Table of Contents

1. Introduction
- 1.1 Regulatory Requirements
- 1.2 Definition of Startup, Shutdown and Malfunction Events
- 1.3 Plan Maintenance and Updates
- 1.4 Standard Procedures and Equipment Malfunction Classifications

2. Process Description

3. Startup Procedures
- 3.1 Definition of Startup Period
- 3.2 Startup Emission Minimization Procedures

4. Shutdown Procedures
- 4.1 Definition of Shutdown Period
- 4.2 Shutdown Emission Minimization Procedures

5. Operational Events (Malfunctions)
- Regenerative Thermal Oxidizer (RTO) Failure
- Abort Stack Damper Failure
- High Dryer Exhaust Temperature

6. Routine Control Device Maintenance Exemption (RCDME)
- 6.1 Downtime Allowance
- 6.2 Maintenance Exempted Related Activities

7. Recordkeeping and Reporting
- 7.1 Recordkeeping Requirements
- 7.2 Reporting Requirements
  - 7.2.1 Periodic Startup, Shutdown, and Malfunction Reports
  - 7.2.2 Immediate Startup, Shutdown, and Malfunction Reports

Appendix A – Typical Abort Damper

1. INTRODUCTION

Georgia-Pacific Wood Products LLC has prepared this document including the procedures and systems detailed herein for the Oriented Strand Board (OSB) Plant located in Hosford, Florida in order to satisfy specific requirements contained in the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Source Categories, 40 CFR Part 63. These federal regulations are intended to minimize emissions of hazardous air pollutants (HAPs) from specific types of affected sources addressed in the regulations. The regulations are referred to as the MACT requirements since they mandate the use of the Maximum Achievable Control Technology to minimize HAP releases from the identified affected source categories. The applicable MACT rules for the Hosford OSB Plant are contained in 40 CFR Part 63, Subpart A; the General Provisions applicable to all Part 63 source categories and Subpart DDDD for OSB and Composite Wood Products (PCWP MACT) facilities.

Facilities that are subject to a MACT regulation are also subject to the General Provisions of the NESHAP. The General Provisions of 40 CFR Part 63 are included in Subpart A of the rule and apply to all MACT Regulated sources. The key requirements concerning SSM plans, reporting, and record keeping are contained in Sections 63.6 and 63.10 of the General Provisions. These General Provisions include a requirement in Section 63.6(e)(1)(i) that reads:

> *"At all times, including periods of startup, shutdown, and malfunction, the owner or operator must operate and maintain any affected source, including associated air pollution control and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the owner or operator reduce emissions from the affected sources to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the owner or operator to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved…"*

The provisions specifically address periods of startup, shutdown and malfunction. Section 63.6(e)(3) requires that facilities subject to a MACT standard develop and implement a written Startup, Shutdown and Malfunction Plan (SSM Plan or Plan). In the event of a malfunction, the rule requires that the malfunction must be corrected as soon as practicable after its occurrence in accordance with the SSM Plan. Section 63.10(d)(5) requires that certain actions taken by a mill in context of the SSM plan must be contained in the facility's semiannual compliance report, or be reported within 2 working days if an exceedance of the rule requirements occurs and the action was not consistent with the procedures specified in the SSM Plan.

This document is the Hosford Oriented Strand Board (OSB) Plant's MACT SSM Plan. The Plant will adhere to the procedures and systems detailed in this Plan, and the Plan will be routinely updated consistent with any changes in Plant's equipment and practices. Any actions taken by Plant personnel during an SSM event (including corrective measures) that are not consistent with this SSM Plan require that the Plan be modified. The Plan will also be updated if process or system modifications occur that affect the details of the Plan. The time periods allotted by the regulations to modify this SSM Plan vary depending on which type of equipment in the system is affected by the actions and this is discussed further within this Plan.

1.1. REGULATORY REQUIREMENTS

In addition to the overriding regulatory mandate to develop, implement and maintain this SSM Plan, the three primary purposes for this Plan, based on the requirements of the rule, are as follows:

- To provide procedures to enable the Hosford OSB Plant to operate and maintain MACT regulated systems, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. During SSM events, there is a general duty for the Hosford OSB Plant to minimize emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. The following exceptions to the general duty apply:
    1. The general duty to minimize emissions during SSM events does not require the MACT regulated system at the Hosford OSB Plant

to achieve emission levels that would be required by the applicable standard at other times; if this is not consistent with safety and good air pollution control practices, and

2. The general duty does not require any further efforts by the Hosford OSB Plant during SSM events of a MACT regulated system to reduce emissions if levels required by the applicable standard have been achieved.

- To correct malfunctions as soon as practicable after their occurrence in accordance with the SSM Plan, and
- To minimize emissions during unexpected events, consistent with safety and good air pollution control practices, that may arise during a SSM event.

The following emission units are located at the Hosford OSB Plant and are subject to a MACT standard, thus qualifying as MACT regulated systems:

Rotary Strand Dryer Systems (40 CFR Part 63, Subpart DDDD)

Reconstituted Wood Products Press (40 CFR Part 63, Subpart DDDD)

[Note: in the following Plan, these systems will be referred to as "Dryer" and "Press", respectively. The Press may be controlled by a Regenerative Thermal Oxidizer (RTO) or Regenerative Catalytic Oxidizer (RCO), or Thermal Catalytic Oxidizer (TCO). For the press where this SSM Plan refers to an RCO, it shall also mean a RTO or TCO]

This SSM Plan has been developed to address this MACT's regulated system at the Hosford OSB Plant including the associated process equipment and air pollution control and monitoring equipment. As required by the MACT rules, this Plan includes the following:

- Procedures for operating, maintaining, and minimizing emissions from the MACT Regulated sources during periods of startup, shutdown, and malfunction.

- A program of corrective action for malfunctioning processes and air pollution control and monitoring equipment used to comply with the relevant standard.

The facility has identified that the control device, a regenerative thermal oxidizer (RTO) on the rotary dryers, and a Regenerative Catalytic Oxidizer for the board press is critical to preventing excess emissions associated with a startup, shutdown, or malfunction event. In order to ensure the immediate repair or replacement of Oxidizer parts, the Hosford OSB Plant has assembled a list of spare parts necessary to perform repairs for "routine" or otherwise predictable malfunctions. The list of "critical" spare parts is maintained by the facility's MP2 system as part of the preventative maintenance procedures for the control device.

1.2 DEFINITION OF STARTUP, SHUTDOWN, AND MALFUNCTION EVENTS

The regulatory definitions of startup, shutdown and malfunction are defined in the General Provisions of the MACT rule (40 CFR Part 63) and a slightly different definition of startup is defined again in 40 CFR Part 63, Subpart DDDD.

