systems required to operate or otherwise connected to the grain unloading station.

(k) Grain loading station means that portion of a grain elevator where the grain is transferred from the elevator to a truck, railcar, barge, or ship. A grain loading station includes all of the equipment, support structures, and associated dust control equipment and aspiration systems required to operate or otherwise connected to the grain loading station.

* * * * *

4. Section 60.302 is amended by revising paragraph (d) (1) to read as follows:

§60.302 Standard for particulate matter.

* * * * *

(d) * * *

(1) The unloading leg shall be enclosed from the top (including the receiving hopper) to the center line of the bottom pulley and ventilation to a control device shall be maintained on both sides of the leg and the grain receiving hopper. Where aspiration of the casing provides dust control at the boot of the conveyor and a receiving hopper is not used, the unloading leg must be enclosed from the top to the center line

of the bottom pulley and ventilation to a control device must be maintained on both sides of the leg.

* * * * *

5. Add Subpart DDa, consisting of 60.300a through 60.307a, to part 60 to read as follows:

Subpart DDa—Standards of Performance for Grain Elevators For Which Construction, Reconstruction, or Modification Commenced After [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]

Sec.

- 60.300a Applicability and designation of affected facility.
- 60.301a Definitions.
- 60.302a Standard for particulate matter.
- 60.303a Test methods and procedures.
- 60.304a Monitoring requirements.
- 60.305a Recordkeeping requirements.
- 60.306a Reporting requirements.
- 60.307a Modifications.

Subpart DDa—Standards of Performance for Grain Elevators For Which Construction, Reconstruction, or Modification Commenced After [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]

§60.300a Applicability and designation of affected facility.

(a) The provisions of this subpart apply to each affected facility at any grain terminal elevator or any grain storage elevator, except as provided under §60.304a(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship

loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations.

(b) Any facility under paragraph (a) of this section that commences construction, modification, or reconstruction after **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]** is subject to the requirements of this part.

§60.301a Definitions.

As used in this subpart, all terms not defined herein have the meaning given them in the Clean Air Act and in subpart A of this part.

(a) Capture system means all of the equipment, such as sheds, hoods, ducts, fans, dampers, etc., used to collect particulate matter generated by an affected facility at a grain elevator.

(b) Column dryer means any equipment used to reduce the moisture content of grain in which the grain flows from the top to the bottom in one or more continuous packed columns between two perforated metal sheets.

(c) En-masse drag conveyor means a device that uses paddles or flights mounted on a chain to remove grain from a barge or ship.

(d) Fugitive emission means the particulate matter which is not collected by a capture system and is released directly into the atmosphere from an affected facility at a grain elevator.

(e) Grain means corn, wheat, sorghum, rice, rye, oats, barley, and soybeans.

(f) Grain elevator means any plant or installation at which grain is unloaded, handled, cleaned, dried, stored, or loaded.

(g) Grain handling operations include bucket elevators or legs (excluding legs used to unload barges or ships), scale hoppers and surge bins (garners), turn heads, scalpels, cleaners, trippers, and the headhouse and other such structures.

(h) Grain loading station means that portion of a grain elevator where the grain is transferred from the elevator to a truck, railcar, barge, or ship. A grain loading station includes all of the equipment, support structures, and associated dust control equipment and aspiration systems required to operate or otherwise connected to the grain loading station.

(i) Grain storage elevator means any grain elevator located at any wheat flour mill, wet corn mill, dry corn mill (human consumption), rice mill, or soybean oil extraction plant which has a permanent grain storage capacity of 35,200 m³ (ca. 1 million bushels).

(j) Grain terminal elevator means any grain elevator which has a permanent storage capacity of more than 88,100 m³ (ca. 2.5 million U.S. bushels), except those located at animal food manufacturers, pet food manufacturers, cereal manufacturers, breweries, and livestock feedlots.

(k) Grain unloading station means that portion of a grain elevator where the grain is transferred from a truck, railcar, barge, or ship to a receiving hopper or to the grain handling equipment that connects the unloading station to the rest of the grain elevator. A grain unloading station includes all of the equipment, support structures, and associated dust control equipment and aspiration systems required to operate or otherwise connected to the grain unloading station.

(l) Permanent storage capacity means the grain storage capacity calculated as specified in either paragraph (l)(1) or (l)(2) of this section, as applicable.

(1) Grain throughput and grain storage capacity are known. If all of the grain storage buildings, bins and silos associated with the grain elevator existed prior to the date of construction, modification, or reconstruction of the affected facility, then use Equation 1 of this subpart to calculate permanent storage capacity.

$$C_{tp} = C_p + \left(\frac{C_p}{T_p} * C_t\right) \quad (\text{Eq.1})$$

Where:

- C_{tp} = Total permanent storage capacity of all buildings, bins (including TSFs) and silos used to store grain (bushels).
- C_p = Total storage capacity of all buildings, bins (excluding TSFs) and silos used to store grain (bushels).

