# DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

**ACTIVITY REPORT: Scheduled Inspection** 

<b>B</b> 7			

FACILITY: WEYERHAEUSER NR COMPANY		SRN / ID: B7302		
LOCATION: 4111 W FOUR MILE RD, GRAYLING		DISTRICT: Cadillac		
CITY: GRAYLING		COUNTY: CRAWFORD		
CONTACT: Kathi Moss, Environmental Coordinator		ACTIVITY DATE: 07/09/2014		
STAFF: Rob Dickman	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR		
SUBJECT: Scheduled inspection of this ROP subject source.				
RESOLVED COMPLAINTS:				

Performed an inspection of this ROP subject source. This ROP (MI-ROP-B7302-2010) was issued on February 1, 2010 and the facility is currently drafting a renewal application for it. This facility manufactures oriented strand board (OSB) for the construction industry. Upon entering the facility, there were no visible emissions from any point. Roadways throughout the facility were clean and appeared in good repair and housekeeping around the facility was good. Following is the findings of the inspection per ROP conditions:

### SOURCE-WIDE CONDITIONS

- I. EMISSION LIMITS No emissions limits
- II. MATERIAL LIMIT(S) No material limits
- III. PROCESS/OPERATIONAL RESTRICTION(S) No process or operational restrictions.
- IV. DESIGN/EQUIPMENT PARAMETER(S) No design or equipment restrictions
- V. TESTING/SAMPLING No testing or sampling requirements
- VI. MONITORING/RECORDKEEPING
- 1. Record all roadway sweeping events and applications of fugitive dust control materials for both the plant roadways and plant yards are to be kept. Review of these records indicated that the facility is following the fugitive emissions plan.

# VII. REPORTING

- 1- 3. All semi-annual and annual deviation reporting has been completed in a timely manner.
- VIII. STACK/VENT RESTRICTION(S) There are no stack restrictions
- IX. OTHER REQUIREMENT(S)
- Implement and maintain the program for continuous fugitive emission control for all plant roadways, the plant yard, all material storage piles, and all material handling operations. This plan is on file with the AQD and appears to have been implemented.
- 2. Implement an AQD approved Malfunction Abatement Plan (MAP) for equipment listed in this permit. This plan is on file with the AQD and appears to have been implemented.
- Permittee shall comply with all applicable parts of 40 CFR 63 subpart DDDD. Facility is in compliance with this MACT. The facility is currently in compliance with this MACT. Some of the details regarding this are listed in the body of this report.

<u>EUPRESSLINE</u> - Covers the storage of dried flakes from the dryers, through the blending, forming, and pressing to form the board. Control of this line is by a Biofilter and total enclosure controls the emissions from the press

portion of this emission unit. Cyclones and baghouses control the emissions from the blending and forming portions.

- I. EMISSION LIMIT(S) Compliance with PM-10, CO, Formaldehyde and VOC emissions limits is through CEMS and stack testing. CEM data collected and Stack Testing performed in the last twelve months were reviewed and documented in MACES, and demonstrated compliance with limitations. Please see MACES for details of these reviews.
- II. MATERIAL LIMIT(S) No material limits

# III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee must maintain the 24-hour block bio-filter bed temperature within the range established during compliance testing. This range is 77.7 to 99.9 degrees Fahrenheit and records indicate this is maintained. A sample of these records is attached, see Records 1,A.
- 2. The permittee shall not operate EUPRESSLINE unless the bio-filter is operating properly, except for bypass of the bio-filter for routine maintenance, repair, or parts replacement on the bio-filter unit. At the time of the inspection, the biofilter was in operation and appeared to be operating properly. Records of bypass are kept, no bypass was noted in the last 12 months, see Records 3,A.
- The permittee shall not bypass the bio-filter for more than 0.5% of the annual operating time for EUPRESSLINE. Records of bypass are kept, no bypass was noted in the last 12 months, see Records 3,A.
- The permittee shall not operate EUPRESSLINE unless the bio-filter is operating properly, except during bypass conditions. No bypass was noted in the last 12 months, see Records 3,A.

## IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The VOC CEMS is installed and appears to be operating properly. All necessary daily calibration checks and other required QA/QC procedures for the CEMS have been performed and demonstrate compliance. All CEM QA/QC procedures performed are required to be reported to the District Office. These procedures are reviewed, documented in MACES, and have demonstrated compliance over the last 12 months.
- 2. The permittee shall install operate and maintain a system to continuously monitor the bed temperature in the bio-filter. This device was in place and appeared to be functioning properly.
- 3. The temperature monitoring system appears to meet or exceed the minimum criteria prescribed in the permit.
- 4. The permittee must maintain the design of the enclosure surrounding the press area so that it meets the definition of a wood products enclosure in 40 CFR 63.2292. This enclosure is in place, appears compliant, and does not appear to have been altered recently. All Natural Draft Openings are labelled such that they are to be closed when the press is operating pursuant to the MACT.

