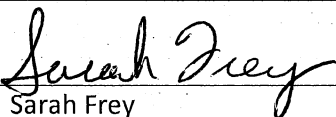
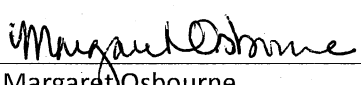




**Region 6 Compliance Assurance and Enforcement Division**  
**INSPECTION REPORT**

|                                        |                                                                                                          |                         |                |
|----------------------------------------|----------------------------------------------------------------------------------------------------------|-------------------------|----------------|
| Inspection Date(s):                    | 05/14-16/2018                                                                                            |                         |                |
| Media:                                 | Air                                                                                                      |                         |                |
| Regulatory Program(s)                  | Title V, NESHAP, NSPS                                                                                    |                         |                |
| Company Name:                          | International Paper Company                                                                              |                         |                |
| Facility Name:                         | Mansfield Mill                                                                                           |                         |                |
| Facility Physical Location:            | 1202 Hwy 509                                                                                             |                         |                |
| (city, state, zip code)                | Mansfield, LA 71052                                                                                      |                         |                |
| Mailing address:                       | 1202 Hwy 509                                                                                             |                         |                |
| (city, state, zip code)                | Mansfield, LA 71052                                                                                      |                         |                |
| County/Parish:                         | DeSoto Parish                                                                                            |                         |                |
| Facility Contact:                      | Alyssa Martin                                                                                            | Environmental Engineer  |                |
|                                        | Alyssa.Martin@ipaper.com                                                                                 |                         |                |
| FRS Number:                            | 110000450173                                                                                             |                         |                |
| Identification/Permit Number:          | Title V: 0760-00006-V12                                                                                  |                         |                |
| Media Number:                          | 22-031-00006                                                                                             |                         |                |
| NAICS:                                 | 322130                                                                                                   |                         |                |
| SIC:                                   | 2631                                                                                                     |                         |                |
| Personnel participating in inspection: |                                                                                                          |                         |                |
| Sarah Frey                             | EPA/6EN-AT                                                                                               | Environmental Scientist | 214-665-6499   |
| James Haynes                           | EPA/6EN-AT                                                                                               | Environmental Scientist | 214-665-8546   |
| James Leathers                         | EPA/6EN-AT                                                                                               | Environmental Engineer  | 214-665-6569   |
| Sophia Ong                             | LDEQ/ Surveillance Division                                                                              | Environmental Scientist | 318-676-7576   |
| Lance Beauvais                         | LDEQ/ Surveillance Division                                                                              | Environmental Scientist | 318-362-5439   |
| Alyssa Martin                          | International Paper                                                                                      | Environmental Engineer  | 318-871-1222   |
| Louis Derose                           | International Paper                                                                                      | EHS Manager             | 318-871-1561   |
| Kevin Driscoll                         | International Paper                                                                                      | Plant Manager           | 318-871-1469   |
|                                        |                                                                                                          |                         |                |
| EPA Lead Inspector<br>Signature/Date   | <br>Sarah Frey        |                         | 7/5/18<br>Date |
| Supervisor<br>Signature/Date           | <br>Margaret Osbourne |                         | 7/5/18<br>Date |

## **Section I – INTRODUCTION**

### **PURPOSE OF THE INSPECTION**

EPA Region 6 inspectors Dr. Sarah Frey, Mr. James Haynes, and Mr. James Leathers, accompanied by LDEQ inspector Ms. Sophia Ong, arrived at International Paper Company's Mansfield Mill at 11:00 am on May 14, 2018 for an announced inspection. We met with Ms. Alyssa Martin and were checked in at the secured entrance. Credentials were presented to Mr. Louis Derosé, EHS Manager, and Mr. Kevin Driscoll, Plant Manager, and we informed them that this was an EPA inspection to determine compliance with the facility's Title V Air Permit and the Clean Air Act (CAA) New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP). The scope of the inspection is partial compliance evaluation (PCE) and includes evaluation of the compliance of the facility with its Title V operating permit and applicable CAA regulations. Photographs taken during the inspection can be found in Appendix 1. The sign-in sheet for the opening conference is attached as Appendix 2.

### **FACILITY DESCRIPTION**

International Paper's Mansfield Mill is a kraft pulp and paper mill in DeSoto Parish, Louisiana, and is permitted to operate 365 days per year. The mill was constructed around 1981 and currently operates under permit number 0760-00006-V12, issued December 9, 2014 and was due to expire June 7, 2015. The mill submitted a renewal application December 5, 2014 and an application amendment August 9, 2016. The renewal application is still under review by LDEQ and the terms and conditions of permit number 0760-00006-V12 will remain in effect until the permitting authority takes final action on the application.

Hardwood chips are processed in the semi-chemical line and pine chips are processed in the Primary or Secondary lines. The Secondary, or "swing", line can also receive hardwood chips, but at the time of inspection was only receiving pine chips. The mill operates chip bins, steaming vessels, continuous digesters, diffusion washers, and washed pulp is stored in high density (HD) storage tanks. Pulp is then sent from the HD storage tanks to the paper-making area. Non-condensable gases (NCG) prior to the HD storage tanks are sent to the LVHC and HVLC systems and routed to an incinerator. Spent cooking liquor is sent to the chemical recovery area.