T_p = Maximum annual throughput of grain for all buildings, bins (excluding TSFs) and silos used to store grain (bushels per year) over the previous 5 years.

C_t = Total storage capacity of all temporary storage facilities used to store grain (bushels).

(2) Grain throughput and grain storage capacity are not known. If any one of the grain storage buildings, bins or silos associated with the grain elevator did not exist prior to the date of construction, modification, or reconstruction of the affected facility, then use Equation 2 of this subpart to calculate permanent storage capacity.

$$C_{tp} = C_p + (0.34 * C_t) \quad (\text{Eq. 2})$$

Where:

C_{tp} = Total permanent storage capacity of all buildings, bins (including TSFs) and silos used to store grain (bushels).

C_p = Total storage capacity of all buildings, bins (excluding TSFs) and silos used to store grain (bushels).

C_t = Total storage capacity of all temporary storage facilities used to store grain (bushels).

0.34 = Default ratio of permanent grain storage capacity to annual throughput

(m) Portable equipment include (but are not limited to) portable augers, portable conveyors and front-end loaders that are not fixed at any one spot and can be moved around the site.

(n) Process emission means the particulate matter which is collected by a capture system.

(o) Rack dryer means any equipment used to reduce the moisture content of grain in which the grain flows from the top to the bottom in a cascading flow around rows of baffles (racks).

(p) Railcar means railroad hopper car or boxcar.

(q) Temporary storage facility, or TSF, means any grain storage bin that:

(1) Uses an asphalt, concrete, or other comparable base material;

(2) Uses rigid, self-supporting sidewalls;

(3) Provides adequate aeration; and

(4) Provides an acceptable covering (e.g., tarp).

(r) Unloading leg means a device which includes a bucket-type elevator which is used to remove grain from a barge or ship.

(s) Wire screen column dryer means any equipment used to reduce the moisture content of grain in which the grain flows from the top to the bottom in one or more continuous packed columns between two woven wire screens.

§60.302a Standard for particulate matter.

(a) On and after the date of completing the initial performance test required in §60.8, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere any gases which exhibit:

(1) Greater than 0 percent opacity from any column dryer with column plate perforation exceeding 2.4 mm diameter (ca. 0.094 inch).

(2) Greater than 0 percent opacity from any rack dryer in which exhaust gases pass through a screen filter coarser than 50 mesh.

(3) Greater than 10 percent opacity from any wire screen column dryer.

(b) On and after the date of completing the initial performance test required in §60.8, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility except a grain dryer, or grain handling, loading, or unloading affected facilities at a TSF using portable equipment, any process emission which:

(1) Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).

(2) Exhibits greater than 0 percent opacity.

(c) On and after the date of completing the initial performance test required in §60.8, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere any fugitive emission from:

(1) Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.

(2) Any grain handling operation which exhibits greater than 0 percent opacity.

(3) Any truck loading station which exhibits greater than 10 percent opacity.

(4) Any barge or ship loading station which exhibits greater than 20 percent opacity.

(d) The owner or operator of any barge or ship unloading station must meet the requirements specified in paragraph (d) (1), (2), or (3) of this section.

(1) Barge or ship unloading operations using an unloading leg must operate as specified in paragraphs (d) (1) (i) and (ii) of this section.

(i) The unloading leg must be enclosed from the top (including the receiving hopper) to the center line of the bottom pulley and ventilation to a control device must be maintained on both sides of the leg and the grain receiving hopper. Where aspiration of the casing provides dust control at the boot of the conveyor and a receiving hopper is not used, the unloading leg must be enclosed from the top to the center line of the bottom pulley and ventilation to a control device must be maintained on both sides of the leg.

(ii) The total rate of air ventilated must be at least 32.1 actual cubic meters per cubic meter of grain handling capacity (ca. 40 ft³ /bu).

(2) On and after the date of completing the initial performance test required in §60.8, visible emissions from a barge or ship unloading station using an en-masse drag conveyor must not exceed 10 percent opacity.

(3) For barge or ship unloading stations not using an unloading leg or an en-masse drag conveyor, the owner or operator must use other methods of emission control demonstrated to the Administrator's satisfaction to reduce emissions of particulate matter to the same level or less.

(e) These standards apply at all times.

§60.303a Test methods and procedures.

(a) In conducting the performance tests required in §60.8, the owner or operator must use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b). Acceptable alternative methods and procedures are given in paragraph (c) of this section.