## V. TESTING/SAMPLING

- 1. Verification of PM<sub>10</sub>, CO, and Formaldehyde emission rates from EUPRESSLINE during normal operation, by testing at owner's expense, is required once every five years. This testing was performed in 2012 and demonstrated compliance.
- All testing, sampling, analytical and calibration procedures used for testing shall be performed in accordance with 40 CFR, Part 60, and Appendix A, or other acceptable reference methods approved by AQD. Testing at this facility was performed per this criteria. Prior to each test, a protocol was submitted for approval that delineates methodologies to be used.
- 3. The permittee shall conduct a repeat performance test for formaldehyde destruction efficiency using the applicable methods specified in Table 4 of 40 CFR subpart DDDD. This testing was performed in 2012.
- 5. The permittee shall perform quality assurance procedures of the CEMS equipment according to the procedures in Appendix F of 40 CFR Part 60. All CEM QA/QC procedures performed are required to be

reported to the District Office. These procedures are reviewed, documented in MACES, and have demonstrated compliance over the last 12 months.

### VI. MONITORING/RECORDKEEPING

- 1. Monitor and record the volumetric flow rate at the bio-filter stack, except during bypass on a continuous basis. This monitor is in place and appears to be functioning properly.
- 2. Monitor and record VOC emissions from the press SVBIOFILTER, except during bypass on continuous basis. This monitor is in place and appears to be functioning properly.
- 3. The permittee shall monitor and record the time and duration of any bio-filter bypass on a daily basis. Records of bypass are kept, no bypass was noted in the last 12 months. See Records 3,A.
- 4. If operations require bypassing the bio-filter, the permittee shall monitor and record the tons of finished product, tons hardwood usage, percent of hardwood usage, tons of pine usage, and percent of pine usage and calculate the PM10, CO and VOC emissions per the formula found in Appendix 7. Records of bypass are kept, no bypass was noted in the last 12 months. See Records 3,A.
- 5. The frequency and duration of each bypass, PM10, CO and VOC emissions calculations and resolution method for each bypass occurrence shall be recorded and maintained. Records for the frequency and duration of each bypass are being kept and are below the allowed annual bypass limits. Emissions calculations of PM-10 and CO are performed during bypass utilizing the most recent stack testing and CEM data. No bypass was noted in the last 12 months. See Records 3,A. Records of the resolution for any bypass would be kept in the on site operators log.
- 6. The tons of finished product and hours of operation (see record 3) for EUPRESSLINE shall be monitored and recorded daily. These records are being kept. See Records 2,D.
- 7. The permittee shall use the most recent stack testing data and perform monthly calculations, to show compliance with the hourly and yearly limits for PM<sub>10</sub>, and CO and the hourly limits for Formaldehyde. This testing was performed in 2012. Results from the test were used to perform emissions calculations.
- 8. The permittee shall monitor and record biofilter bed temperature data for EUPRESSLINE and determine the 24-hour block average. A sample of these records is attached, see Records 1,A.

#### VII. REPORTING

- 1- 3. All semi-annual and annual deviation reporting has been completed in a timely manner. This reporting is reviewed and documented in MACES.
- 4: The permittee must submit a MACT compliance report semiannually. This reporting is reviewed and documented in MACES.
- 5. If EUPRESSLINE has a startup, shutdown, or malfunction during the reporting period that is not consistent with their Startup, Shutdown, or Malfunction Plan (SSMP), the permittee must submit an immediate startup, shutdown and malfunction report. No such incidents were reported in the last 12 months.
- 6. EER's for the CEMS and COMS at the facility are required to be prepared and submitted quarterly. All CEM QA/QC procedures performed are required to be reported to the District Office. These procedures are reviewed, documented in MACES, and have demonstrated compliance over the last 12 months.
- 7. The results of the annual audits of CEMS equipment shall be submitted to the District Supervisor within 30 days of completion of the audit. All CEM QA/QC procedures performed are required to be reported to the District Office. These procedures are reviewed, documented in MACES, and have demonstrated compliance over the last 12 months.
- 8. Approvable stack testing procedures and the location of stack testing ports for PM<sub>10</sub>, CO, and Formaldehyde must be submitted to the AQD at least 60 days before scheduled testing. This condition is