Startup (§ 63.2) - *Startup means the setting in operation of an affected source or portion of an affected source for any purpose.*

Startup (§ 63.2292) - *Startup means bringing equipment online and starting the production process.*

Shutdown - *Shutdown means the cessation of operation of an affected source or portion of an affected source for any purpose.*

Malfunction - *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. <u>Failures that are caused in part by poor maintenance or careless operation are not malfunctions.</u>*

Please note: Process upsets that do not cause, or would not be expected to cause an exceedance of an emission limit, are not considered a malfunction for purposes of SSM Plan record-keeping or reporting.

In the Dryer system, the dryers are interlocked with the RTOs so that if the RTOs shut down then all feed to the dryers is automatically stopped. Therefore, the main malfunction addresses failure of the RTO since most upsets in the dryer will not cause excess emissions.

Operation of the press is interlocked with the RCO so that in the event of a malfunction of the control device, the system will not allow the press to load another 'charge', but will allow the press to finish the cycle. Therefore, the main malfunction addresses failure of the RTO since most upsets in the press will not cause excess emissions.

1.3 PLAN MAINTENANCE AND UPDATES

The Plant's Environmental Coordinator maintains a complete copy of the SSM Plan. A copy of the SSM Plan is maintained in the control rooms of the hot press and the dryers. The Plant's Environmental Coordinator has the overall responsibility to ensure that the Plan is maintained and updated as required by the rules. The Plant's Environmental Coordinator works with the Operations/Maintenance personnel to obtain the information needed to maintain and update the Plan.

The Hosford OSB Plant's document control system procedures are applicable to this Plan, however, all earlier versions of the Plan that have been subsequently revised are maintained by the Plant Environmental Coordinator for a period of five (5) years from the date of revision.

1.4 REFERENCE TO STANDARD PROCEDURES AND EQUIPMENT MALFUNCTION CLASSIFICATIONS

Certain sections of this SSM Plan may reference other Hosford OSB Plant documents, including preventative maintenance procedures, standard operating procedures for equipment and systems, and other similar Plant documents. When referring to other documents, this SSM Plan is referring to the most recent version of any such applicable document and is only referring to the portions of the referenced document that are specifically applicable to the equipment or system to which the relevant portion of this SSM Plan is directed.

In addition, certain types of equipment and system malfunctions that may result in HAP emissions exceeding an applicable MACT standard (MACT excess emissions) have been grouped and classified for reference under this MACT SSM Plan. These equipment malfunction classifications are identified as follows:

- Power failure – Refers to the complete loss, interruption, or unplanned variation in electric supply serving a portion of the equipment or all of the equipment associated with a particular process.
- Loss of fuel – Refers to the complete loss, interruption, or unplanned variation in fuel serving a unit (e.g., natural gas supply serving the RTO/RCO, etc.).
- Loss of instrument air – Refers to the complete loss, interruption, or unplanned variation in instrument air serving a portion of or all of the air-actuated equipment associated with a particular process.
- Structural malfunction/failure – Refers to failures of any physical equipment, vessels, ductwork, enclosure, etc. associated with the Dryer and Press Systems (which includes the RTO/RCO).
- Dryer and Press Systems Upset – Refers to a fire in a Dryer and Press Systems or a dryer pluggage, dryer fan malfunctions, pull chain breaks, elevated temperatures etc. These events can occur within the Press, Dryers, Pressure Equalization Chamber, and/or RTO/RCO.
- Loss of pump(s)/motor(s) – Refers to a reduction or termination of hydraulic fluid flow provided by mechanical pump(s) outside of nominal operating limits. Loss of pump(s) in the RTO/RCO or abort damper system can be caused by, but is not limited to, such things as a physical obstruction, failure of liquid seal(s), rupture or leakage of pump housing, pump motor failure, and pump misalignment.
- Loss of fan(s) – Loss of fan(s), including Dryer and Press Systems fans, RTO ID fan, other system related fans, can include a reduction or termination of gaseous flow caused by, but not limited to, a physical failure of the fan or housing, buildup of material on fan blades, imbalance, loss of motor, failure of starters, failure of drive systems, failure of actuators/cylinders, or modulator, etc.

- Loss of valve(s)/damper(s) – Loss of valve(s)/damper(s) can include a reduction or termination of gaseous or liquid flow caused by, but not limited to, a physical obstruction, loss of actuator control, rupture or leakage of weld or flange gasket, or a valve stuck in the closed position. Loss of valve(s) can also include a failure to seat properly in the closed position (i.e., inability to adequately restrict or terminate flow).

- Loss of piping – Refers to a reduction or termination hydraulic fluid flow or gas flow caused by, but not limited to, such things as a physical obstruction, rupture or leakage of connecting weld or flange, and material failure. Also refers to the dampers and valves within the piping that impact the ability of the operator to control the flow of hydraulic fluid or gas to a system.

- Loss of instrumentation – Refers to the inability of the process logic controller (digital or analog), process monitoring equipment, distributive control system (DCS), sensors, controllers, actuators, cylinders, modulators, solenoids, thermocouples, flame detectors, monitors and monitoring systems (including continuous monitoring systems required to satisfy MACT requirements), safety interlocks, etc., to function properly or perform a required task.

2. PROCESS DESCRIPTION

The Hosford OSB Plant operates multiple opening Press that was manufactured by Washington Irons and constructed in 2005. The Press is rated at 600 million square feet on a 3/8" basis, per consecutive 12 month period. Emissions from the press are routed to a Pro-Environmental Inc. regenerative Catalytic oxidizer (RCO) and a variable speed drive fan that pulls the exhaust gases through the system this unit also has the capability of being used as a regenerative Thermal Oxidizer (RTO) . The RCO is a 5-can unit that is currently permitted at 16 MMBtu/hour, on a 30 day rolling average basis. The Press is equipped with its own bypass (abort) stack prior to the pressure equalization chamber.

The Hosford OSB Plant operates five (5) rotary Dryers that were manufactured MEC and constructed / installed in 2005. The processing rate from all five dryers is limited to 693,272 oven dried tons of flakes per 12 month rolling total. The flue gases from the dryers are routed through a pressure equalization chamber and then to two regenerative thermal oxidizers (RTO) and variable speed drive fans that pull the exhaust gases through the system. The two RTOs have 9-cans and each are currently permitted for 32 MMBtu/hour, on a 30 day rolling average basis. Each Dryer System is equipped with its own bypass (abort) stack prior to the pressure equalization chamber.

The Thermal Oil Heaters (TOH) uses its own gas or sanderdust burners to heat the oil circulating within the press. An electrostatic precipitator (ESP) controls the TOH exhaust during periods of burning sanderdust fuel. Once the exhaust passes through the ESP, it is conveyed to the flake dryers and to their subsequent RTOs. If the TOH has to abort the dryers and RTO due to experiencing a malfunction, or are not operating normally (e.g. start-up or shut down) it will abort the exhaust through the TOH abort stack or the ESP using only natural gas (other than the short period of time required to make the transition from wood fuel to gas in the event of a sudden shutdown of the dryer. This is covered under G-P Hosford's Title V permit and Compliance Assurance Monitoring (CAM) Plan. The switch from wood to gas is addressed through the facility's CAM plan.

