



Air Quality Permitting Statement of Basis

February 7, 2006

Permit to Construct No. P-050039

**Louisiana-Pacific Corporation
LP Building Specialty Products Group, Meridian**

Facility ID No. 001-00115

Prepared by:

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AIR QUALITY DIVISION

FINAL

Table of Contents

ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURES.....	3
1. PURPOSE	4
2. FACILITY DESCRIPTION.....	4
3. FACILITY / AREA CLASSIFICATION.....	4
4. APPLICATION SCOPE	4
5. PERMIT ANALYSIS.....	4
6. PERMIT FEES	8
7. PERMIT REVIEW	8
8. RECOMMENDATION.....	8

Acronyms, Units, and Chemical Nomenclatures

AFS	AIRS Facility Subsystem
AIRS	Aerometric Information Retrieval System
AQCR	Air Quality Control Region
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
CAA	Clean Air Act
CFR	Code of Federal Regulations
CO	carbon monoxide
DEQ	Department of Environmental Quality
dscf	dry standard cubic feet
EPA	U.S. Environmental Protection Agency
gr	grain (1 lb = 7,000 grains)
HAPs	Hazardous Air Pollutants
hp	horsepower
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
lb/hr	pound per hour
MACT	Maximum Achievable Control Technology
MMBtu	million British thermal units
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO _x	nitrogen oxides
NSPS	New Source Performance Standards
O ₃	ozone
PM	particulate matter
PM ₁₀	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
PSD	Prevention of Significant Deterioration
PTC	permit to construct
PTE	potential to emit
Rules	Rules for the Control of Air Pollution in Idaho
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SM	Synthetic Minor
SO ₂	sulfur dioxide
T/yr	tons per year
µg/m ³	micrograms per cubic meter
UTM	Universal Transverse Mercator
VOC	volatile organic compound

1. PURPOSE

The purpose for this memorandum is to satisfy the requirements of IDAPA 58.01.01.200, Rules for the Control of Air Pollution in Idaho, for issuing permits to construct.

2. FACILITY DESCRIPTION

LP's Meridian facility produces composite decking manufactured from wood waste and high density polyethylene (HDPE) resin. No raw materials for this process are produced onsite. The wood waste, consisting of trim ends, sawdust, sticks, etc., is sourced locally. The HDPE resin, which is an odorless opaque white pellet, is produced by ExxonMobil Chemical Company in Texas. Both raw materials are transported to the Meridian facility where they are either entered directly into the manufacturing process or are stored for later use.

3. FACILITY / AREA CLASSIFICATION

LP's Meridian facility is not a major facility as defined by IDAPA 58.01.01.205; consequently, PSD permitting requirements do not apply. This facility is not a designated facility as defined by IDAPA 58.01.01.006.27. The primary Standard Industrial Classification for the facility is 2431, a millwork facility. The AIRS facility classification is "B" (i.e. natural minor) because the facility's uncontrolled potential to emit is less than all major source thresholds.

The LP facility is located in the City of Meridian, which is located in Ada County. Ada County is located in Air Quality Control Region 64 and UTM Zone 11. This area is designated as attainment or unclassifiable for all criteria air pollutants.

4. APPLICATION SCOPE

This permitting action involves a permit revision to reflect as-built parameters of emission sources installed at the facility. This revision reflects updates to several of the location and parameters of the installed sources. This revision also removes the Re grind System from the permit because it no longer vents to the outside air.

4.1 *Application Chronology*

August 17, 2005	DEQ receives application
August 22, 2005	DEQ places on inactive list because application fee was not submitted at the time the application was submitted
August 31, 2005	DEQ receives application fee
September 12, 2005	DEQ removes from inactive list
September 22, 2005	DEQ determines application complete
December 6, 2005	DEQ provides draft permit to facility for its review

5. PERMIT ANALYSIS

This section of the Statement of Basis describes the regulatory requirements for this PTC action.

5.1 Equipment Listing

The following equipment is affected by this permit revision:

- Finishing Line Baghouse #1
- Finishing Line Baghouse #2
- Finishing Line Baghouse #4
- Wood Dryer Baghouse #1
- Wood Dryer Baghouse #2
- Sifter Baghouse (replaces Wood Handling Baghouse #3)
- HDPE Silo Bin Vent #1
- Dry Wood Day Bin vent #1
- Dry Wood Day Bin vent #2

5.2 Emissions Inventory

The primary pollutant of concern associated with this permit revision is PM₁₀. Total hourly PM₁₀ emissions decreased 0.02. lb/hr with this proposed revision. Total annual PM₁₀ emissions have remained the same with this proposed revision. A summary of the PM₁₀ emissions estimates is provided in Table 5.1 below.