- complied with by submission of stack testing protocols. All testing performed at this facility was preceded by a protocol submitted and approved by the agency.
- 9. Verification of PM<sub>10</sub>, CO, and Formaldehyde emission rates includes the submittal of a complete report of the test results to the AQD District Office and AQD's Technical Programs Unit within 60 days following the last date of the test. All testing reports have been submitted in a timely manner. These submissions are tracked in MACES.
- 10. The permittee must submit documentation that the wood products enclosure meets the press enclosure design criteria in 40 CFR 63,2292 with the Notification of Compliance Status for EUPRESSLINE. This documentation is submitted as part of semi-annual MACT reporting. See MACES for details regarding review of this reporting.
- 11. If the CEMS for EUPRESSLINE is replaced, then no less than 30 days prior to the performance specification testing. No CEM was replaced in the last 12 months.
- 12. The permittee shall submit to the AQD, Cadillac District Office and AQD's Compliance and Support Unit within 30 days of completion, a copy of the final report demonstrating the VOC CEMS complies with the requirements of PS6. This condition is historical and not applicable. The VOC monitor on this process is in place and in compliance.

# VIII. STACK/VENT RESTRICTION(S)

 This stack appears in compliance with criteria listed in the ROP and does not appear to have been recently altered.

## IX. OTHER REQUIREMENT(S)

- The permittee shall abide by the CEMS Monitoring plan that was submitted to AQD, Cadillac District Office. The Monitoring Plan includes drawings and specifications showing locations and descriptions of all required monitors. This monitoring plan is on file and has not been amended in the last 12 months.
- 2. The permittee shall develop a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in 40 CFR 63.6(e)(3). The most recent version of this plan was submitted in 2013.
- The permittee shall comply with all applicable requirements in 40 CFR Part 63 Subpart DDDD National Emission Standards For Hazardous Air Pollutants: Plywood and Composite Wood Products. This condition is redundant, please see Source Wide.

# EUPAINTBOOTH - Used to paint the edges of the finished OSB product. Control is by dry fabric filters.

- I. EMISSION LIMIT(S) Particulate emissions are limited to 0.94 pounds per hour and 4.1 tons per year. Compliance with emissions limits is through emissions calculations.
- II. MATERIAL LIMIT(S) No material limits
- III. PROCESS/OPERATIONAL RESTRICTION(S)
- 1. The paint booth shall not be operated unless all exhaust filters are installed and operating properly. Filters were in place and appeared in good condition.
- 2. The permittee shall maintain the differential pressure across the filter media within the approved range stated in the MAP. This pressure drop range is 0.03 to 3.0 inches of water, gauge, pressure drop on inspection was 0.8 inches of water, gauge.

### IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The permittee shall install, operate and maintain a device to measure the differential pressure across the filter media for EUPAINTBOOTH. This device was in place and appeared to be operating properly.
- V. TESTING/SAMPLING No testing or sampling requirements

### VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

- 1. The permittee shall monitor and record the pressure drop across the paint booth, once per day, to show filter is operating properly. Records of this are being kept and demonstrate compliance.
- 2. On a monthly basis, retain records of the amount of paint used, in gallons, in the paint booth. Records of this are being kept and demonstrate compliance.
- 3. Calculate the hourly particulate matter emissions on a monthly average for EUPAINTBOOTH. Records of this are being kept and demonstrate compliance.
- 4. Calculate the tons per year of particulate matter emissions for EUPAINTBOOTH. Records of this are being kept and demonstrate compliance.
- 5. The permittee shall keep records showing the use of only non-HAP coatings as defined in 40 CFR 63.2292. Review of records indicated all coating used are HAP free.

#### VII. REPORTING

1- 3. All semi-annual and annual deviation reporting has been completed in a timely manner.

# VIII. STACK/VENT RESTRICTION(S)

 This stack appears in compliance with criteria listed in the ROP and does not appear to have been recently altered.

# IX. OTHER REQUIREMENT(S)

1. The permittee shall use only non-HAP coatings as defined in 40 CFR 63.2292. There are no HAP based coatings being used at this facility

EUIBW – The number 2 thermal oil heater has a burner manufactured by IBW. It is a 40 MMBTU/hr natural gas burner which exhausts directly to atmosphere through its own stack. The hot oil from this thermal oil heater supplies heat to the presses and plant building heaters. At the time of the inspection, this unit was not in operation.