A block flow diagram is included as Figure 2-1.

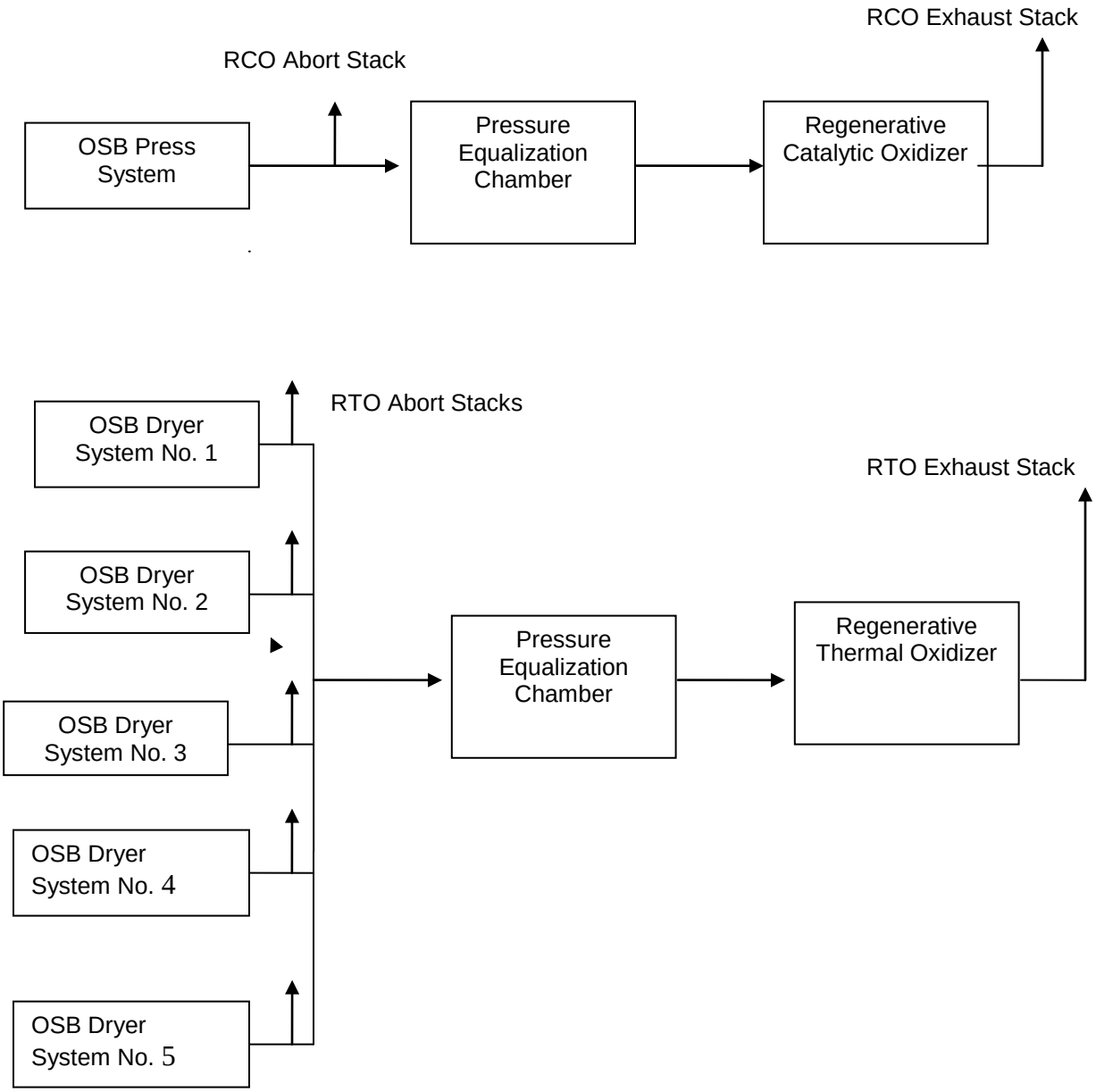
The PCWP MACT defines a **Rotary Strand Dryer System** as follows:

> *"Rotary strand dryer* means a rotary dryer operated by applying heat and used to reduce the moisture of wood strands used in the manufacture of oriented strandboard, laminated strand lumber, or other wood strand-based products. A *rotary strand dryer* is a process unit."

The PCWP MACT defines a **Reconstituted Wood Products Press** as follows:

> **"***Reconstituted wood product press* means a press, including (if applicable) the press unloader, that presses a resinated mat of wood fibers, particles, or strands between hot platens or hot rollers to compact and set the mat into a panel by simultaneous application of heat and pressure. Reconstituted wood product presses are used in the manufacture of hardboard, medium density fiberboard, particleboard, and oriented strandboard. Extruders are not considered to be reconstituted wood product presses. A *reconstituted wood product press* is a process unit."

Figure 2-1
OSB Press RCO and OSB Dryers RTOs Systems
Block Flow Diagram



3. STARTUP PROCEDURES

EPA defines a startup in 40 CFR 63.2 as "***Startup* means the setting in operation of an affected source or portion of an affected source for any purpose**."

To implement startup procedures for the Hosford OSB Plant, the definition of the system startup is provided below along with standard operating procedures that are to be followed to minimize emissions during the startup of the Dryer and Press Systems. A checklist for the minimization of emissions during the system startup period is also provided.

3.1 Definition of Startup Period

The Hosford OSB Plant follows the standard operating procedures maintained in the Dryer and Press Systems Control Room for starting up the unit. For the purpose of defining startup as it pertains to the PCWP MACT regulation, the Hosford OSB Plant has identified the following key parameters to verify that the Dryer and Press Systems and the supporting systems have reached steady state and are prepared to begin normal operations.

3.1.1 OSB Press Startup

1. **Begin Startup** - Check all control systems; begin RCO startup sequence pursuant to vendor operating procedures. Document that startup has now begun.
2. Bring the RCOs up to the minimum operating temperature greater than 846° F.
3. Begin Press startup sequence and begin routing the Press gas to the RCO.
4. **End Startup, Begin Normal Operations** – When OSB mats are being fed to the Press and exhaust gases are being routed to the RCO, the Press

Systems is considered to be in normal operation, document that startup ends.

3.1.2 OSB Dryer Startup

1. **Begin Startup** - Check all control systems; begin RTO startup sequence pursuant to vendor operating procedures. Document that startup has now begun.
2. Bring the RTOs up to the minimum operating temperature greater than 1501 (RTO A) and 1509 (RTO B) °F.
3. Begin Dryer startup sequence and begin routing the dryer gas to the RTO.
4. **End Startup, Begin Normal Operations** – When OSB flakes are being fed to the Dryers and exhaust gases are being routed to the RTO, the Dryer Systems is considered to be in normal operation, document that startup ends.