TABLE 5.1 EMISSION SUMMARY

Emissions Point	Hourly PM ₁₀ Emissions (lb/hr)	Annual PM ₁₀ Emissions (T/yr) ^a
Finishing Line Baghouse #1 (C12)	0.26	1.13
Finishing Line Baghouse #2 (C13)	0.27	1.19
Finishing Line Baghouse #4 (C21)	0.25	1.10
Wood Dryer Baghouse #1 (C15)	0.39	1.73
Wood Dryer Baghouse #2 (C16)	0.39	1.73
Sifter Baghouse (C22)	0.48	2.09
HDPE Silo Bin Vent #1 (C7)	0.034	0.150
Dry Wood Day Bin vent #1 (C23)	0.020	0.086
Dry Wood Day Bin vent #2 (C24)	0.020	0.086
Total PM₁₀ Emissions	3.38	14.81

a. Assumes 8,760 hr/yr operations.

5.3 Modeling

The facility has demonstrated to the satisfaction of DEQ that PM₁₀ emissions will not cause or contribute to a violation of the PM₁₀ NAAQS. Table 5.2 summarizes the stack parameters and stack locations used in the modeling analysis. Table 5.3 summarizes the decrease in the 24-hr and annual average concentrations of PM₁₀.

TABLE 5.2 MODELED STACK PARAMETERS AND LOCATIONS SUMMARY

Source Description	Source ID	UTM East (m)	UTM North (m)	Emission Rate (lb/hr)	Stack Height (ft)	Stack Temp. (°F)	Exit Velocity (ft/min)	Stack Diameter (ft)
Baghouse #2	BH2	548,359	4,828,446	0.041	30	250	3,569	1.0
Storage Silo Baghouse	C1A	548,392	4,828,437	0.015	18	68	3,616	0.5
BA Baghouse	C3	548,400	4,828,399	0.260	21.69	68	6,872	1.5
HDPE Silo Bin Vent #1	C7	548,423	4,828,383	0.034	54	68	5,987	0.6
Finishing Line Baghouse #1	C12	548,396	4,828,290	0.257	37.83	68	2,897	1.7
Finishing Line Baghouse #2	C13	548,396	4,828,295	0.271	39.75	68	3,050	1.7
Dryer Baghouse #1	C15	548,420	4,828,376	0.394	50	200	2,238	2.7
Dryer Baghouse #2	C16	548,420	4,828,364	0.394	50	200	2,238	2.7
Wood Handling Baghouse #1	C17	548,412	4,828,436	0.867	37	68	4,482	2.5
Wood Handling Baghouse #2	C18	548,420	4,828,435	0.394	36.83	68	2,037	2.5
Finishing Line Baghouse #4	C21	548,396	4,828,298	0.251	37.83	68	2,820	1.7
Sifter Baghouse	C22	548,400	4,828,403	0.478	40	68	2,609	2.3
Dry Wood Day Bin Filter #1	C23	548,426	4,828,368	0.020	16	68	3,424	0.6
Dry Wood Day Bin Filter #2	C24	548,431	4,828,368	0.020	16	68	3,424	0.6

Table 5.3 PM₁₀ MODELING SUMMARY

Year	February 2004 Modeling		April 2005 Revised Modeling	
	Annual Average (µg/m ³)	24-Hour Average (µg/m ³)	Annual Average ^c (µg/m ³)	24-Hour Average ^d (µg/m ³)
Maximum Concentration	13.14	34.53	9.95	26.13
Background Concentration ^a	25.1	90	25.1	90
Total Concentration	38.2	124.5	35.1	116.1
NAAQS ^b	50	150	50	150
Exceeds NAAQS?	No	No	No	No

^a The background concentrations were provided in September 22, 2003 electronic correspondence from Mary Anderson, IDEQ, to Kristine Lawrie, Trinity Consultants.

^b Primary NAAQS.

^c The maximum concentration for the annual averaging period is the high over all five years modeled.

^d The maximum concentration for the 24-hour averaging period is the sixth high over all five years modeled.

5.4 Regulatory Review

This section describes the regulatory analysis of the applicable air quality rules with respect to this PTC.

IDAPA 58.01.01.209.04 Revisions to Permits to Construct

This rule establishes the requirements for permit revisions. Because emissions are not increasing, a public comment period is not required.

5.5 Permit Conditions Review

This section describes only those permit conditions that have been revised, modified or deleted as a result of this permit action. All other permit conditions remain unchanged.

Permit Sections 1 through 3 have been renumbered as Permit Sections 2 through 4. Existing Permit Section 4 has been deleted, as the Re grind System no longer vents to the outside air.

The following permit condition has been revised to reflect the only one reference to PM:

Existing Permit Condition 1.2 has been revised to remove the phrase “particulate matter” and renumbered to Permit Condition 2.2

The Permit Conditions 2.1 through 2.3 have been revised to reflect the “Sifter Baghouse” instead of the “Wood Handling Baghouse #3”.