- I. EMISSION LIMIT(S) Compliance with NOx and CO emissions limits is through stack testing. Testing regarding this EU was performed in 2012. Review of the testing was performed then and the results demonstrated compliance. Please see MACES for further details.
- II. MATERIAL LIMIT(S) No material limits
- III. PROCESS/OPERATIONAL RESTRICTION(S)
- The permittee shall perform routine and scheduled maintenance on EUIBW as recommended by the manufacturer and contained in the approved MAP. No records required for this condition, but, operators logs regarding this are being kept.
- IV. DESIGN/EQUIPMENT PARAMETER(S) No design or equipment restrictions

#### V. TESTING/SAMPLING

1. Verification of NOx and COemission rates from EUIBW by testing at owner's expense, in accordance with Department requirements, is required once every five years. Testing was performed in 2012 and demonstrated compliance.

# VI. MONITORING/RECORDKEEPING

- 1. The permittee shall keep records on the amount of natural gas used on a daily basis. These records were available. A sample of this is attached, although, they demonstrate that the unit has not run yet in July. See Records 2.A
- 2. The permittee shall monitor and record the hours of operation of EUIBW on a continuous basis in a manner and with instrumentation acceptable to the Air Quality Division. A sample of this is attached, see Records 2,B
- 3. The permittee shall calculate the NOx, and CO emissions from EUIBW hourly. A sample of this is attached, see Records 2,C

- 1- 3. All semi-annual and annual deviation reporting has been completed in a timely manner. See MACES for further details.
- 4-5. Stack testing procedures and reporting were handled through the testing protocol process and were performed correctly.

# VIII. STACK/VENT RESTRICTION(S)

 This stack appears in compliance with criteria listed in the ROP and does not appear to have been recently altered.

# IX. OTHER REQUIREMENT(S)

1. Only natural gas shall be used as fuel in EUIBW. This equipment is plumbed such that only natural gas can be used for fuel.

EUCOEN – The number 1 thermal oil heater has a burner manufactured by Coen. This burner is rated at 50 MMBTU/hr when fired on wood dust and/or 40 MMBTU/hr on natural gas. The heat from this thermal oil heater is used to enhance the heat in EUPRESSLINE. The exhaust is directed through the Dryers and controlled by a wet electrostatic precipitator (WESP) followed by a regenerative thermal oxidizer (RTO) and may be bypassed to its own stack (SVCOEN) when operated on natural gas only. This emission unit table shows conditions EUCOEN is subject to when it is burning natural gas only. When firing wood and wood dust the exhaust shall be directed through the dryers and WESP and RTO. The conditions EUCOEN is subject to when firing wood and wood dust, are located in FGDRYERS.

- I. EMISSION LIMIT(S) Emissions of NOx from this process is limited to 5.0 pounds per hour and emissions of CO is limited to 3.4 pounds per hour when the unit is firing natural gas. Compliance with emissions limits is through emissions calculations when firing natural gas only (see description above). The facility has only used natural gas in this process in the last 12 months. Testing was performed in 2012 when the unit was firing on wood and gas (see FGDRYERS) and demonstrated compliance. Review of the testing was performed then and the results demonstrated compliance. Please see MACES for further details.
- II. MATERIAL LIMIT(S) No material limits
- III. PROCESS/OPERATIONAL RESTRICTION(S)
- When burning natural gas only, exhaust gas from the EUCOEN may exhaust either through SVCOEN or through the WESP and RTO. During normal operation EUCOEN only exhausts through SVCOEN during periods of startup and idle. Records indicate this equipment exhausted appropriately.
- IV. DESIGN/EQUIPMENT PARAMETER(S) No design or equipment restrictions
- V. TESTING/SAMPLING No testing or sampling requirements
- VI. MONITORING/RECORDKEEPING

- 1. The permittee shall record and maintain records, as approved by the AQD, of the amounts of natural gas combusted each day. A sample of this is attached, see Records 2,A.
- 2. The permittee shall monitor and record the hours of operation of EUCOEN on a continuous basis when venting to SVCOEN, in a manner and with instrumentation acceptable to the Air Quality Division. A sample of this is attached, see Records 2,B.
- 3. The permittee shall calculate the hourly NOx and CO emissions from EUCOEN monthly when firing natural gas only. The hourly emissions are calculated electronically and compiled in to a monthly total. A sample of the monthly records is attached, see Records 2,C.

1- 3. All semi-annual and annual deviation reporting has been completed in a timely manner. Please see MACES for further details.