3.2 Startup Emissions Minimization

During startup of the Dryer and Press Systems, the Hosford OSB Plant will attempt to operate in a manner that is compliant with the emission standards of 40 CFR Subpart DDDD. In addition to the good engineering and operational practices, the steps below will be followed to minimize emissions.

- ❑ Assure that the RTO or RCO is operational and up to normal operating temperature.
- ❑ Follow the Plant Startup Procedures for the Dryer and Press Systems.

4. SHUTDOWN PROCEDURES

EPA defines a shutdown in 40 CFR 63.2 as "***Shutdown* means the cessation of operation of an affected source or portion of an affected source for any purpose**."

To implement shutdown procedures for the Hosford OSB Plant, the definition of the system shutdown is provided below along with standard operating procedures that are to be followed to minimize emissions during the shutdown of the Dryer and Press Systems. A checklist for the minimization of emissions during the system shutdown period is also provided.

The Hosford OSB Plant follows the standard operating procedures maintained in the Dryer and Press Systems Control Room for shutting down the Dryer and Press Systems. For the purpose of defining shutdown as it pertains to the PCWP MACT regulation, the Hosford OSB Plant has identified the following key parameters to verify that the Dryer and Press Systems and the supporting systems have concluded normal operations and is prepared to shutdown.

4.1 Definition of Shutdown Period

4.1.1 Complete OSB Press and Dryer Shutdown

1. **Begin Shutdown** – Stop feeding OSB mats to the front end of Press System and green flakes to the infeed of the rotary dryers. Document that shutdown has now begun.
2. Ensure that no additional OSB mats are fed to the Press System and confirm that the Press RCO is operating and that the minimum temperature is greater than 846° F. and the Dryer RTOs are operating and the minimum temperature is greater than 1501 and 1510° F.
3. Continue to operate the control devices at or above the minimum temperature setpoint until the last piece of OSB exits the press and the dryers are empty of flakes.

4. **End Shutdown** – After confirming that the Press and all Dryers have been evacuated and empty for a period of 10 minutes, the exhaust gases from the Dryer and Press Systems may bypass the control devices and the unit shutdown ends. Document that shutdown has been completed.

4.1.2 Individual OSB Dryer Shutdown (If whole system is not being shut down)

1. **Begin Shutdown** – Stop feeding green flakes to the front end of Dryer. Document that shutdown has now begun.
2. Ensure that no additional green flakes are fed to the affected dryer and confirm that the RTO is operating and that the minimum temperature is greater than 1510° F.
3. **End Shutdown** – After confirming that the Dryer has been evacuated and has been empty for a period of 10 minutes, the exhaust gases from the Dryer may bypass the RTO and the unit shutdown ends. Document that shutdown has been completed.

4.2 Shutdown Emissions Minimization Checklist

During shutdown of the Dryer and Press Systems, the Hosford OSB Plant will attempt to operate in a manner that is compliant with the emission standards of 40 CFR Subpart DDDD. In addition to the good engineering and operational practices, the steps below will be followed to minimize emissions.

- ❑ Follow the Plant Shutdown Procedures for the Dryer and Press Systems
- ❑ Maintain the operation of the RTO/RCO during the shutdown period as defined in Section 4.1.

5. MALFUNCTION EVENTS

This section presents a description of the various Dryer and Press Systems operational events leading to potential malfunctions that can result in excess emissions. These events are caused by various malfunctions such as safety interlocks, process alarms, and equipment failures. By EPA definition in, 40 CFR 63.2, an operational event would be considered a malfunction if the event was "**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. Failures that are caused in part by poor maintenance or careless operation are not malfunctions**".

For each of the possible events listed, the Hosford OSB Plant has determined the appropriate responses to correct for malfunctions as soon as practicable. During the period required to correct this malfunction, the Hosford OSB Plant will follow the SSM Plan to correct the malfunction and minimize emissions. Recordkeeping and reporting obligations are covered in Section 7 of this plan.

Important Note: Malfunctions that are associated with startup or shutdown conditions are covered under the Startup and Shutdown Procedures of this Plan and do not need to be considered or reported as malfunctions under this Plan.

MALFUNCTION: Regenerative Thermal Oxidizer (RTO) or Regenerative Catalytic Oxidizer (RCO) Failure

Below are possible operational events that could cause an RTO failure.

- RTO Structural Malfunctions/Failures
- Air Pollution Control System Fires (Pressure Equalization Chamber or RTO bed fire)
- Loss of Pump(s)/Motor(s)
- Loss of Fan(s)/Loss of air flow to RTO/RCO (RTO/RCO ID Fan)
- Loss of Valve(s)/Damper(s)
- Loss of Piping
- Loss of fuel
- Loss of Instrumentation
- Loss of Temperature in the RTO/RCO
- Loss of Flame in the RTO/RCO
- RTO/RCO System Failure

Potential Release Points:

Below are possible release points during an RTO/RCO failure.

- Press and/or Dryer systems abort stacks
- RTO/RCO stacks
- RTO/RCO physical system
- Press and/or Dryer system (in the case of a RTO/RCO exhaust system)

The following are actions to be taken to correct an RTO failure:

- Maintenance, upon notification from operations, will begin mobilizing equipment, supplies, and personnel as appropriate to begin repairs.

The following are steps that will be taken to minimize emissions:

- Clear press and dryers of OSB as quickly as possible

MALFUNCTION NOTE:
Extraordinary events such as Tornadoes, Lightning, Ice storms, etc. which cause malfunctions and emissions will be evaluated as they occur and emissions will be minimized to the maximum extent practicable by shutting process equipment down in an orderly manner.

MALFUNCTION: Abort Stack Damper Failure

Below are possible operational events that could cause a failure of the abort stack damper:

- Power failure
- Loss of Instrument Air
- Loss of instrumentation
- Structural malfunction/failure
- Loss of valve(s)/damper(s)

Potential Release Points:

Below are possible release points during a failure of the abort stack damper.

- Press and/or Dryer systems abort stack (Refer to picture in Appendix A)

The following are actions to be taken to correct an Abort Stack Damper Failure:

- ❑ Maintenance, upon notification from operations, will begin mobilizing equipment, supplies, and personnel as appropriate to begin repairs.

The following are steps that will be taken to minimize emissions:

- ❑ Clear press and dryers of OSB as quickly as possible

MALFUNCTION NOTE:
Extraordinary events such as Tornadoes, Lightning, Ice storms, etc. which cause malfunctions and emissions will be evaluated as they occur and emissions will be minimized to the maximum extent practicable by shutting process equipment down in an orderly manner.

MALFUNCTION: High Dryer Exhaust Temperature

Below are possible operational events that could cause a high dryer exhaust temperature:

- Dryer Systems Upset
- Dryer Fires

Potential Release Points:

Below are possible release points during a high dryer exhaust temperature.