Existing Table 1.2 of Permit Condition 1.3 has been renumbered to Table 2.2 of Permit Condition 2.3. Table 1.3 has been changed to the following:

Table 2.2 WOOD HANDLING BAGHOUSE NOS. 1 AND 2, AND THE SIFTER BAGHOUSE EMISSIONS LIMITS*

Source Description	PM ₁₀	
	lb/hr	T/yr
Wood Handling Baghouse #1 (C17)	0.87	3.80
Wood Handling Baghouse #2 (C18)	0.39	1.73
Sifter Baghouse (C22)	0.24	2.09

*The permittee shall not exceed the T/yr listed based on any consecutive 12-month period.

Existing Table 3.2 of Permit Condition 3.3 has been renumbered to Table 4.2 of Permit Condition 4.3 and revised as follows:

Table 3.2 FINISHING LINE BAGHOUSE NOS. 1, 2, AND 4 EMISSIONS RATE LIMITS

Source Description	PM ₁₀	
	lb/hr	T/yr
Finishing Line Baghouse #1 (C12)	0.27	1.16
Finishing Line Baghouse #2 (C13)	0.27	1.16
Finishing Line Baghouse #4 (C21)	0.27	1.16

*The permittee shall not exceed the T/yr listed based on any consecutive 12-month period

Permit Conditions 5.2 through 5.7 have been revised to state “HDPE Silo Bin Vent #1” instead of the “HDPE Silo Bin Vent #4”.

Existing Permit Condition 5.2 has been revised to state the following:

“HDPE storage silo is the emissions source, and the existing bin vent is the emissions point.”

Existing Table 5.1 of Permit Condition 5.2 references emission point HDPE Silo Bin Vent #4 and emission pint unit ID C19. Revised Table 5.1 of Permit Condition 5.2 references emission point HDPE Silo Bin Vent #1 and emission pint unit ID C7.

Existing Permit Condition 5.3 has been revised to the following:

The PM₁₀ emissions from the HDPE Silo Bin Vent #1 stack, Dry Wood Day Bin vent #1 stack, and Dry Wood Day Bin vent #2 stack shall not exceed any corresponding emissions rate limits listed in Table 5.2.

Table 5.2 HDPE SILO BIN VENT #1 AND DRY WOOD DAY BIN VENT NOS. 1 AND 2 EMISSIONS RATE LIMITS

Source Description	PM ₁₀	
	lb/hr	T/yr
HDPE Silo Bin Vent #1 (C7)	0.034	0.150
Dry Wood Day Bin vent #1 (C23)	0.020	0.086
Dry Wood Day Bin vent #2 (C24)	0.020	0.086

Existing Permit Conditions 5.4 through 5.7 have been revised to reference HDPE Silo Bin Vent #1 instead of HDPE Silo Bin #4. Section 6 of the

6. PERMIT FEES

A PTC processing fee of \$250.00 is due because the project involved minimal engineering.

7. PERMIT REVIEW

7.1 Regional Review of Draft Permit

A draft copy of the permit was provided to DEQ's Boise Regional Office on December 6, 2005. Comments were received, but were beyond the scope of the application and not incorporated.

7.2 Facility Review of Draft Permit

A draft copy of the permit was provided to the facility on December 6, 2005. No comments were submitted.

7.3 Public Comment

An opportunity for public comment period on the PTC application was not provided, in accordance with IDAPA 58.01.01.209.04, because this permitting action involves a revision which does not result in an increase in emission.

8. RECOMMENDATION

Based on review of application materials, and all applicable state and federal rules and regulations, staff recommends that Louisiana-Pacific Corporation of Meridian, Idaho be issued a final PTC No. P-050039. No public comment period is recommended, no entity has requested a comment period, and the project does not involve PSD requirements.

AC/sd Permit No. P-050039

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Appendix A

AIRS Information

P-050039

AIRS/AFS^a FACILITY-WIDE CLASSIFICATION^b DATA ENTRY FORM

Facility Name: Louisiana-Pacific Corporation
 LP Building Specialty Products Group

Facility Location: Meridian

AIRS Number: 001-00115

AIR PROGRAM POLLUTANT	SIP	PSD	NSPS (Part 60)	NESHAP (Part 61)	MACT (Part 63)	SM80	TITLE V	AREA CLASSIFICATION A-Attainment U-Unclassified N- Nonattainment
SO ₂	B							
NO _x	B							
CO	B							
PM ₁₀	B							
PT (Particulate)	B							
VOC	B							
THAP (Total HAPs)	B							
			APPLICABLE SUBPART					

^a Aerometric Information Retrieval System (AIRS) Facility Subsystem (AFS)

^b AIRS/AFS Classification Codes:

- A = Actual or potential emissions of a pollutant are above the applicable major source threshold. For HAPs only, class "A" is applied to each pollutant which is at or above the 10 T/yr threshold, or each pollutant that is below the 10 T/yr threshold, but contributes to a plant total in excess of 25 T/yr of all HAPs.
- SM = Potential emissions fall below applicable major source thresholds if and only if the source complies with federally enforceable regulations or limitations.
- B = Actual and potential emissions below all applicable major source thresholds.
- C = Class is unknown.
- ND = Major source thresholds are not defined (e.g., radionuclides).