

MACT Startup, Shutdown & Malfunction Plans

Indiana A&WMA
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History of SSMP

- Part 63 General Provisions
- Concept began with NSPS, but not in NSPS
- Technology-based vs. health/air quality-based standards
- Protection from continuous compliance requirement
- Litigation even up to today



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Rule and Implementation Information for Part 63 General Provisions (Subpart A)

[\(Docket#A-91-09, A-2001-02\)](#)

last updated 6/29/04

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Rule Information




Proposed and Promulgated Rules

Subpart A - General Provisions

<i>Date</i>	<i>Citation</i>	<i>Action</i>	<i>Description</i>	<i>File Download</i>
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- Rules & Implementation
- National-Scale Air Toxics Assessment
- Risk Studies
- Education & Outreach
- About Air Toxics
- Pollutants & Sources
- State, Local, Tribal Resources
- Publications
- Contacts
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Settlements

<i>Date</i>	<i>Citation</i>	<i>Action</i>	<i>Description</i>	<i>File Download</i>
8/26/02	67 FR 54804	Settlement Agreement	Federal Register Notice announcing the proposed settlement for the 112 (j)/General Provisions Litigation. The settlement proposes to reduce the time between the Part 1 and Part 2 application from 24 months to 12 months, would require submittal of all startup, shutdown, and malfunction plans to the Administrator (or delegated), and would make certain other SSMP provisions consistent with intent stated in the preamble to the previous amendments. The comment period is 30 days	 
11/28/00	65 FR 70898	Settlement Agreement	Federal Register Notice announcing a settlement agreement with the litigants for amendments to the Part 63 General Provisions and the Section 112(j) requirements.	










Closely Related Rules, Policies or Program Guidance

3/02 Air Toxics Rule: Applicability Information









2/00 DRAFT Guidelines for MACT Determinations under Section 112(j) Requirements [EPA-453/R-xx-026]



Other

			make several changes in sections of the General Provisions that establish general procedures for startup, shutdown and malfunction plans (SSMP).	
4/5/02	67 FR 16595	Rules/Regulations	Promulgation of 3/23/01 Amendments	  Table of Significant Changes available, see below.
3/23/01	66 FR 16318	Proposed Rules	Proposes to revise and clarify several of the current provisions. Proposed amendments, in part, based on a result of decisions reached in settlement negotiations.	 
2/12/99	64 FR 7467	Rules/Regulations	Recordkeeping and Reporting Burden Reduction	 
09/11/96	61 FR 47840	Proposed Rule	Recordkeeping and Reporting Burden Reduction	 
3/16/94	59 FR 12430	Rules/Regulations	Original Promulgation	 (TTN file)
8/11/93	58 FR 62782	Rules/Regulations	Original Proposal	not available

NOTE: All files are [Government Printing Office \(GPO\)](#) Federal Register files unless otherwise indicated. You can also access full text of the Code of Federal Regulations at [GPO e-CFR](#).

<i>Date</i>	<i>Citation</i>	<i>Action</i>	<i>Description</i>	<i>File Download</i>
5/30/03	68 FR 32585	Rules/Regulations	Final Amendments of the final amendments proposed 12/9/02.	 
5/15/03	67 FR 26249	Proposed Rules	This action proposes amendments to the general provisions that would provide regulatory relief, where appropriate, to facilities that use P2 to achieve and maintain HAP emission reductions equivalent to or better than MACT level of control. This rule also proposes additional incentives for facilities that are members of the national environmental performance track program. Comments are due by July 14, 2003.	 
12/9/02	67 FR 72875	Proposed Rules	Proposed Amendments - Proposes to establish new timeline for submission of 112 (j) Part 2 applications and to make several changes in sections of the General Provisions that establish general procedures for startup, shutdown and malfunction plans (SSMP).	 
4/5/02	67 FR 16595	Rules/Regulations	Promulgation of 3/23/01 Amendments	  Table of

4/5/02 Amendments to 40 CFR 63.6

- Revised paragraphs (e)(1)(i) and (ii);
- Removed and reserved paragraph (e)(2);
- Revised paragraphs (e)(3)(i) introductory text, (e)(3)(i)(A), (e)(3)(ii), the first three sentences of (e)(3)(iii) and (e)(3)(v), revising paragraphs (e)(3)(iv), (e)(3)(vii)(B), (e)(3)(vii)(C), adding paragraph (e)(3)(vii)(D), revising paragraph (e)(3)(viii) and adding paragraph (e)(3)(ix)

5/30/03 Amendments to 40 CFR 63.6

- Revised paragraph (e)(1)(i);
- Revised the first sentence in paragraph (e)(3)(i) introductory text;
- Revised paragraph (e)(3)(i)(A);
- Revised paragraph (e)(3)(iv);
- Added five sentences to the end of paragraph (e)(3)(v);
- Revised paragraph (e)(3)(vi);
- Revised the introductory text to paragraph (e)(3)(vii) and Revised paragraph (e)(3)(vii)(B); and
- Revised the last sentence in paragraph (e)(3)(viii).

Sec. 63.2 Definitions

Startup means the setting in operation of an affected source or portion of an affected source for any purpose (4/5/02 rev)

Shutdown means the cessation of operation of an affected source or portion of an affected source for any purpose (4/5/02 rev)

Sec. 63.2 Definitions

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner *which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded (5/30/03 rev)*. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

40 CFR Sec. 63.6

Compliance with standards and maintenance requirements.