## VIII. STACK/VENT RESTRICTION(S)

- The stacks appear in compliance with criteria listed in the ROP and does not appear to have been recently altered.
- IX. OTHER REQUIREMENT(S) No other requirements

<u>FGDRYERS</u> – This flex group consists of the 4 wood flake dryers and the number 1 thermal oil heater, EUCOEN, when it is being fired on wood and wood dust and being exhausted through the dryers and WESP and RTO. Pollution control is through Cyclones followed by Wet electrostatic precipitator (WESP), followed by a regenerative thermal oxidizer (RTO)

- I. EMISSION LIMIT(S) Compliance with PM-10, SO2, NOx, CO, Formaldehyde, HAP, and VOC emissions limits is demonstrated through CEMS and stack testing. Stack testing was last performed in 2012. Review of the testing was performed then and the results demonstrated compliance. CEM compliance data is reviewed quarterly, documented in MACES, and demonstrated compliance with emissions limits monitored by CEMS. Please see MACES for further details on these reviews.
- II. MATERIAL LIMIT(S) No material limits
- III. PROCESS/OPERATIONAL RESTRICTION(S)
- 1. The permittee shall not operate FGDRYERS unless the WESP and RTO are operating properly, except as provided below in condition III.3. At the time of the inspection, this equipment was in operation and appeared to be operating properly. Records regarding any bypass condition are being kept and a sample of these is attached. See Records 3, B.
- 2. The permittee shall not bypass one or both RTO units for more than 3% of the annual operating uptime for FGDRYERS. Records regarding any bypass condition are being kept and a sample of these is attached. See Records 3, B.
- 3. The permittee may operate FGDRYERS with only the WESP, or with the WESP and a partially bypassed RTO for necessary maintenance, repair, or parts replacement of the RTO. Records regarding any bypass condition are being kept and a sample of these is attached. See Records 3, B.
- 4. When operating FGDRYERS with only the WESP or the WESP and a partially bypassed RTO, the permittee shall adjust the production rates and/or the amount of pine used, consistent with safe operating practices, to a level necessary to achieve compliance with the PM<sub>10</sub>, VOC, and CO emissions. Also, the VOC and CO emissions shall be measured by the continuous monitoring systems. Records regarding the type and duration of any bypass are being kept. A sample of the records of duration of bypass is attached. See Records 3, B. Emissions from the process are monitored by CEMS.
- 5. If the hourly and/or yearly PM<sub>10</sub>, VOC and CO emission limitations for FGDRYERS can not be achieved, or if continuous monitoring systems are inoperable, then material input feed to FGDRYERS shall cease immediately, consistent with safe operating practices. There were no records of this type of incident.

- 6. Input feed to FGDRYERS shall not restart until the dryers' emissions control system and/or continuous monitors system is back on line and functioning properly. Incidents of this nature are included in the facility MAP, are recorded, and reported as part of the facility semi- annual ROP reporting.
- 7. Upon initiation of WESP bypass, input of wood fuel to the burners shall cease immediately, consistent with safe operating procedures. Input of wood fuel shall not restart until the WESP can safely accept gases from FGDRYERS. Incidents of this nature are included in the facility MAP, are recorded, and reported as part of the facility semi-annual ROP reporting.
- 8. When burning wood in EUCOEN, exhaust gases from EUCOEN shall be discharged through the WESP and RTO. Records indicate at no time did this occur incorrectly.
- 9. When operating FGDRYERS permittee shall maintain the 3-hour block average fire box temperature in the RTO above the minimum temperature established during the performance testing in which the THC reduction in the RTO exhaust was above the required 90%. This minimum based on test is 1500 F. Records of this are being kept. See Records 1,B for a sample.
- 10. The permittee must install, operate, and maintain each temperature monitoring device or other continuous parameter monitoring system (CPMS). A device to monitor temperature was installed and appeared to be operating properly.

# IV. DESIGN/EQUIPMENT PARAMETER(S)

- The permittee shall install and operate a continuous opacity monitor system (COMS) at the RTO exhaust. This equipment is in place and appears to be operating properly.
- The permittee shall install, operate and maintain temperature monitoring devices in a position that provides a representative temperature in the area of the firebox of the RTO that will indicate the actual temperature achieved by the RTO. This equipment is in place and appears to be operating properly.
- The CEMS/COMS shall be installed, calibrated, maintained, and operated in accordance with the procedures set fourth in 40 CFR 60. This equipment is in place, appears to have been installed properly, and appears to be operating properly.