The chemical recovery area includes evaporators, concentrators, steam stripper, recovery boilers, smelt tanks, process tanks, and a tall oil plant. The causticizing area includes causticizers, green liquor preparation, lime slaker, white liquor preparation, lime mud washing/thickening, and a lime kiln. The NCG collection systems route to the LVHC/HVLC incinerator, and the lime kiln is a back-up for the LVHC gases. The papermaking area consists of three paper machines, producing unbleached and white top linerboard and corrugating medium. The mill also includes a power area and uses steam and/or power generating units to produce all the steam needed for its processes, including 2 power boilers and 2 recovery boilers.

The mill sends approximately 15 million gallons per day to the wastewater treatment system (WWTS). The WWTS consists of 3 sections of pond settling with 16 aerators, and uses land spray application (~600 acres) as a secondary clarifier. Carbon dioxide is used for pH control at 3 points through the WWTS. Adjacent to the WWTS is 30 acres of wetlands with cattails, which can also be fed water from equalization basin. Treated water can also be collected and piped to the Red River.

## **Section II - OBSERVATIONS**

On May 14, 2018 after presenting credentials and identification to the responsible officials, Mr. Driscoll and Mr. Derosé, we discussed our plans for the inspection, including that our focus would be on NSPS Subpart BB and NESHAPs Subparts S, MM, and DDDDD. After discussions about safety, scheduling, photographs, and confidential business information (CBI), Mr. Derosé drove the inspection team on a tour of the facility and wastewater treatment system. Following the driving tour, we engaged in detailed discussions of facility history, process flow, and production. The inspection continued May 15 and 16, in which we walked the facility and had discussions with facility personnel. LDEQ inspector Sophia Ong accompanied EPA inspectors on May 14 and 15, and LDEQ inspector Lance Beauvais accompanied EPA inspectors on May 16. Photographs taken during walkthrough can be found in Appendix 1. The inspection team performed some record review on site, engaging in discussions with Ms. Alyssa Martin. Many records reviewed were requested one week prior to the inspection on May 7, 2018. This Document Request is included as Appendix 3. Our observations are separated by process area below:

### Primary Products Area

On 5/15/18 at 7:30am, the inspection team arrived at the facility and met with Alyssa Martin, Lou Derosé, and Steve Mayeux (Primary Products Business Unit Manager) to take a tour of the pulp processing equipment, HD storage tanks, dregs filter, lime kiln, and incinerator. Beginning on the roof of the digester building, the inspection team viewed the chip bins and flash tanks. We observed visible emissions at the entrance feeds of the steam vessel and the low-pressure feeder on the Primary Line, or "Big Pine" line (Photos 2 and 3). We observed the coolers and high-pressure feeder system. On the Primary Line, remnants of a previous liquor leak were present near the high-pressure feeder, with the area roped off and safety tags dated 5/4/18. On the ground floor, below the Primary high-pressure feeder, there was a second area roped off with safety tags dated 5/7/18. Mr. Mayeux stated that the leak likely originated from the pump, and had bubbled out, releasing less than 10 lbs of white liquor (Photos 4 and 5). The inspection team observed a third safety tag: a white liquor leak on the bottom circulation pump for the primary line was discovered on 5/7/18. The impregnation vessels (IV) and digesters for the Primary and Secondary lines were viewed, and the digester for the Semichemical line was viewed and does not have an IV (Photos 6 and 7). The mill uses diffusion washers that operate at atmospheric pressure. The Secondary, or "swing", diffuser screen was replaced in 2017 and the old screen was available for viewing (Photos 8 and 9). The inspection team then climbed to the top of the Primary line to view the top of the diffusion washers and HD storage tanks, viewing the LVHC condensers. From the top of HD storage tank C, the HVLC vents were viewed. Mr. Haynes observed minor emissions from diffusion washer C. The team then viewed the dregs filter, lime kiln, and

incinerator (Photos 12-14). The incinerator is the primary combustion device for both the HVLC and LVHC systems. The lime kiln is the backup combustion device for the LVHC system. The incinerator has a planned outage twice a year, and the HVLC is emitted to the atmosphere.

#### Powerhouse Area

On 5/15/18 at 11:10 am the inspection team toured the power-house boiler complex building which included the power boilers, chemical recovery tanks, and recovery boilers. Alec Mullen and Boyd Adkinson from the facility guided the tour, with Alyssa Martin accompanying the inspection team. The inspection team observed the fuel feed piles (Photo 15) and observed chip and tire derived fuel (TDF) feed entering the feed belt for use in the boiler. The inspection team took the elevator to the top of the east power boiler stack, and observed the electrostatic precipitators below the power boiler stack catwalk. The instrumentation box was observed, but was locked and the inspection team did not request opening the instrumentation panel. No areas of concern were observed for the power boilers at the time of the inspection. After viewing the power boilers, the team observed the chemical recovery tanks (Photo 17). Next, we viewed Recovery Boiler #1 at the point where the liquor guns spray into the flame. We then entered the control room and observed the camera view of the flame monitoring and solids' pile. Mr. Adkinson explained that at least 4 temperature probes were inside each boiler and monitored from the control room. From Recovery Boiler #1, four chutes direct solids into Smelt Tank #1. In the basement of the power-house, smelt is mixed with weak water then sent to green liquor recovery. The inspection team then departed the power-house and viewed Foul Condensate Tank 0065 from the outside. We viewed the scrubber, but it was behind other tanks and due to construction near the evaporators, the inspection team was not able to obtain a good vantage point of the scrubber (Photo 18). The caustic is sprayed into the scrubber, cooled, and then sent to the pulp side. It was emphasized by Ms. Martin that the stand-alone steam stripper is used to reduce hydrogen sulfide content, not to reduce methanol. The team returned to the conference room and the remainder of the day was spent reviewing documents.