- a) Applicability
- b) Compliance dates for new and reconstructed sources
- c) Compliance dates for existing sources
- d) [Reserved]
- e) ***Operation and maintenance requirements***
- f) Compliance with nonopacity emission standards
- g) Use of an alternative nonopacity emission standard
- h) Compliance with opacity and visible emission standards
- i) Extension of compliance with emission standards
- j) Exemption from compliance with emission standards

40 CFR Sec. 63.6(e)(1)(i)

- General Duty clause
- At all times, including SS&M, operate and maintain source, including:
 - Air pollution control equipment
 - Monitoring equipmentin manner consistent with safety and good air pollution control practices

40 CFR Sec. 63.6(e)(1)(i)

- Means have to reduce emissions to the greatest extent
 - Consistent with safety and good air pollution control practices
- Does not mean:
 - Have to comply with emission levels in the applicable standard if not consistent
 - Have to further reduce emissions if in compliance with applicable standard

40 CFR Sec. 63.6(e)(1)(i)

- Compliance with this clause can be determined based on:
 - Monitoring results
 - Review of O&M procedures (including SS&MP)
 - Review of O&M records
 - Inspection of source

40 CFR Sec. 63.6(e)(1)(ii) & (iii)

- Must correct malfunctions ASAP after occurrence in accordance with SSMP
- If unexpected event arises during SS&M, must minimize emissions consistent with safety and good air pollution control practices
- O&M requirements are independently enforceable

40 CFR Sec. 63.6(e)(3)(i)

Startup, Shutdown, and Malfunction Plan

- Must develop and implement written SSMP containing:
 - Procedures for operating and maintaining source during periods of SSM
 - Program of corrective action for malfunctioning process, air pollution control, monitoring equipment
- Must develop by standard compliance date

40 CFR Sec. 63.6(e)(3)(i)

Purpose of SSMP:

- (A) Ensure compliance with general duty clause
- (B) Ensure that O/O prepared to correct malfunctions ASAP
- (C) Reduce reporting burden

40 CFR Sec. 63.6(e)(3)(ii), (iii)

- During SS&M, follow SSMP
- If SSMP followed, keep records demonstrating plan was followed
 - Checklist or other effective form of recordkeeping
- Keep records specified in Sec. 63.10(b)
 - SSM occurrence and duration
 - Malfunction of air pollution control and monitoring equipment
- Confirm actions in semiannual report required in Sec. 63.10(d)(5)

40 CFR Sec. 63.6(e)(3)(iv)

If SSMP not followed and emission limitation exceeded:

- Record actions taken
- Report such actions within 2 working days of commencing, followed by letter within 7 working days after the end of the event
- Or can make alternative reporting arrangements in advance

40 CFR Sec. 63.6(e)(3)(v)

- Must maintain current SSMP at source
- Must make available upon EPA request
- If revised, must maintain each previous version and make available to EPA for 5 years after revision
- If cease operation or no longer subject to MACT, must keep copy of most recent plan for 5 years from that date and make available upon request
- EPA must request SSMP submittal whenever public asks to examine or receive a copy of plan
 - Can submit in electronic format
 - Can claim confidential business information

40 CFR Sec. 63.6(e)(3)(vi)

To develop SSMP, can use

- Standard Operating Procedures manual
- OSHA plans
- Other Plans

40 CFR Sec. 63.6(e)(3)(vii)

EPA can require SSMP revisions if:

- A. Does not address a SSM event that has occurred;
- B. Fails general duty clause;
- C. Does not correct ASAP; or
- D. Includes event that does not meet definition of startup, shutdown, or malfunction

40 CFR Sec. 63.6(e)(3)(viii)

- May revise plan as necessary to reflect changes in equipment or procedures
- Unless agency provides otherwise, may revise without prior approval
 - Report revision in the semiannual report
- If event not in the plan happens, must revise within 45 days after the event

40 CFR Sec. 63.6(e)(3)(viii)

- If make revision that alters scope of activities at the source that are deemed to be a SS&M, or otherwise modifies applicability of any emission limit, work practice requirement, or other requirement in a MACT standard
 - Revised plan shall not take effect until after written notice describing the revision provided to permitting authority

40 CFR Sec. 63.6(e)(3)(ix)

- Title V permit must require adoption of SSMP and operation and maintenance with it
- Revisions to SSMP shall not constitute permit revisions under part 70 or part 71
- SSMP procedures do not fall within the permit shield provision in section 504(f) of the Act

OM&M Plan Example

Secondary Aluminum Production MACT 40 CFR 63.1510(b)

- 1) Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
- 2) A monitoring schedule for each affected source and emission unit.
- 3) Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in 40 CFR 63.1505.
- 4) Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including
 - i. Calibration and certification of accuracy of each monitoring device, at least once every 6 months
 - ii. Procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in subpart A of this part.

OM&M Plan Example

Secondary Aluminum Production MACT 40 CFR 63.1510(b)

- 5) Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.
- 6) Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in paragraph (b)(1) of this section, including:
 - i. Procedures to determine and record the cause of a deviation or excursion, and the time the deviation or excursion began and ended; and
 - ii. Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed

OM&M Plan Example

Secondary Aluminum Production MACT 40 CFR 63.1510(b)

- 7) A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
- 8) Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in paragraph (o) of this section for each group 1 furnace not equipped with an add-on air pollution control device