#### V. TESTING/SAMPLING

- 1. EUCOEN shall be tested for PM when using wood and/or wood dust for fuel, every five years. Testing was performed in 2012 and demonstrated compliance.
- Performance Audits of the COMS shall be conducted annually. All CEM QA/QC procedures performed are
  required to be reported to the District Office. These procedures are reviewed, documented in MACES, and
  have demonstrated compliance over the last 12 months.
- The permittee shall perform an annual Relative Accuracy Test Audit (RATA) and quarterly quality assurance
  procedures of the CEMS. All CEM QA/QC procedures performed are required to be reported to the District
  Office. These procedures are reviewed, documented in MACES, and have demonstrated compliance over
  the last 12 months.
- 4. Verification of PM<sub>10</sub>, one unit and during two unit RTO operations, plus SO<sub>2</sub>, NOx, and Formaldehyde emission rates from FGDRYERS, by testing at owner's expense, is required once every five years. Testing was performed in 2012 and demonstrated compliance.
- Verification of reduction of Total HAP, measured as THC, from FGDRYERS, by testing at owner's expense, is required once every two years. The THC reduction in the RTO exhaust is required to be above 90% reduction. Testing was performed in 2011 and demonstrated compliance.
- 6. All stack testing procedures and the location of stack testing ports, sampling, analytical and calibration procedures used for testing shall be performed in accordance with 40 CFR, Part 60, and Appendix A. All CEM QA/QC procedures performed are required to be reported to the District Office. These procedures are reviewed, documented in MACES, and have demonstrated compliance over the last 12 months.

7. During the performance test for reduction of total HAP measured as THC, the permittee must continuously monitor the RTO fire box temperature during each of the required 1-hour test runs. Testing methods were handled through submission of a testing protocol and the methods were performed correctly. Temperature monitoring is continuous per this permit.

### VI. MONITORING/RECORDKEEPING

- 1. The permittee shall monitor and record the volumetric flow rate at the RTO stack. This monitor is in place and appears to be operating properly.
- 2. The permittee shall monitor and record the VOC and CO emissions from FGDRYERS on a continuous basis. These monitors are in place and appear to be operating properly.
- 3. The permittee shall monitor and record the visible emissions from the FGDRYERS, on a continuous basis. These monitors are in place and appear to be operating properly.
- 4. The CEMS/COMS shall be installed, calibrated, maintained, and operated in accordance with the procedures set fourth in 40 CFR 60. This equipment is in place and appears to be operating properly.
- 5. The permittee shall perform an annual audit of the COMS. All COM QA/QC procedures performed are required to be reported to the District Office. These procedures are reviewed, documented in MACES, and have demonstrated compliance over the last 12 months.
- 6. The permittee shall perform testing of the VOC and CO. Testing was performed in 2012 and demonstrated compliance.
- 7. The permittee shall maintain an AQD approved Monitoring Plan for CEMS and COMS. Historic, while the plan exists, the systems are installed and operating. This condition is not applicable.
- 8. The permittee shall monitor and record FGDRYERS operating time and any time one or both RTO units are bypassed (III.3.). Records regarding any bypass condition are being kept and a sample of these is attached. See Records 3, B.
- 9. Records of the date, time, duration, and reason for each occurrence if emission control system bypass operation that occurs per condition III.3, shall be kept on file. Records Records of the date, time, duration, and reason for each bypass are kept in the on site operators log.
- 10. For all pollutants not monitored by CEMS or COMS, the permittee shall calculate the emission factors using the most recent stack testing data. Emission factors are based on the most recent stack testing. Staff indicated with each stack test, emissions calculation formulas are adjusted to reflect the most recent emissions factors.
- 11. The permittee shall continuously monitor and record RTO fire box temperature and Total HAPs as THC in the RTO exhaust at all times. This equipment is in place and appears to be operating properly.
- 12. To show compliance with CAM for PM10 on FGDRYERS the operating temperature of the RTO shall be measured. This equipment is in place and appears to be operating properly.
- 13. An excursion is defined as a 3-hour block RTO temperature which is below the minimum temperature established in the Malfunction Abatement Plan (MAP). This temperature is 1500 F. These are excursions for PM10. All excursions are reported semi-annually, reviewed, and documented. Please see MACES for further details.
- 14. Upon detecting an excursion, the permittee shall restore operation of FGDRYERS to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions and in following the MAP. All excursions are reported semi-annually, reviewed, and documented. Please see MACES for further details.

15. The permittee shall, at all times, maintain the monitoring equipment, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment. At the time of inspection, the facility was storing several spare parts for all monitors.