- Dryer systems abort stack (Refer to picture in Appendix A)
- Dryer system

The following are actions to be taken to correct High Dryer Exhaust Temperature:

- ❑ Operations will correct the process upset that is causing high exhaust temperature as quickly as practicable.

The following are steps that will be taken to minimize emissions:

- ❑ Follow corrective actions.

MALFUNCTION NOTE:
Extraordinary events such as Tornadoes, Lightning, Ice storms, etc. which cause malfunctions and emissions will be evaluated as they occur and emissions will be minimized to the maximum extent practicable by shutting process equipment down in an orderly manner.

.

6. ROUTINE CONTROL DEVICE MAINTENANCE EXEMPTION (RCDME)

Georgia-Pacific

Georgia-Pacific Hosford OSB
PO BOX 322
Hosford, Fl 32334
Telephone 850-379-4017
Fax 404-749-2472

CERTIFIED MAIL

August 31, 2007

Mr. Rick Bradburn
Florida Department of Environmental Protection
Northwest District
160 Government Center
Pensacola, Florida 32502-5794

RE: Georgia Pacific Wood Products LLC- Hosford, Florida
Permit Number 0770010-003-AV
National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products - 40 CFR Part 63.2251 - Routine Control Device Maintenance Exemption (RCDME)

Dear Rick:

Consistent with the Subpart DDDD provisions allowing a facility to request a routine control device maintenance exemption (RCDME) in recognition of the level of maintenance required by MACT control devices, attached for your review and approval is the RCDME request for the Georgia- Pacific Wood Products LLC, Hosford, Florida OSB Facility.

Thank you for your consideration of our request. If you have any further questions, please contact Paul Hurst at (850) 379-4017.

Sincerely,

Timothy S. Adams
Plant Manager

cc: P. Vasquez

Enclosure

ROUTINE CONTROL DEVICE MAINTENANCE EXEMPTION (RCDME) – 40 CFR63.2251

Georgia-Pacific Wood Products LLC – Hosford, Florida OSB Facility

Routine Control Device Maintenance Exemption

40 CFR Par 63 Subpart DDDD provisions allow a facility to request a routine control device maintenance exemption (RCDME) in recognition of the level of maintenance required by MACT control devices. The RCDME provision details are described below:

- The exemption must not exceed annual process operating uptime percentages specified for differing process units:
    - 0.5 percent of the uptime for RTO/RCO controlling veneer dryers emissions and hot presses,
    - 3 percent of the uptime for RTO controlling emissions from OSB flake dryers.
- The compliance options and operating requirements do not apply during times when control device maintenance covered under the routine control device maintenance exemption is performed.
- Emissions must be minimized to the greatest extent possible during these times.
- To the extent practical, startup and shutdown of emission control systems must be scheduled during times when process equipment is shut down.

Normal Process Shutdown Schedule
The facility normally schedules at least one major shutdown during a holiday period lasting 2 to 3 days duration. The Hosford, Florida facility normally does this during the Christmas Holiday.

Every two weeks, and as allowed by the Title V Operating permit, two flake dryers and one RTO are taken off line for preventive maintenance, including bakeout and/or washout of the RTO. The facility operates two RTOs to control emissions from five flake dryers. The system has the flexibility of routing emissions from three dryers to one RTO while the other RTO is down for maintenance.

Maintenance Exemption Related Activities

Safety checks, preventative maintenance, and internal inspections are required by insurance underwriters, recommended by RTO/RCO manufacturers, and indicated as necessary based on operational experience. The timing and duration of bakeouts, washouts, replacement of media, and replacement/repair of corroded parts will depend

on particulate loading to the system, frequency of maintenance activities, age of the equipment, etc.

Particulate that penetrates deeper into the media bed will tend to burn off. However, chemically reactive particles can cause problems even when they penetrate deep into the media. A portion of the particulate that enters the RTO/RCO will collect on the cold face of the media bed. Depending on the design of the media, the particulate build up can rapidly lead to plugging of the media bed. Plugging causes several significant problems. Blockage of airflow results in a rise in pressure drop, forcing the induced draft fan to work harder and consume more electricity. The only remediation solution for these symptoms is wash-out and/or bake-out of the media bed. The frequency of wash-out and bake-out procedures typically increases until the only viable solution is a complete media change out. Based on our historical experience with these systems, we intend to implement the following schedule to insure proper operation of the control device:

1. OSB FLAKE DRYERS / RTO SYSTEM

Maintenance Activity	Frequency	Reason
Preventive Maintenance and Internal Inspection	Annual	An annual safety check is recommended by the RTO/RCO manufacturer and by Factory Mutual, and supported based on company's operating experience. This activity involves checking various components – i.e., valves, structure, burners, natural gas train, etc. This activity requires 48 hours including cooling and heating. However, issues like media replacement, replacement of corroded components, metal support structure repair or replacement, etc., may take more than 48 hours but less than the 3% of the uptime allocated for RCDME on emission controlling devices on OSB flake dryers.
Bakeout	Each Unit Once every 28 Days	The facility may perform scheduled, routine bakeouts of each RTO once every 28 days. A bakeout operation holds the RTO chamber in outlet mode and raises the temperature of the bottom of the bed above 600°F. The bakeout is required to remove organic materials from the chamber and typically lasts 8 hours per occurrence.

Washout	Once every 2 weeks	The facility will perform scheduled washout, every 2 weeks per unit. A washout is conducted at ambient conditions and is required to remove inorganic and burned out materials accumulated in the bed saddles or media. A washout typically lasts 24 hours, including cool-down and heat-up of the unit. Middle of bed washout is substituted for a washout periodically and is conducted by cooling the bottom half of the saddles to below 125°F by holding each chamber as an inlet until this temperature is reached. Then water is turned on in the middle of the bed through lances that are in place.
Media Replacement	Varies (One to Two years)	Replacement of standard media in RTOs controlling flake dryers emissions is anticipated every 2 years. Removal of old media and placement of the new media may take up to 96 hours per RTO.
Replacement of Corroded Parts	Once Per Year	Natural Gas trains, valves and regulators tend to corrode due to moisture in the natural gas pipeline and/or exposure to the weather. Visual inspections of the natural gas distribution system are conducted every year and addressed during the annual Preventive Maintenance and Internal Inspection described above.

2. OSB HOT PRESS / RTO-RCO SYSTEM

Maintenance Activity	Frequency	Reason
Preventive Maintenance and Internal Inspection	Annual	An annual safety check is recommended by the RTO/RCO manufacturer, by Factory Manual, and supported based on company's operating experience. This activity involves checking various components – i.e., valves, structure, burners, natural gas train, etc. This activity requires approximately 48 hours including cool-down and heat-up. However, issues like media replacement, replacement of corroded components, metal support structure repair or replacement, etc., may take more than 48 hours.