On 5/16/18 at 8:00 am the inspection team toured the Tall Oil plant accompanied by Alyssa Martin and Robbie Bursley. According to Ms. Martin, the Tall Oil Scrubber was installed approximately 1998 to prevent triggering PSD, but is missing from the special conditions of the permit. The scrubber has been incorporated in the 2014 permit application. The most recent performance test was conducted in 2009 and the next performance test is pending permit application approval.

#### Finished Products Area

On 5/16/18 around 9:00 am the inspection team toured Paper Machine (PM) #3, guided by Alyssa Martin and Nick Cross. We were informed that PM #3 was very similar to PM #1 and PM #2. The pulp comes from the HD storage tanks to low density storage tanks, diluted with white water. The pulp is diluted, refined, and screened before entering the PM and dryers. All storage tanks vent to the atmosphere and all components and dryers inside the PM building are collected in vents and routed to the roof/exterior to be released to the atmosphere. The team climbed to the roof to observe the vents,

and counted approximately 15 vents on the roof (Photos 21 and 22). We observed dryer vents on the side of the building from the ground, some of which has visible steam (Photo 23). Mr. Cross explained that the dryer vents should be closed when in operation, and repairs are scheduled during the next PM shutdown.

#### Primary Products Area

On 5/16/10 around 10am, the inspection team left the Paper Machine area and viewed the soap skimmer, soap tanks, and black liquor storage tank, accompanied by Alyssa Martin. From this area, we observed dense vapors coming from the smelt scrubber stacks and light vapor from the one of the recovery boiler stacks (Photos 24 and 25). Walking toward the Annex, the inspection team viewed the stripped condensate tank from the ground and observed an open pipe exiting the top of the tank. The team climbed the tank, accompanied by Steve Mayeux. From the top of the tank, we did not observe any block or valve associated with the vertical pipe exiting the tank. We did observe the additional 5 lines at the top of the tank, described by Mr. Mayeux: (1) stripped condensate in; (2) hot water make-up; (3) steam in; (4) HVLC gas out; and (5) recirculation from pump to top of the tank (Photos 26-29). Next to the stripped condensate tank are two white water tanks. Mr. Mayeux told the team that the stripped condensate can be routed to the white water tanks to prevent overflow. Mr. Haynes asked if the white water tanks were controlled and gases routed to the HVLC system, and was told no. The team then climbed to the top of the diffusion washers and HD storage tanks. The team visually inspected each washer for emissions from the top of the HD storage tanks. The minor emissions from diffusion washer C observed by Mr. Haynes on 5/15/18 was no longer present. No visible emissions were observed at diffusion washers C, B, A, D (semichemical diffuser), or E (swing diffuser). Vapors were observed exiting the HD storage tanks throughout the 3-day inspection, but those emissions are not required to be controlled. HD storage tanks are permitted to emit 61.85, 28.68, and 52.93 tons of VOC per year for the primary, secondary, and semichemical HD storage tanks, respectively.

On 5/16/18 around 1:00pm, the inspection team reviewed documents and held discussions with Ms. Alyssa Martin. Ms. Martin provided additional information about the open, vertical pipe at the top of the stripped condensate tank: in the 2017 annual leak detection and repair (LDAR) inspection, the pipe was identified as manual valve MV2182 and passed a negative pressure test on 5/30/17.

#### Regulatory Components

The Power Boilers, EQT0005 and EQT003, are subject to 40 CFR Part 60 Subpart D and 40 CFR Part 63 Subpart DDDDD. IP Mansfield measures opacity, nitrogen oxides, and sulfur dioxide from both stacks. Oxygen is also measured to correct the values recorded and it is also a surrogate for carbon monoxide emissions.

The following documents were received to determine compliance with 40 CFR Part 63 Subpart DDDDD—National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters (Boiler MACT): Notification of compliance status, the Initial

performance test for each power boiler, Tune-up reports, and CMS data from the time of the performance test to the time of the inspection.

IP Mansfield is subject to 40 CFR Part 63 Subpart MM. The facility's affected sources that make up the chemical recovery system are two recovery furnaces, two smelt dissolving tanks, and a lime kiln. The inspection team received records from IP Mansfield and performed an initial evaluation the data. The files contained to demonstrate compliance with Subpart MM include opacity records measured by a continuous opacity monitoring system (COMS) and parameter values from the facility's continuous parameter monitoring system (CPMS). The COMS measures opacity at the two recovery furnaces. The CPMS measures parameter values at each smelt dissolving tank scrubber and the lime kiln scrubber. At each smelt dissolving tank, the parameters measured are scrubbing liquid flow rate and fan amperage. At the lime kiln scrubber, the parameters measured are scrubbing liquid flow rate and pressure drop across the scrubber.

### **Section III – AREAS OF CONCERN**

After each day of the inspection, the team met with Alyssa Martin, Louis Derosé, and Kevin Driscoll for a debrief and logistics planning for the next day. On the final day of inspection, we held a closing conference at 5:20pm (Appendix 4). A copy of all photographs taken were provided to the facility, and no claims of confidential business information (CBI) were made on the documents provided. During the closing conference, the inspection team shared 5 areas of concern with the facility's representatives:

- 1) Visible emissions were observed at the steam vessel and low-pressure feeder of the primary line on May 15. All vapors from this part of the pulping process should be routed to the LVHC system. On May 16, Ms. Martin showed us a video of the repaired steam vessel. A work order for the low-pressure feeder was submitted. The inspection team noted that this process equipment may need to be added to the monthly visible LDAR inspections.
- 2) During our initial document review, it was discovered that annual emission reporting exceeded permit allowances in 2016. While the review was not exhaustive, it included multiple pollutants and equipment, as seen in the table below. The facility believes some of the exceedances were due to updated emission factors that are reflected in the 2014 permit renewal application or 2016 permit application amendment. In addition, the reported methanol emissions at EQT 15 were significantly lower than the permitted limit, which may indicate a problem with the current calculation.