#### VII. REPORTING

- 1-3. All semi-annual and annual deviation reporting has been completed in a timely manner.
- 4. Each CAM semiannual report of monitoring deviations shall include summary information on the number, duration and cause of excursions and/or exceedances and the corrective actions taken. These reports have been submitted in a timely manner. Please see MACES for further details.
- Each CAM semiannual report of monitoring deviations shall include summary information on monitor downtime. These reports have been submitted in a timely manner. Please see MACES for further details.
- 6. The permittee shall notify the appropriate District Office of the AQD for the need to modify the CAM monitoring plan. There has been no cause to modify the MAP in the last 12 months.
- 7. Not less than 60 days prior to any AQD required stack testing, the permittee shall submit copies of the test protocol to the AQD District Supervisor and the AQD Technical Programs Unit for review and approval Protocols submitted have met this criteria.
- 8. Within 60 days after the final day of any required AQD stack testing the test results shall be submitted to the AQD District Supervisor and the Technical Programs Unit. All stack testing reports have been submitted in a timely manner. See MACES for further details.
- No less that 30 days prior to the performance specification testing, an approvable complete test plan must be submitted to the AQD, Cadillac District Office and AQD's Technical Programs Unit. All protocols have been submitted in a timely manner. Please see MACES for further details.
- 10. Within 60 days after testing, a copy of the final report demonstrating the CEMS or COMS complies with the requirements of its specific Performance Specifications shall be submitted to AQD Cadillac District Office and AQD's Technical Programs Unit. All CEM QA/QC procedures performed are required to be reported to the District Office. These procedures are reviewed, documented in MACES, and have demonstrated compliance over the last 12 months.
- 11. Within 30 days after the end of each calendar quarter a RATA or quarterly gas audit is completed, a copy of the final report shall be submitted to AQD District Supervisor and the Technical Programs Unit. All CEM QA/QC procedures performed are required to be reported to the District Office. These procedures are reviewed, documented in MACES, and have demonstrated compliance over the last 12 months.
- 12. The permittee must submit a MACT compliance report semiannually. This reporting has been submitted in a timely manner. Please see MACES for further details.
- 13. If FGDRYERS has a startup, shutdown, or malfunction during the reporting period that is not consistent with the Startup, Shutdown, or Malfunction Plan (SSMP), the permittee must submit an immediate startup, shutdown and malfunction report by fax or telephone within 2 working days after starting actions inconsistent with the plan to the AQD District office. There have been no incidents of this nature in the last 12 months.
- 14. In accordance with 40 CFR Parts 60.7(c) and (d), an EER and summary report for each CEMS and COMS shall be submitted. This reporting has been submitted in a timely manner. See MACES for further details.
- 15. The results of the COMS annual audits shall be submitted to the AQD Cadillac District Supervisor and the AQD Technical Programs Unit within 30 days of completion of the testing. All COM QA/QC procedures performed are required to be reported to the District Office. These procedures are reviewed, documented in MACES, and have demonstrated compliance over the last 12 months.

- 16. The permittee shall report the results of the quarterly quality assurance procedures of the CEMS set forth in Appendix F of 40 CFR Part 60 within 30 days after the end of each calendar quarter. All CEM QA/QC procedures performed are required to be reported to the District Office. These procedures are reviewed, documented in MACES, and have demonstrated compliance over the last 12 months.
- 17. The permittee shall report the calculated emissions within 30 days following the end of the calendar quarter in which the emissions occurred using the emission factors established in Condition VI.10 of this table. This reporting has been performed in a timely manner, see MACES for further details.

# VIII. STACK/VENT RESTRICTION(S)

 This stack appears in compliance with criteria listed in the ROP and does not appear to have been recently altered.

# IX. OTHER REQUIREMENT(S)

- 1. The permittee must develop a written startup shutdown malfunction plan (SSMP) according to the provisions in 40 CFR 63.6(e)(3). The most recent version of this plan was submitted in 2013.
- 2. The permittee shall comply with all applicable requirements in 40 CFR Part 63 Subpart DDDD National Emission Standards For Hazardous Air Pollutants: Plywood and Composite Wood Products. This condition is redundant.
- 3. The permittee shall comply with all applicable requirements of 40 CFR Part 64. The facility has maintained compliance with CAM.

<u>FGWOODHANDLING</u> – Waste material is transferred from flake screening areas, cleanup system for screens and dry bins area, the sanding line, wood handling systems consisting of press board trim line and the area where pressed board is finished to the final product, packaged, and shipped and delivered as dry fuel to the wood burners in EUCOEN and EUDRYER1 through EUDRYER4. This is a pneumatic system with dust pickups servicing screens, conveyors, dry bins, and associated equipment for housekeeping purposes. This equipment is controlled by Cyclones and Baghouses.