Bakeout	As needed by observed particulate matter build up.	The facility may perform scheduled, routine bakeouts of the RTO-RCO, as indicated by buildup of material on the media. A bakeout operation holds the RTO/RCO chamber in outlet mode and raises the temperature of the cold face to 600°F. The bakeout is required to remove organic materials from the chamber and typically lasts approximately 24 to 30 hours, including cool-down and heat-up of the unit.
Washout	As needed by observed build up.	The facility may perform routine washouts of the RTO/RCO, as indicated by buildup of material on the media. A washout is conducted at ambient conditions and is required to remove inorganic and burned out materials accumulated in the bed saddles or media. A washout typically lasts 24 hours including cool-down and heat-up of the unit.
Catalytic Media Sampling	Once per year	PCWP MACT requires sampling of catalytic media to check the activity level. This activity requires 24 hours to conduct, including cool-down and heat-up of the unit.
Media Replacement	Every 7 years for standard media and 3 years for catalytic media.	Replacement of standard media in an RTO/RCO controlling OSB press emissions is anticipated every 7 years. Catalytic media will need replacement about every 3 years. Removal of old media and placement of the new media may take up to 72 hours.
Replacement/Repair of Corroded Parts	Once per year	Natural Gas trains, valves and regulators tend to corrode due to moisture in the natural gas pipeline and/or exposure to the weather. Visual inspections of the natural gas distribution system are conducted every year and addressed during the annual Preventive Maintenance and Internal Inspection

Quarterly safety checks are of very short duration and will be scheduled to coincide with the bi-weekly RTO/Dryers preventative maintenance period in order to minimize emissions during the RTO/RCO outage. The annual preventive maintenance and internal inspection and catalytic media sampling (if applicable) will be scheduled to coincide with a major holiday process shutdown in order to minimize emissions. Should additional activities requiring RTO/RCO outage beyond the duration of the annual process shutdown be indicated including bakeout, washout, media replacement, and/or replacement/repair of corroded parts, these will be conducted as RCDME activities in order to minimize emissions that would occur as a result of the need for a subsequent, separate outage. RCDME outages will be tracked in order to assure that they do not exceed the allowed 3% for RTO/Dryers and 0.5% for hot press annual process unit operating uptime.

Georgia-Pacific

Georgia-Pacific Hosford OSB
PO BOX 322
Hosford, Fl 32334
Telephone 850-379-4017
Fax 404-749-2472

CERTIFIED MAIL 7007 0710 0003 0337 0956

October 14, 2008

Mr. Rick Bradburn
Florida Department of Environmental Protection
Northwest District
160 Government Center
Pensacola, Florida 32502-5794

RE: Georgia Pacific Wood Products LLC- Hosford, Florida
Permit Number 0770010-003-AV
National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products - 40 CFR Part 63.2251 - Routine Control Device Maintenance Exemption (RCDME)

Dear Mr. Bradburn:

This is in response to your letter dated October 31, 2007, in which you requested additional information related to our request for a Routine Control Device Maintenance Exemption (RCDME) dated August 31, 2007.

- The uptime, downtime and runtime for all equipment and control devices are all tracked and recorded by our Compliance Assurance Monitoring (CAM) plan software. A CAM report is generated and filed to document/report each day's activity (uptime, downtime, runtime) schedule. The period of time for the operation of equipment that occurred when the control device was not in operation will be included in the PCWP MACT Semi Annual Compliance Report along with the percentage of time based on the time of operation for the last twelve months.

- The PCWP MACT Semiannual Compliance Report features a section dedicated to RCDME and in which, the downtimes and associated maintenance activities listed in the request for RCDME, are captured as the event occurs. In specific, the spreadsheet allows for the selection of the appropriate maintenance activity – see "Maintenance Activity" column with dropdown window – and then calculates the annual percent uptime while control device is down and also the percent of

allowable. Please refer to Appendix A which illustrates the RCDME section of the PCWP MACT Semiannual Compliance report.

- Activities that would occur under the RCDME provision will be tracked by the plant Environmental Coordinator and/or the Maintenance Manager within five business days of the event. The tracking report for routine control device maintenance is managed through our work order system software which documents both the processes that are currently operating as well as the control device's operation. Each time a control device is taken off-line for maintenance, a work order is generated that documents the number of hours the device was off-line. Specifically, the work order is filled out by the maintenance personnel that conduct the maintenance activity and then input into the work order data base by the Maintenance Planner. This typically occurs within 24 hours of when the maintenance work was completed. Once the maintenance work order information has been put into the work order data base, it is then accessible on a central network drive to all plant management personnel. This information is used to complete the RCDME section of the PCWP MACT Semiannual Compliance report presented in Appendix A, enclosed herein.

- Emissions are minimized to the greatest extent possible during routine control device maintenance periods in the following ways:

  1. Under normal operations, when a Regenerative Thermal Oxidizer (RTO) control device is going to have any routine maintenance performed on it, product feed to the dryers is stopped. The dryers are allowed to run without product feeding to them for a minimum of fifteen minutes. This allows time for the dryers and associated duct work to the RTO to be purged before the RTO is shut down. Fuel to the dryer burners is turned off and the dryers begin cooling. Dampers isolating dryer emissions from the RTO are closed. To enhance dryer cooling and to prevent the dryer drum from warping, ambient air is circulated through the dryers and vented to atmosphere. Finally, the RTO is shut down and begins cooling so that maintenance activities can be performed.

  2. The same process as described in #1 above is used when an RTO "bakeout" is performed. Under normal operations, product feed to the dryers is stopped, fuel to the dryer burners is stopped and ambient air for dryer drum cooling is circulated through the dryers and vented to atmosphere. Isolation dampers between the dryers and the RTO are closed to isolate the RTO from the dryers during the "bakeout" process. Mechanical interlocks make it physically impossible for air flow from one or more dryers to be routed to an RTO during a "bakeout".

  3. When the Thermal Catalytic Oxidizer (TCO) that controls emissions from the press is going to be shut down for planned maintenance, the press is shut down a minimum of 15 minutes before the TCO is shut down or a

"bakeout" is initiated. This allows the press enclosure and associated duct work going to the TCO to purge before any maintenance activities on the TCO commence. As with the RTOs, once the press is shut down, isolation dampers prevent the flow of air from the press enclosure to the TCO. The TCO also has mechanical interlocks that make it physically impossible for the press to operate while the TCO is shut down.

4. If maintenance is needed on the Control Devices while the processes are still in operation under the RCDME provisions, the processes would be immediately slowed down to a minimal processing speed for maintenance issues that are expected to take less than 15 minutes. If the activity is expected to take more than 15 minutes, the process will be shut down as safely as possible for the personnel and the equipment.

If you have any additional comments or questions please contact Margarete Vest at 904-445-8761.