Table 1. Specific Examples of 2016 Permit Limit Exceedances

| Equipment Name            | Pollutant        | Permit Limit  | 2016 Reported Emission |
|---------------------------|------------------|---------------|------------------------|
| EQT 17 No. 1 Soap Skimmer | H <sub>2</sub> S | 20 lbs/yr     | 1595 lbs               |
| EQT 62 No. 2 Soap Skimmer | H <sub>2</sub> S | 20 lbs/yr     | 1595 lbs               |
| EQT 17 No. 1 Soap Skimmer | Methanol         | 20 lbs/yr     | 570 lbs                |
| EQT 62 No. 2 Soap Skimmer | Methanol         | 20 lbs/yr     | 570 lbs                |
| EQT 143 Causticizer       | H <sub>2</sub> S | 20 lbs/yr     | 7500 lbs               |
| EQT 144 Causticizer       | H <sub>2</sub> S | 20 lbs/yr     | 7500 lbs               |
| EQT 145 Causticizer       | H <sub>2</sub> S | 20 lbs/yr     | 7500 lbs               |
| EQT 15 Smelt Tank No. 1   | Acetyl aldehyde  | 200 lbs/yr    | 662 lbs                |
| EQT 15 Smelt Tank No. 1   | Methanol         | 256.2 tons/yr | 21.5 tons              |

3) The stripped condensate tank should be part of the closed collection system, and gases routed to the HVLC system. The inspection team observed an open pipe at the top of the tank, with no valve, hatch, or blind. In addition, it was indicated to the team that stripped condensate liquid could be pumped to the adjacent white water tanks, which are not controlled and gases are not routed to the HVLC system. A condensate tank used in the closed collection system must meet the requirements of 63.446(d)(2)(ii), which states, *“Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that the tank contains pulping process condensates or any HAP removed from a pulping process condensate stream except when it is necessary to use the opening for sampling, removal, or for equipment inspection, maintenance, or repair.”* While the 2017 annual LDAR certification labels this open pipe as a manual valve (MV), the 2012 LDAR Plan has the component labeled as a tap. Furthermore, the diagram places component 2182 in series after MV-2176 and MV-2181, which was not observed by the inspection team.

4) The inspection team explained that the Paper Machines are the highest emitter of methanol for the entire mill. Paper Machines #1, #2, and #3 reported 641.7 tons, 338.1 tons, and 103.3 tons of methanol in 2016, respectively. While the paper machines are not required to be controlled, it may be prudent to evaluate the control devices operating upstream to reduce the amount of pollutants reaching the Finished Products area. Additionally, the paper machine performance testing will be reviewed to determine if the appropriate emission factors have been applied.

5) The inspection team shared that visible emissions from the Recovery Boiler stacks were observed on May 16. An evaluation of all opacity, COMS, and CEMS data will be reviewed after the inspection.

Following the records review conducted subsequent to the on-site inspection, the inspection team developed additional areas of concern:

- 1) Potential missed monitoring and early monitoring of once a month visual LDAR inspections.
- 2) Excess emissions events of opacity and TRS, and potential missed reporting of excess emission events in semiannual reports.

3) Multiple documents, including the annual LDAR certification reports, mislabel the LVHC system's primary control device as the lime kiln. It is the inspection team's understanding that the HVLC incinerator has been the primary control device for LVHC gases beginning in 2014. In addition, the LDAR Site Monitoring Plan is not updated.

#### **Section IV – FOLLOW UP**

The following information was received by EPA after exiting the Facility on May 16, 2016:

- August 2017 Stack Test Report for smelt dissolving tank and lime kiln
- August 2017 Test Report for recovery boiler compliance
- Summary pages for Cylinder Gas Audits (CGAs) and Data Assessment Reports (DARs) for the lime kiln and recovery boilers
- February 2015 CMS QA/QC Plan for NESHAP MM
- February 2004 Initial COMS Testing Report for recovery boilers
- Current summary of Operating Parameters at the recovery boilers, smelt dissolving tanks, lime kiln, HVLC incinerator, and pulping condensates
- Piping and instrument diagrams of the stripped condensate system and white water system
- September 2014 HVLC Incinerator Emissions Test Report
- Summary table of Emissions Test Results from a Paper Machine Wet End Vents
- September 2017 Power Boiler Stack Test Report
- May 25, 2018 video showing fixed leak from inspection

#### **Section V – LIST OF APPENDICES**

Appendix 1 – Photo Log – 32 photos taken 5/14-16/18

Appendix 2 – Opening conference sign-in sheet

Appendix 3 – Document Request letter

Appendix 4 – Closing conference sign-in sheet

## Appendix 1

### Photograph Log



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## Photograph Log

Photo No. 1

|                                                        |                       |                  |
|--------------------------------------------------------|-----------------------|------------------|
| Location: International Paper Company – Mansfield Mill |                       |                  |
| City: Mansfield                                        | County/Parish: Desoto | State: Louisiana |



Photo File Name: DSCN0594.jpeg

Date of Photo: 05/15/2018

Time of Photo: 7:27am

Photographer: J. Haynes

Description: Wide shot of pulping process equipment, secondary ("swing") line. Impregnation vessel and digester on right, high density storage tank on left.