- I. EMISSION LIMIT(S) Particulate emissions are limited to 0.002 #/1000#, 1.86 pounds per hour, and 8.1 tpy; visible emissions are limited to 5% opacity. Compliance with emissions limits is through control equipment parameter monitoring and non-certified VE's.
- II. MATERIAL LIMIT(S) No material limits
- III. PROCESS/OPERATIONAL RESTRICTION(S)
- The wood systems of FGWOODHANDLING shall not operate unless the associated cyclones and baghouses are operating properly. The control equipment was in operation at the time of the inspection and appeared to be operating properly.
- 2. The compliant operating range for the differential pressure across each baghouse shall be determined based on the baghouse manufacturer's range or other methods. Pressure drop ranges are outlined in the MAP.

### IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. FGWOODHANDLING shall be equipped with cyclones and/or baghouses, or shall be equipped with control devices of equal or better efficiency. The control equipment was in operation at the time of the inspection and appeared to be operating properly.
- The permittee shall install instrumentation capable of determining the differential pressure across the baghouse on each of the baghouses in FGWOODHANDLING. This equipment was in place and appeared to be operating properly.
- V. TESTING/SAMPLING No testing or sampling requirements
- VI. MONITORING/RECORDKEEPING

- 1. The permittee shall calculate the particulate emissions in tons per year and pounds per hour from FGWOODHANDLING. Records indicate this is being performed.
- The permittee shall continuously monitor and record daily while operating, the differential pressure (?P)
  measured in inches of water across each baghouse in FGWOODHANDLING. The controls in this group are
  equipped to monitor pressure drop. Records of these daily readings are being kept.
- 3. Once daily when FGWOODHANDLING emission units are operating, an employee shall observe the exhaust vents of all FGWOODHANDLING emission units that are operating and perform non-certified observations for visible emissions. These records are being kept as part of a daily inspection log and appear correct.

1-3. All semi-annual and annual deviation reporting has been completed in a timely manner.

## VIII. STACK/VENT RESTRICTION(S)

- This stack appears in compliance with criteria listed in the ROP and does not appear to have been recently altered.
- IX. OTHER REQUIREMENT(S) No other requirements

<u>FGDIESEL-ENGINES</u> — emergency diesel-fired engines used during power outages to circulate hot oil for the press and building heat at the facility, to supply emergency electricity, and to pump water during fires.

- I. EMISSION LIMIT(S)
- SO2 emissions are limited to 1.7 pounds per MMBtu heat input. Compliance with emissions limits is through sulfur material content limits.
- II. MATERIAL LIMIT(S)
- 1. Sulfur content of the fuel oil used at the facility is not to exceed 0.5%. The last analysis performed on the sulfur content in the fuel was in 2010 and demonstrated a sulfur content of 0.02% by weight.
- III. PROCESS/OPERATIONAL RESTRICTION(S)
- 1. The permittee may operate the diesel engines during the following scenarios besides testing:
  - a. The permittee may operate EUDIESELHOTOIL and EUEMERGENCYGEN as needed when normal process equipment is not operating properly.
  - b. The permittee may operate EUFIREPUMP at any time to help combat fires.

Records reviewed for the last 12 months indicated these engines were run only to test them and only for short periods. A total of 37 hours for all was logged in 2013.

- The permittee shall not operate each diesel engine for more than 200 hours per year for diesel engine testing. Records reviewed for the last 12 months indicated these engines were run only to test them and only for short periods. A total of 37 hours for all was logged in 2013.
- IV. DESIGN/EQUIPMENT PARAMETER(S) No design or equipment restrictions

#### V. TESTING/SAMPLING

1. The permittee shall sample and test the diesel fuel for sulfur content and BTU's once every five years using approved AQD or USEPA test methods. The last analysis performed on the sulfur content in the fuel was in 2010 and demonstrated a sulfur content of 0.02% by weight.

## VI. MONITORING/RECORDKEEPING

- The permittee shall monitor and record the hours of operation for testing of each diesel engine. These
  records are being kept for each engine.
- 2. For each shipment of diesel fuel oil received, the permittee shall obtain from the supplier and record the percent sulfur and BTU/ gallon content. These records are being kept. Last analysis demonstrate 0.02% sulfur content and 19460 BTU/gallon.
- 3. The permittee shall calculate and record monthly the pounds of SO2/MMBTUs for the emission units in FGDIESEL-ENGINES. These records are being kept in a timely manner. Most recent calculation demonstrated 0.306 #SO2/MMBtu.

1- 3. All semi-annual and annual deviation reporting has been completed in a timely manner.

VIII. STACK/VENT RESTRICTION(S) – There are no stack restrictions

IX. OTHER REQUIREMENT(S) - No other requirements

NAME

DATE\_

SUPERVISOR