Sincerely,

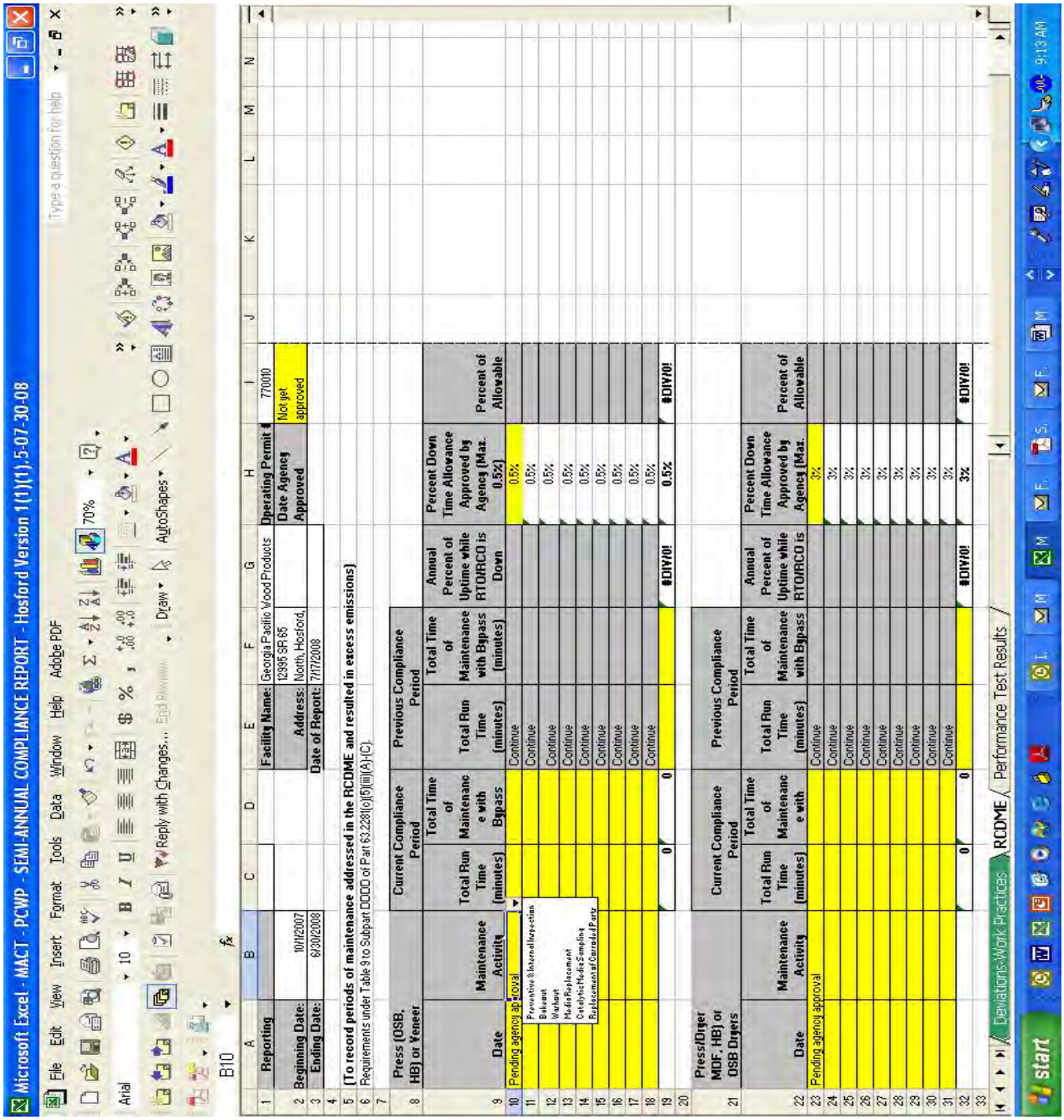
Timothy Adams
Operations Manager

Attachment: Appendix A- Semi-Annual Report RCDME Worksheet

Cc: Paul Vasquez
Margarete Vest

Appendix A

Semi-Annual Report RCDME Worksheet



Microsoft Excel - MACT - PCWP - SEMI-ANNUAL COMPLIANCE REPORT - Hosford Version 1(1)(1).5-07-30-08

Reporting							
Beginning Date:	10/1/2007	Facility Name:	Georgia Pacific Wood Products	Operating Permit #	770010		
Ending Date:	6/30/2008	Address:	12395 SR 85 North, Hosford,	Date Agency Approved	Not yet approved		
		Date of Report:	7/17/2008				

(To record periods of maintenance addressed in the RCDME and resulted in excess emissions)
Requirements under Table 9 to Subpart DDDD of Part 63.2281(c)(5)(iii)(A)-(C).

Press (OSB, HB) or Veneer			Current Compliance Period		Previous Compliance Period				
Date	Maintenance Activity	Total Run Time (minutes)	Total Time of Maintenance with Bypass	Total Run Time (minutes)	Total Time of Maintenance with Bypass (minutes)	Annual Percent of Uptime while RTO/RCO is Down	Percent Down Time Allowance Approved by Agency (Max. 0.5%)	Percent of Allowable
Pending agency approval				Continue			0.5%	
	Preventive Maintenance Inspection			Continue			0.5%	
	Bakeout			Continue			0.5%	
	Washout			Continue			0.5%	
	Media Replacement			Continue			0.5%	
	Catalytic Media Sampling			Continue			0.5%	
	Replacement of Corrodes Parts			Continue			0.5%	
				Continue			0.5%	
				Continue			0.5%	
				Continue			0.5%	
		0	0			#DIV/0!	0.5%	#DIV/0!

Press/Dryer MDF, HB) or OSB Dryers			Current Compliance Period		Previous Compliance Period				
Date	Maintenance Activity	Total Run Time (minutes)	Total Time of Maintenance with	Total Run Time (minutes)	Total Time of Maintenance with Bypass	Annual Percent of Uptime while RTO/RCO is	Percent Down Time Allowance Approved by Agency (Max.	Percent of Allowable
Pending agency approval				Continue			3%	
				Continue			3%	
				Continue			3%	
				Continue			3%	
				Continue			3%	
				Continue			3%	
				Continue			3%	
				Continue			3%	
				Continue			3%	
		0	0			#DIV/0!	3%	#DIV/0!

Deviations-Work Practices | RCDME | Performance Test Results

7. Recordkeeping and Reporting Requirements

During periods of SSM events, the facility is required to operate and maintain the Dryer and Press Systems in accordance with the procedures outlined in its SSM Plan. In addition to the requirements to operate and maintain the Dryer and Press Systems, there are also recordkeeping and reporting requirements that are required by the MACT Rules in order to document that proper procedures are followed during Startup, Shutdown, and Malfunction events.