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## Photograph Log

Photo No. 2

|                                                        |                       |                  |
|--------------------------------------------------------|-----------------------|------------------|
| Location: International Paper Company – Mansfield Mill |                       |                  |
| City: Mansfield                                        | County/Parish: Desoto | State: Louisiana |



Photo File Name: DSCN0595.jpeg

Date of Photo: 05/15/2018

Time of Photo: 8:02am

Photographer: J. Haynes

Description: We observed visible emissions at the entrance of the primary steaming vessel.



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## Photograph Log

Photo No. 3

|                                                        |                       |                  |
|--------------------------------------------------------|-----------------------|------------------|
| Location: International Paper Company – Mansfield Mill |                       |                  |
| City: Mansfield                                        | County/Parish: Desoto | State: Louisiana |



Photo File Name: DSCN0596.jpeg

Date of Photo: 05/15/2018

Time of Photo: 8:08am

Photographer: J. Haynes

Description: Photo of primary line low pressure feeder, visible emissions observed from the top.



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## Photograph Log

Photo No. 4

|                                                        |                       |                  |
|--------------------------------------------------------|-----------------------|------------------|
| Location: International Paper Company – Mansfield Mill |                       |                  |
| City: Mansfield                                        | County/Parish: Desoto | State: Louisiana |



Photo File Name: DSCN0597.jpeg

Date of Photo: 05/15/2018

Time of Photo: 8:27am

Photographer: J. Haynes

Description: Photo of primary line high pressure feeder. Roped off due to previous white liquor leak from pump.



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## Photograph Log

Photo No. 5

|                                                        |                       |                  |
|--------------------------------------------------------|-----------------------|------------------|
| Location: International Paper Company – Mansfield Mill |                       |                  |
| City: Mansfield                                        | County/Parish: Desoto | State: Louisiana |



Photo File Name: DSCN0598.jpeg

Date of Photo: 05/15/2018

Time of Photo: 8:33am

Photographer: J. Haynes

Description: Photo of primary line high pressure feeder from the opposite side. Roped off due to previous white liquor leak from pump.



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## Photograph Log

Photo No. 6

|                                                        |                       |                  |
|--------------------------------------------------------|-----------------------|------------------|
| Location: International Paper Company – Mansfield Mill |                       |                  |
| City: Mansfield                                        | County/Parish: Desoto | State: Louisiana |



Photo File Name: DSCN0599.jpeg

Date of Photo: 05/15/2018

Time of Photo: 8:44am

Photographer: J. Haynes

Description: Photo of secondary ("swing") line from ground. Left is impregnation vessel and right is digester.



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## Photograph Log

Photo No. 7

|                                                        |                       |                  |
|--------------------------------------------------------|-----------------------|------------------|
| Location: International Paper Company – Mansfield Mill |                       |                  |
| City: Mansfield                                        | County/Parish: Desoto | State: Louisiana |



Photo File Name: DSCN0600.jpeg

Date of Photo: 05/15/2018

Time of Photo: 8:44am

Photographer: J. Haynes

Description: Photo of secondary ("swing") line from ground. Left is impregnation vessel and right is digester.



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## Photograph Log

Photo No. 8

|                                                        |                       |                  |
|--------------------------------------------------------|-----------------------|------------------|
| Location: International Paper Company – Mansfield Mill |                       |                  |
| City: Mansfield                                        | County/Parish: Desoto | State: Louisiana |



Photo File Name: DSCN0601.jpeg

Date of Photo: 05/15/2018

Time of Photo: 8:57am

Photographer: J. Haynes

Description: Diffusion washer screen removed in 2017.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 9

|                                                        |                       |                  |
|--------------------------------------------------------|-----------------------|------------------|
| Location: International Paper Company – Mansfield Mill |                       |                  |
| City: Mansfield                                        | County/Parish: Desoto | State: Louisiana |



Photo File Name: DSCN0602.jpeg

Date of Photo: 05/15/2018

Time of Photo: 8:58am

Photographer: J. Haynes

Description: Diffusion washer screen, view from underneath.



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## Photograph Log

Photo No. 10

|                                                        |                       |                  |
|--------------------------------------------------------|-----------------------|------------------|
| Location: International Paper Company – Mansfield Mill |                       |                  |
| City: Mansfield                                        | County/Parish: Desoto | State: Louisiana |



Photo File Name: DSCN0603.jpeg

Date of Photo: 05/15/2018

Time of Photo: 9:02am

Photographer: J. Haynes

Description: High density storage tanks on left and right of secondary line diffusion washer.



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## Photograph Log

Photo No. 11

|                                                        |                       |                  |
|--------------------------------------------------------|-----------------------|------------------|
| Location: International Paper Company – Mansfield Mill |                       |                  |
| City: Mansfield                                        | County/Parish: Desoto | State: Louisiana |



Photo File Name: DSCN0604.jpeg

Date of Photo: 05/15/2018

Time of Photo: 9:02am

Photographer: J. Haynes

Description: High density storage tanks on left and right of secondary line diffusion washer, refiners below.



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## Photograph Log

Photo No. 12

|                                                        |                       |                  |
|--------------------------------------------------------|-----------------------|------------------|
| Location: International Paper Company – Mansfield Mill |                       |                  |
| City: Mansfield                                        | County/Parish: Desoto | State: Louisiana |



Photo File Name: DSCN0605.jpeg

Date of Photo: 05/15/2018

Time of Photo: 10:21am

Photographer: J. Haynes

Description: Close-up view of HVLC/LVHC incinerator.