(b) The owner or operator must determine compliance with the particulate matter and opacity standards in §60.302a as follows:

(1) Method 5 at 40 CFR part 60, appendix A-3 must be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run must be at least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder must be operated without heaters.

(2) Method 2 at 40 CFR part 60, appendix A-1 must be used to determine the ventilation volumetric flow rate.

(3) Method 9 at 40 CFR part 60, appendix A-4 and the procedures in §60.11 must be used to determine opacity.

(c) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:

(1) For Method 5 at 40 CFR part 60, appendix A-3, Method 17 at 40 CFR part 60, appendix A-6 may be used.

(d) Periodic performance tests must be conducted as specified in paragraphs (d)(1) and (2) of this section.

(1) Method 9 at 40 CFR part 60, appendix A-4 testing for opacity must be performed annually. The first performance test must be conducted no later than 12 months after the initial performance test required in §60.8 of this part. Subsequent performance tests must be conducted at intervals no longer than 12 months following the previous periodic performance test.

(2) Method 5 at 40 CFR part 60, appendix A-3 testing for particulate matter concentration must be conducted no later than 60 months after the initial performance test required in §60.8 of this part. Subsequent performance tests must be conducted at intervals no longer than 60 months following the previous periodic performance test. The periodic performance test results must be submitted according to §60.306a. The performance test must be conducted while processing grains that will result in the highest PM emissions.

§60.304a Monitoring requirements.

(a) You must conduct weekly visual emissions checks for each affected facility and take corrective action for positive visual emissions checks.

(b) You must conduct inspections of fabric filters and baghouses at each affected facility no later than 6 months after the initial performance test required in §60.8 of this part. Subsequent inspections must be conducted at intervals no longer than 6 months following the previous inspection.

§60.305a Recordkeeping requirements.

You must maintain the records specified in subpart A of this part and the records specified in paragraphs (a) through (f) of this section.

(a) Total storage capacity and annual throughput of grain (bushels) for each building, bin (excluding TSFs), and silo used to store grain.

(b) Total storage capacity for each TSF.

(c) The date, time and duration of each event that causes an affected source to fail to meet an applicable standard; the record must list the affected source or equipment, an estimate of the volume of each regulated pollutant emitted over the standard for which the source failed to meet a standard, and a description of the method used to estimate the emissions.

(d) Results of 6 month baghouse and fabric filter inspections, including any corrective action taken.

(e) Weekly visual emissions checks and any corrective action taken as a result of positive visual emissions checks.

(f) Results of 12 month opacity tests.

§60.306a Reporting Requirements.

(a) Within 60 days after the date of completing each performance test (defined in §60.8) as required by this subpart and §60.8, you must submit the results of the performance tests, and include the type of grain processed at the affected facility for which the performance test is being conducted, required by this subpart to the EPA by the following steps. You must use the EPA's Electronic Reporting Tool (ERT) (see <http://www.epa.gov/ttn/chief/ert/index.html>) to document

performance test data. You must submit the file package generated by ERT through the EPA's Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed by logging in to the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>). Only data collected using test methods supported by the ERT as listed on the ERT website are subject to the requirement to submit the performance test data electronically. Owners or operators who claim that some of the information being submitted for performance tests is confidential business information (CBI) must submit a complete ERT file including information claimed to be CBI on a compact disk, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to the EPA via CDX as described earlier in this paragraph. At the discretion of the delegated authority, you must also submit these reports, including the confidential business information, to the delegated authority in the format specified by the delegated authority. For any performance test conducted using test methods that are not listed on the ERT website, the owner or operator shall submit the results of the performance test to the Administrator at the appropriate address listed in §60.4.

(b) Within 60 days after the date of completing each Method 9 opacity test required in this subpart and §60.11, you must submit the results of the opacity tests to the Administrator at the appropriate address as shown in 40 CFR 60.4.

(c) The date, time and duration of each event that causes an affected facility to fail to meet a standard; the record must list the affected facility or equipment, an estimate of the volume of each regulated pollutant emitted over the standard for which the source failed to meet a standard, and a description of the method used to estimate the emissions.

§60.307a Modifications.

(a) The factor 6.5 must be used in place of "annual asset guidelines repair allowance percentage," to determine whether a capital expenditure as defined by §60.2 has been made to an existing facility.

(b) The following physical changes or changes in the method of operation are not by themselves considered to be a modification of any existing facility:

(1) The addition of gravity loadout spouts to existing grain storage or grain transfer bins.

(2) The installation of automatic grain weighing scales.

(3) Replacement of motor and drive units driving existing grain handling equipment.

(4) The installation of permanent storage capacity with no increase in hourly grain handling capacity.

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