7.1 RECORDKEEPING REQUIREMENTS

The Hosford OSB Plant will keep records of the following events for the Dryer and Press Systems included in this Plan:

- The occurrence and duration of each startup and shutdown where there was an excess emission or operating parameter exceedance;
- The occurrence and duration of each malfunction for the Dryer and Press Systems, associated air pollution control and monitoring equipment.;
- All maintenance performed on associated air pollution control and monitoring equipment will be maintained in the facility MP2 system;
- All information necessary to demonstrate conformance with this SSM Plan when all actions taken during periods of startup, shutdown, and malfunction are consistent with the procedures;
- Actions taken during periods of startup, shutdown, and malfunction when such actions are different from the procedures specified in this SSM Plan, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation; and
- Each period during which a monitoring system is malfunctioning or inoperative, including out-of-control periods.

The following are general plant recordkeeping requirements:

- The Hosford OSB Plant maintains files of all information (including all reports and notifications) required with the environmental files located in the Environmental Department. The files are available for inspection and review.
- The files are retained on-site for two (2) years and maintained in storage for an additional three (3) years.
- Files are maintained in a hardcopy format. Some files may also be maintained electronically.

7.2 REPORTING REQUIREMENTS

7.2.1 Periodic Startup, Shutdown, and Malfunction Reports

The Hosford OSB Plant Environmental Coordinator conducts the following reporting activities for actions during a startup, shutdown, or malfunction event resulting in an excess emission or may have resulted in excess emission that occur during the semi-annual reporting period. This includes actions taken to correct a malfunction that are <u>not consistent</u> with the procedures specified in this SSM Plan.

- *Periodic SSM Report Contents:*
  - A cover letter including the name, title, and signature of the responsible Plant official who is certifying its accuracy.
  - A summary of the SSM events during the reporting period and the duration of each event.
  - A summary or Checklist of Actions taken to minimize emissions during such SSM events.
- *Submittal Requirements:*
  - Postmarked by the 30th day following the end of each calendar half (or other calendar reporting period, as appropriate).
  - Submitted simultaneously with the semi-annual excess emissions and continuous monitoring system performance (or other) reports.

7.2.2 Startup, Shutdown, and Malfunction Reports

The Hosford OSB Plant Environmental Coordinator (or designated alternate) will submit an Immediate Startup, Shutdown, and Malfunction Report at any time to:

Division of Air Resource Management
2600 Blair Stone Road,
MS 5000
Tallahassee, Florida 32399-2400
Phone: (850) 488-0114

An action taken during a startup or shutdown, not consistent with the procedures specified in the SSM Plan **AND** the source exceeds any applicable emission limitation in the relevant emission standard or operational parameter, and.

- An action taken during any malfunction that is not consistent with the procedures specified in the SSM Plan (whether or not an emission limit or operational parameter was exceeded).

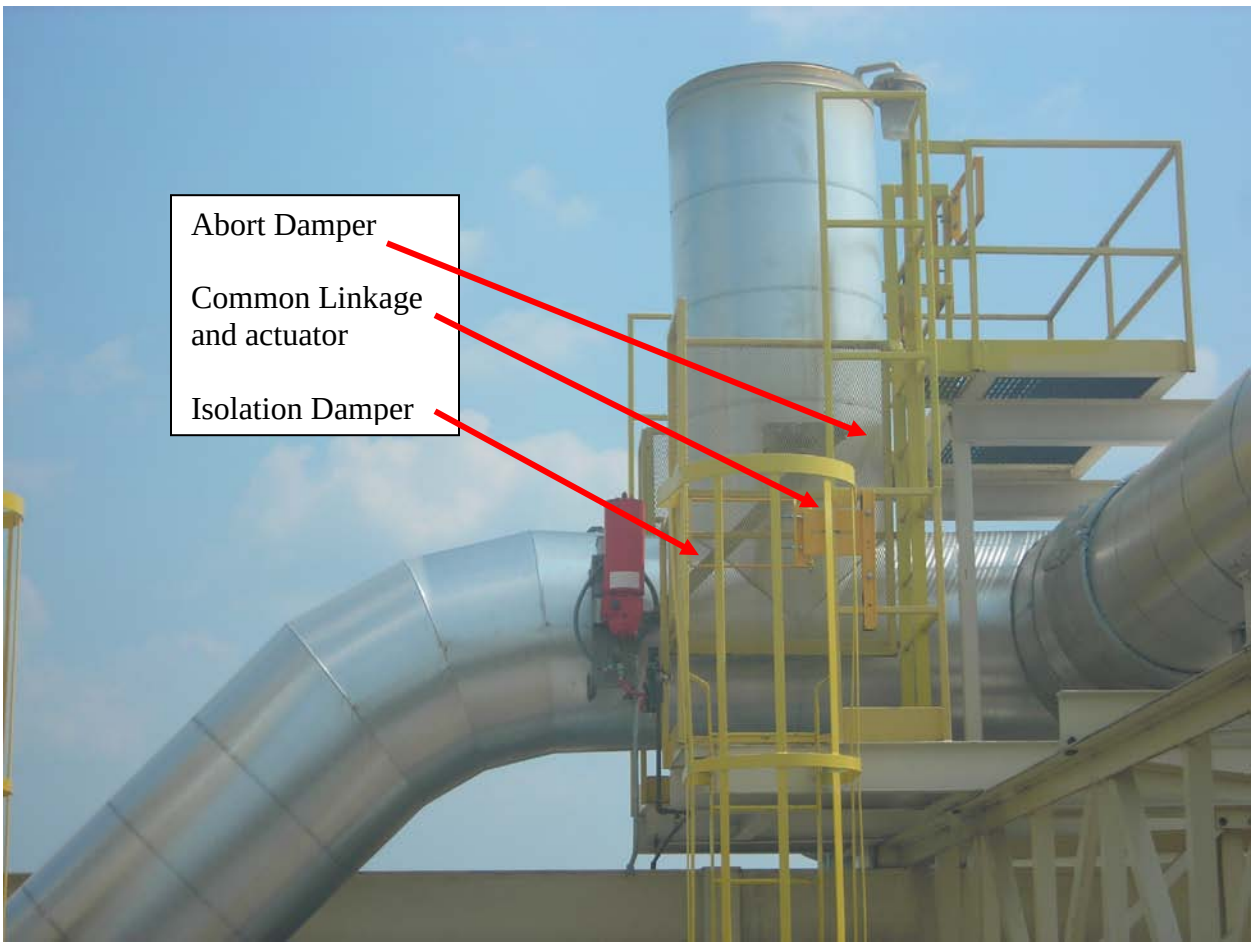
- *Submittal Requirements:*

  - Immediately report via a telephone call or a facsimile transmission to the Administrator within two (2) working days after commencing actions inconsistent with the plan.

  - Submit a follow-up letter within seven (7) working days after the end of the event. A cover letter containing the name, title, and signature of the responsible Plant official who is certifying its accuracy.

    - The circumstances of the event.

    - The reasons for not following the SSM Plan.

    - The occurrence of any excess emissions and/or parameter monitoring exceedances

APPENDIX A - TYPICAL ABORT STACK DAMPER