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## Photograph Log

Photo No. 13

|                                                        |                       |                  |
|--------------------------------------------------------|-----------------------|------------------|
| Location: International Paper Company – Mansfield Mill |                       |                  |
| City: Mansfield                                        | County/Parish: Desoto | State: Louisiana |



Photo File Name: DSCN0606.jpeg

Date of Photo: 05/15/2018

Time of Photo: 10:21am

Photographer: J. Haynes

Description: Wide view of HVLC/LVHC incinerator.



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## Photograph Log

Photo No. 14

|                                                        |                       |                  |
|--------------------------------------------------------|-----------------------|------------------|
| Location: International Paper Company – Mansfield Mill |                       |                  |
| City: Mansfield                                        | County/Parish: Desoto | State: Louisiana |



Photo File Name: DSCN0607.jpeg

Date of Photo: 05/15/2018

Time of Photo: 10:26am

Photographer: J. Haynes

Description: Wide view of dregs filter.



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## Photograph Log

Photo No. 15

|                                                        |                       |                  |
|--------------------------------------------------------|-----------------------|------------------|
| Location: International Paper Company – Mansfield Mill |                       |                  |
| City: Mansfield                                        | County/Parish: Desoto | State: Louisiana |



Photo File Name: DSCN0608.jpeg

Date of Photo: 05/15/2018

Time of Photo: 11:23am

Photographer: J. Haynes

Description: Chip piles from roof of powerhouse.



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## Photograph Log

Photo No. 16

|                                                        |                       |                  |
|--------------------------------------------------------|-----------------------|------------------|
| Location: International Paper Company – Mansfield Mill |                       |                  |
| City: Mansfield                                        | County/Parish: Desoto | State: Louisiana |



Photo File Name: DSCN0609.jpeg

Date of Photo: 05/15/2018

Time of Photo: 11:40am

Photographer: J. Haynes

Description: Stacks from smelt dissolving tanks (front) and recovery boilers (back) from powerhouse roof.



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## Photograph Log

Photo No. 17

|                                                        |                       |                  |
|--------------------------------------------------------|-----------------------|------------------|
| Location: International Paper Company – Mansfield Mill |                       |                  |
| City: Mansfield                                        | County/Parish: Desoto | State: Louisiana |



Photo File Name: DSCN0610.jpeg

Date of Photo: 05/15/2018

Time of Photo: 11:45am

Photographer: J. Haynes

Description: Aerial view of recovery boilers.



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## Photograph Log

Photo No. 18

|                                                        |                       |                  |
|--------------------------------------------------------|-----------------------|------------------|
| Location: International Paper Company – Mansfield Mill |                       |                  |
| City: Mansfield                                        | County/Parish: Desoto | State: Louisiana |



Photo File Name: DSCN0611.jpeg

Date of Photo: 05/15/2018

Time of Photo: 12:11pm

Photographer: J. Haynes

Description: Piping surrounding the stand alone scrubber.



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## Photograph Log

Photo No. 19

|                                                        |                       |                  |
|--------------------------------------------------------|-----------------------|------------------|
| Location: International Paper Company – Mansfield Mill |                       |                  |
| City: Mansfield                                        | County/Parish: Desoto | State: Louisiana |



Photo File Name: DSCN0612.jpeg

Date of Photo: 05/16/2018

Time of Photo: 8:10am

Photographer: J. Haynes

Description: Crude Tall Oil scrubber and reactor.



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## Photograph Log

Photo No. 20

|                                                        |                       |                  |
|--------------------------------------------------------|-----------------------|------------------|
| Location: International Paper Company – Mansfield Mill |                       |                  |
| City: Mansfield                                        | County/Parish: Desoto | State: Louisiana |



Photo File Name: DSCN0613.jpeg

Date of Photo: 05/16/2018

Time of Photo: 8:14am

Photographer: J. Haynes

Description: Tall oil scrubber plant. The reactor (middle) between the tank and incinerator scrubber vapor plume.



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## Photograph Log

Photo No. 21

|                                                        |                       |                  |
|--------------------------------------------------------|-----------------------|------------------|
| Location: International Paper Company – Mansfield Mill |                       |                  |
| City: Mansfield                                        | County/Parish: Desoto | State: Louisiana |



Photo File Name: DSCN0614.jpeg

Date of Photo: 05/16/2018

Time of Photo: 8:48am

Photographer: J. Haynes

Description: Roof of paper machine #3 building.



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## Photograph Log

Photo No. 22

|                                                        |                       |                  |
|--------------------------------------------------------|-----------------------|------------------|
| Location: International Paper Company – Mansfield Mill |                       |                  |
| City: Mansfield                                        | County/Parish: Desoto | State: Louisiana |



Photo File Name: DSCN0615.jpeg

Date of Photo: 05/16/2018

Time of Photo: 8:48am

Photographer: J. Haynes

Description: Wide view of roof of paper machine #3 building.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 23

|                                                        |                       |                  |
|--------------------------------------------------------|-----------------------|------------------|
| Location: International Paper Company – Mansfield Mill |                       |                  |
| City: Mansfield                                        | County/Parish: Desoto | State: Louisiana |



Photo File Name: DSCN0616.jpeg

Date of Photo: 05/16/2018

Time of Photo: 9:07am

Photographer: J. Haynes

Description: Paper machine #3 dryer vents.



