

# **Weyerhaeuser Start-up, Shutdown and Malfunction Plan (SSMP)**

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CAPCA

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# Regulatory Requirements

 40 CFR Part 63 Subpart S

 40 CFR Part 63 Subpart MM

 40 CFR Part 63 Subpart  
DDDDD (future)

# General SSMP Format

## Section 1

- a. Introduction
- b. Regulatory Basis and Analysis  
Summary
- c. Applicable Regulations

# General SSMP Format

- ✍ **Section 2 – Process Equipment**
  - a. System Description - definitions, process equipment, MACT sources, process diagrams
  - b. Start-up - procedures, verification, emissions minimization, event tracking

# General SSMP Format

## **Section 2 – Process Equipment**

- c. Shutdown – procedures, verification, emissions minimization, event tracking
- d. Malfunctions – event description, types of malfunctions, preventative measures, emission minimization steps

# General SSMP Format

- ✍ **Section 3 – Collection & Transportation Systems (if applicable)**
  - a. System Description - definitions, process equipment, MACT sources, process diagrams
  - b. Start-up - procedures, verification, emissions minimization, event tracking

# General SSMP Format

- ✍ **Section 3 – Collection & Transportation Systems (if applicable)**
  - c. Shutdown – procedures, verification, emissions minimization, event tracking
  - d. Malfunctions – event description, types of malfunctions, preventative measures, emission minimization steps

# General SSMP Format

- ✍ **Section 4 – Control Equipment**
  - a. System Description - definitions, process equipment, MACT sources, process diagrams
  - b. Start-up - procedures, verification, emissions minimization, event tracking

# General SSMP Format

## Section 4 – Control Equipment

- c. Shutdown – procedures, verification, emissions minimization, event tracking
- d. Malfunctions – event description, types of malfunctions, preventative measures, emission minimization steps

# General SSMP Format

- ✍ **Section 5 – Continuous Monitoring Requirements**
  - a. Control Devices
  - b. By-pass Vents (if applicable)

# General SSMP Format

## **Section 6 – Maintenance Information**

- a. General Maintenance Plan
- b. Maintenance Guidelines
- c. Specific Maintenance Activities
- d. Leak Detection & Repair Program (if applicable)

# General SSMP Format

- ✍ **Section 7 – Reporting & Recordkeeping Requirements**
  - a. General Reporting Requirements
  - b. Recordkeeping Requirements

# General SSMP Format

## **Section 8 – SSMP Review & Revision Requirements**

- a. SSMP Review
- b. SSMP Revision(s)

# General SSMP Format

- ✍ Appendix A – Malfunction Flowcharts
- ✍ Appendix B – Site-Specific Inspection Plan (if applicable)
- ✍ Appendix C – Start-up, Shut-down, Malfunction Checklists
- ✍ Appendix D – CFR Part 63 (for electronic copy, an internet link to applicable subpart)

# SSMP Malfunction Table Contents

## ✍ No. 5 Lime Kiln (control device & source)

1. Event – Loss of Incineration Permissives
2. Malfunctions – flame failure, low kiln temperature, mechanical component failures, electrical component failures

# SSMP Malfunction Table Contents

- ✍ No. 5 Lime Kiln (control device & source)
  - 3. Preventative Measures
    - ✍ DCS Monitoring & Alarms
    - ✍ Flame Safety Checks
    - ✍ Operations Basic Care Routes
    - ✍ Maintenance Condition Monitoring Routes
    - ✍ Routine Preventative Maintenance

# SSMP Malfunction Table Contents

- ✍ No. 5 Lime Kiln (control device & source)
- 4. Emission Minimization Steps
  - ✍ Automatic switching from one control device to another without venting
  - ✍ Reference to applicable Malfunction Flowchart
  - ✍ Investigate cause of malfunction and take maintenance action to repair

# SSMP Malfunction Flowchart Contents

- ✍ Assess Probable Cause & Estimated Duration of Excess Emissions
- ✍ Initiate Emergency Work Notification
- ✍ Reduce Process Rate if Excess Emissions Continue for more than 4 hours
- ✍ Shut-down Process if Excess Emissions Continue for more than 16 hours

# SSMP Malfunction Flowchart Contents

- ✍ Document Malfunction and Excess Emissions Event with Environmental Incident Investigation Report including;
  - ✍ Incident Description
  - ✍ Potential Root Causes
  - ✍ Corrective Action(s)
  
- ✍ Document SSMP Checklist
  - ✍ Were Malfunction Procedures described in SSMP followed?

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