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## Photograph Log

Photo No. 24

|                                                        |                       |                  |
|--------------------------------------------------------|-----------------------|------------------|
| Location: International Paper Company – Mansfield Mill |                       |                  |
| City: Mansfield                                        | County/Parish: Desoto | State: Louisiana |



Photo File Name: DSCN0617.jpeg

Date of Photo: 05/16/2018

Time of Photo: 9:26am

Photographer: J. Haynes

Description: Soap skimmer tanks.



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## Photograph Log

Photo No. 25

|                                                        |                       |                  |
|--------------------------------------------------------|-----------------------|------------------|
| Location: International Paper Company – Mansfield Mill |                       |                  |
| City: Mansfield                                        | County/Parish: Desoto | State: Louisiana |



Photo File Name: DSCN0618.jpeg

Date of Photo: 05/16/2018

Time of Photo: 9:26am

Photographer: J. Haynes

Description: Recovery boiler stacks from ground level (front) and smelt tank scrubber stacks (back).



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## Photograph Log

Photo No. 26

|                                                        |                       |                  |
|--------------------------------------------------------|-----------------------|------------------|
| Location: International Paper Company – Mansfield Mill |                       |                  |
| City: Mansfield                                        | County/Parish: Desoto | State: Louisiana |



Photo File Name: DSCN0619.jpeg

Date of Photo: 05/16/2018

Time of Photo: 9:55am

Photographer: J. Haynes

Description: Top of stripped condensate tank, viewing pipes entering the top of the tank



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## Photograph Log

Photo No. 27

|                                                        |                       |                  |
|--------------------------------------------------------|-----------------------|------------------|
| Location: International Paper Company – Mansfield Mill |                       |                  |
| City: Mansfield                                        | County/Parish: Desoto | State: Louisiana |



Photo File Name: DSCN0620.jpeg

Date of Photo: 05/16/2018

Time of Photo: 9:55am

Photographer: J. Haynes

Description: Top of stripped condensate tank, viewing pipes entering the top of the tank. Pipe on the right is open to atmosphere.



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## Photograph Log

Photo No. 28

|                                                        |                       |                  |
|--------------------------------------------------------|-----------------------|------------------|
| Location: International Paper Company – Mansfield Mill |                       |                  |
| City: Mansfield                                        | County/Parish: Desoto | State: Louisiana |



Photo File Name: DSCN0621.jpeg

Date of Photo: 05/16/2018

Time of Photo: 10:01am

Photographer: J. Haynes

Description: Stripped condensate tank from stairs.



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## Photograph Log

Photo No. 29

|                                                        |                       |                  |
|--------------------------------------------------------|-----------------------|------------------|
| Location: International Paper Company – Mansfield Mill |                       |                  |
| City: Mansfield                                        | County/Parish: Desoto | State: Louisiana |



Photo File Name: DSCN0622.jpeg

Date of Photo: 05/16/2018

Time of Photo: 10:05am

Photographer: J. Haynes

Description: Stripped condensate tank from ground.



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## Photograph Log

Photo No. 30

|                                                        |                       |                  |
|--------------------------------------------------------|-----------------------|------------------|
| Location: International Paper Company – Mansfield Mill |                       |                  |
| City: Mansfield                                        | County/Parish: Desoto | State: Louisiana |



Photo File Name: DSCN0623.jpeg

Date of Photo: 05/16/2018

Time of Photo: 10:35am

Photographer: J. Haynes

Description: HVLC bypass line from top of high density storage tanks.



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## Photograph Log

Photo No. 31

|                                                        |                       |                  |
|--------------------------------------------------------|-----------------------|------------------|
| Location: International Paper Company – Mansfield Mill |                       |                  |
| City: Mansfield                                        | County/Parish: Desoto | State: Louisiana |



Photo File Name: DSCN0624.jpeg

Date of Photo: 05/16/2018

Time of Photo: 10:45am

Photographer: J. Haynes

Description: Paper machines #1 and #2 building from top of high density storage tanks.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 32

|                                                        |                       |                  |
|--------------------------------------------------------|-----------------------|------------------|
| Location: International Paper Company – Mansfield Mill |                       |                  |
| City: Mansfield                                        | County/Parish: Desoto | State: Louisiana |



Photo File Name: DSCN0625.jpeg

Date of Photo: 05/16/2018

Time of Photo: 10:45am

Photographer: J. Haynes

Description: Paper machine #3 building from top of high density storage tanks.

## Appendix 2

### Opening Conference Sign-in Sheet

## Opening/Pre-Inspection Meeting

Commence opening/pre-inspection meeting.....Time: 11:10 am

| Name           | Title              | Representing | Telephone No.  |
|----------------|--------------------|--------------|----------------|
| Sarah Frey     | Env. Scientist     | EPA R6       | 214-665-6499   |
| Sophia Ong     | Env. Scientist     | LOEG         | 318-676-7876   |
| LOUIS DEROSE   | EHS MGR            | IP           | 318/871-1561   |
| Alyssa Martin  | Envr. Engineer     | IP           | 318-871-1222   |
| Kevin Driscoll | Mill Manager       | IP           | (318)-871-1469 |
| James Haynes   | Physical Scientist | EPA R6       | 214-665-8546   |
| James Leathers | Env. Engineer      | EPA R6       | 214-665-6569   |
|                |                    |              |                |
|                |                    |              |                |
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|                |                    |              |                |
|                |                    |              |                |
|                |                    |              |                |
|                |                    |              |                |
|                |                    |              |                |

Conclude opening/pre-inspection meeting .....Time: 11:30 amInitials / Date: 5/14/15, LG

## Appendix 3

### Document Request Letter

**INTERNATIONAL PAPER COMPANY - MANSFIELD MILL  
MANSFIELD, LOUISISANA  
EPA REGION 6 RECORDS/DOCUMENTS REQUEST**

**GENERAL PROCEDURE**

During the Clean Air Act (CAA) compliance investigation at International Paper Company - Mansfield Mill (Mill), inspectors will be reviewing records kept for your facility. To expedite this portion of the investigation, EPA is providing you advanced notification of the records that will likely be reviewed on-site. For most documents, EPA will review the records on-site and request copies, as needed. In certain cases, document copies, either electronic or paper, will be requested for later review by EPA.

In preparation for this compliance investigation, EPA has divided this record and document request into two sections. The first section consists of documents that EPA would like available and copies prepared (only as noted) on May 14, 2018. The second section consists of general and specific documents that will most likely be reviewed by EPA inspectors during the inspection. Other documents may also be requested that are not listed. During the investigation, EPA will work with the Mill to develop a schedule to review these documents.

**PART 1 - Please have these documents available on May 14, 2018**

1. Provide description for all process areas including process flow diagrams (3 copies)
2. Site map of the facility (3 copies)
3. Facility organizational chart (including overall responsibilities, Risk Management Program responsibilities, and environmental department) (1 copy)
4. Information on change of ownership or separation of divisions (subsidiaries) within the last 5 years (1 copy)
5. Most recent Title V operating permit (1 copy)
6. Identification of all process areas subject to NESHAP or MACT requirements (1 copy)
7. For 40 CFR Part 63 Subpart S provide:
  - A. Initial notification report (1 copy)
  - B. Notification of compliance status (1 copy)
  - C. Semiannual reports from 2015 to present (1 copy)
  - D. Initial performance tests for emissions sources subject to §63.443 and 63.446 (electronic copy, if possible)
  - E. Start-up, shut-down, and malfunction plan. (1 copy)
  - F. Visual inspections of closed vent system from 2015 to present. (electronic copy, if possible)

- G. Requests and approvals for alternatives and/or variances from requirements. (1 copy)
- 8. For 40 CFR Part 63 Subpart MM provide:
  - A. Initial notification report (1 copy)
  - B. Notification of compliance status (1 copy)
  - C. Initial performance tests used to establish operating ranges for monitoring parameters (electronic copy, if possible)
  - D. Semiannual reports from 2015 to present (1 copy)
  - E. Start-up, shut-down, and malfunction plan (1 copy)
  - F. Requests and approvals for alternatives and/or variances from requirements. (1 copy)
- 9. For 40 CFR Part 63 Subpart DDDDD provide:
  - A. Initial notification report (electronic copy, if possible)
  - B. Notification of compliance status (electronic copy, if possible)
  - C. Initial performance tests used to establish operating ranges for monitoring parameters (electronic copy, if possible)
  - D. Semiannual reports from initial date of compliance to present (electronic copy, if possible)
  - E. Requests and approvals for alternatives and/or variances from requirements (electronic copy, if possible)
  - F. For all continuous monitoring systems (i.e. COMS, CEMS, CPMS etc.), provide continuous monitoring data in electronic format for each monitored parameter used to demonstrate compliance with 40 CFR Part 63 Subpart DDDDD and/or permit requirements. Please provide data from the date of compliance to present.
- 10. Excess emission summary reports for 2015 to present (1 copy)
- 11. For all continuous monitoring systems (i.e. COMS, CEMS, CPMS etc.), provide one-minute continuous monitoring data in electronic format for each monitored parameter used to demonstrate continuous compliance with 40 CFR Part 63 Subpart S, 40 CFR Part 63 Subpart MM, and/or permit requirements. Please provide the data (preferably in Microsoft Access format) for 2015 to present.
- 12. List of all opacity monitor and parameter sensor downtimes, including starting and ending dates/times from 2015 to present. (1 copy)
- 13. List of all process unit shut-downs that have occurred during the last 3 years, including starting and ending dates/times. (1 copy)
- 14. Most recent site-specific leak detection and repair (LDAR) monitoring plan. (1 copy)
- 15. Description of any wastewater treatment plants (WWTP) including schematic diagrams which include any process changes since submittal of the NPDES permit application. (electronic copy, if possible)
- 16. Water balance diagram. (1 copy)

17. For the calendar years 2015, 2016, and 2017 list of all reportable releases, the root cause, and corrective action taken for each event. (electronic copy, if possible)

**PART 2- Documents likely to be requested by EPA inspectors (Schedule to be determined)**

1. Enforcement Actions/Notices of Violations (NOVs).
2. Consent Decrees/Orders/Agreements and related correspondences.
3. List of laboratories (on-site and off-site) and types of analyses conducted.
4. Title V permit revision requests and associated Title V operating permit applications that were submitted to the Louisiana Department of Environmental Quality (LDEQ). Also, provide any related correspondences between the Mill and LDEQ.
5. Provide all subsequent stack test/performance test reports describing methods used, test data, calculations, test results and process weights. Include all test data from tests done by the company, consultants, or regulatory agencies.
6. All correspondence regarding spills, bypasses, or upsets during the last 3 years.

## Appendix 4

### Closing Conference Sign-in Sheet

### Exit interview / Out-briefing Meeting

Commenced meeting..... Time: 5:20 pm

[illegible]

Conclude meeting..... Time: 5:40pm

Initials / Date: SS / 5/16/15