

STATE OF MISSOURI



DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: **032016-008** Project Number: 2016-01-041  
Installation Number: 031-0053

Parent Company: The Procter & Gamble Company

Parent Company Address: 6090 Center Hill Avenue, Cincinnati, OH 45224

Installation Name: The Procter & Gamble Paper Products Company

Installation Address: 14484 State Highway 177, Jackson, MO 63755

Location Information: Cape Girardeau County, S4 & S5, T32N, R14E

Application for Authority to Construct was made for:

Increased material throughput on Lines 52 - 54, 58 - 59, 62 - 65, and 68. This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required.*

Standard Conditions (on reverse) are applicable to this permit.

Standard Conditions (on reverse) and Special Conditions are applicable to this permit.

*Alana L. Hess*

Prepared by  
Alana Hess  
New Source Review Unit

*Kyra L. Moore*

Director or Designee  
Department of Natural Resources

MAR 29 2016

Effective Date

## STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. The permittee should notify the Enforcement and Compliance Section of the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Enforcement and Compliance Section of the Department's Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). The information must be made available within 30 days of actual startup. Also, you must notify the Department's Southeast Regional Office within 15 days after the actual start up of this (these) air contaminant source(s).

A copy of the permit application and this permit and permit review shall be kept at the installation address and shall be made available to Department's personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant source(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit using the contact information below.

Contact Information:  
Missouri Department of Natural Resources  
Air Pollution Control Program  
P.O. Box 176  
Jefferson City, MO 65102-0176  
(573) 751-4817

The regional office information can be found at the following website:  
<http://dnr.mo.gov/regions/>

**SPECIAL CONDITIONS:**

The permittee is authorized to construct and operate subject to the following special conditions:

*The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060(12)(A)10. "Conditions required by permitting authority."*

The Procter & Gamble Paper Products Company  
Cape Girardeau County, S4 & S5, T32N, R14E

1. Superseding Condition
  - A. The conditions of this permit supersede the following special conditions found in construction permits previously issued by the Air Pollution Control Program:
    - 1) Special Condition 1 of Construction Permit 122015-014.
    - 2) All special conditions of Construction Permit 112004-010.
    - 3) All special conditions of Construction Permit 042002-003.
2. Control Device Requirement - Baghouses
  - A. The Procter & Gamble Paper Products Company shall control particulate emissions from 02A Lines 52, 53, 54, and 55 using baghouses as specified in the permit application.
  - B. The baghouses shall be operated and maintained in accordance with the manufacturer's specifications. The baghouses shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. These gauges or meters shall be located such that Department of Natural Resources' employees may easily observe them.
  - C. Replacement filters for the baghouses shall be kept on hand at all times. The bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).
  - D. The Procter & Gamble Paper Products Company shall monitor and record the operating pressure drop across the baghouses at least once every 24 hours while the emission sources are in operation. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.
  - E. The Procter & Gamble Paper Products Company shall maintain a copy of the baghouse manufacturer's performance warranty on site.
  - F. The Procter & Gamble Paper Products Company shall maintain an operating and maintenance log for the baghouses which shall include the

**SPECIAL CONDITIONS:**

The permittee is authorized to construct and operate subject to the following special conditions:

following:

- 1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
- 2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

3. Control Device Requirement – High-Efficiency Baghouses

A. The Procter & Gamble Paper Products Company shall control particulate emissions from the following emission sources using high-efficiency baghouses as specified in the permit application:

<b>Emission Point</b>	<b>Description</b>
15A	D Mod CVC (Lines 62, 63, 64, 65, and 67 - 69)
18A	A & B Mod CVCs (Lines 52 - 55, and 58 - 61)
35A	AGM (Lines 62, 63, 65, and 68)
36A	AGM (Lines 52, 66, 67, and 69)
37A	AGM (Lines 53, 54, 55, and 64)
38A	AGM (Lines 58, 59, 60, and 61)
43A	Building 11 (Lines 52 through 55 and Lines 58 through 69)

- B. The high-efficiency baghouses shall be operated and maintained in accordance with the manufacturer's specifications. The high-efficiency baghouses shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. These gauges or meters shall be located such that Department of Natural Resources' employees may easily observe them.
- C. Replacement filters for the high-efficiency baghouses shall be kept on hand at all times. The bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).
- D. The Procter & Gamble Paper Products Company shall monitor and record the operating pressure drop across the high-efficiency baghouses at least once every 24 hours while the emission sources are in operation. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.
- E. The Procter & Gamble Paper Products Company shall maintain a copy of the baghouse manufacturer's performance warranty on site.
- F. The Procter & Gamble Paper Products Company shall maintain an operating and maintenance log for the high-efficiency baghouses which shall include the following:

**SPECIAL CONDITIONS:**

The permittee is authorized to construct and operate subject to the following special conditions:

- 1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
  - 2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.
4. **Record Keeping and Reporting Requirements**  
The Procter & Gamble Paper Products Company shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE  
SECTION (5) REVIEW

Project Number: 2016-01-041  
Installation ID Number: 031-0053  
Permit Number:

Installation Address:

The Procter & Gamble Paper Products Company  
14484 State Highway 177  
Jackson, MO 63755

Parent Company:

The Procter & Gamble Company  
6090 Center Hill Avenue  
Cincinnati, OH 45224

Cape Girardeau County, S4 & S5, T32N, R14E

REVIEW SUMMARY

- The Procter & Gamble Paper Products Company has applied for authority to increase material throughput on Lines 52 – 54, 58 – 59, 62 – 65, and 68.
- The application was deemed complete on March 11, 2016.
- HAP emissions are not expected from the proposed equipment.
- None of the regulations currently promulgated at 40 CFR Parts 60, 61, and 63 apply to the proposed equipment.
- Baghouses and high-efficiency baghouses are being used to control particulate emissions from the proposed equipment.
- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060 *Construction Permits Required*. Potential emissions of all pollutants are below de minimis levels; however, a permit was required as project PM<sub>10</sub> emissions exceed the insignificant emission exemption level in 10 CSR 10-6.061(3)(A)3.A.
- This installation is located in Cape Girardeau County, an attainment area for all criteria pollutants.
- This installation is not on the List of Named Installations found in 10 CSR 10-6.020(3)(B), Table 2. The installation's major source level is 250 tons per year and fugitive emissions are not counted toward major source applicability.
- Ambient air quality modeling was not performed since potential emissions of the application are below de minimis levels.
- Emissions testing is not required for the equipment.
- The Procter & Gamble Paper Products Company shall submit any revisions

necessary to incorporate the increased material throughput of these emission sources into their Part 70 operating permit renewal application, Project 2015-10-032, no later than 90 days after the issuance of this permit.

- Approval of this permit is recommended with special conditions.

## INSTALLATION DESCRIPTION

The Procter & Gamble Paper Products Company operates a sanitary disposable paper products manufacturing facility in Jackson, Missouri. This installation is an existing major source for both construction permits and operating permits. The installation currently operates under Part 70 operating permit OP2011-013 which expires April 20, 2016. A Part 70 operating permit renewal application, Project 2015-10-032, was received by the Air Pollution Control Program on October 16, 2015 and is under review.

The following construction permits have been issued to The Procter & Gamble Paper Products Company by the Air Pollution Control Program:

**Table 1: Permit History**

Permit Number	Description
0881-002A	Diaper production equipment
0585-003	Processes D and E, converting process
0785-003	Process F
0487-010	Modification of Processes C and E
1292-017	Delivery system for raw materials
0695-021	Increase in capacity of Process B
0198-037	PSD papermaking process
1198-023	Temporary boiler
0999-020	Diaper production lines
032002-009	Diesel generators and pumps
042002-003	Diaper lines
102002-019	Bleach usage
032003-041	A Section (8) modification of Permit Number 0198-037 and installation of two new air handling units, an emergency generator, and four natural gas-fired space heaters
112004-010	Addition of four new diaper lines and one absorbent delivery system
052006-004	Construction of three new diaper lines
052007-011	Modification of paper machines 5G, 6G, and 7G
032003-041B	Removal of RATA and PEMS for CO for boilers 3, 4, and 5
032008-008	Construction of one new diaper line
072008-012	Modification of eight diaper lines
052007-011A	Scrubber special conditions
032003-041C	Alternate operating scenarios
092012-006	Installation of Operations 8 and 9
092015-002	Installation of Lines 51 and 57
122015-004	Installation of Line 56

## PROJECT DESCRIPTION

The Procter & Gamble Paper Products Company has applied for authority to increase material throughput on Lines 52 – 54, 58 – 59, 62 – 65, and 68. The Procter & Gamble

Paper Products Company has requested that the following project information remain confidential (see confidential file 2016-10-042):

- ◆ Diaper pad formula including total pad weight and the weight of pad constituents;
- ◆ Process flow diagrams;
- ◆ Line throughput information;
- ◆ Control device efficiency information;
- ◆ Unit-specific maximum hourly design rates and emission factors; and
- ◆ Ink and solvent formulas and SDS.

The increased material throughput of Lines 52 – 54, 58 – 59, 62 – 65, and 68 will not require any new equipment but is necessary due to a change in diaper pad formula. The emission sources associated with the project are:

**Table 2: Project Equipment List**

<b>Emission Source</b>	<b>Description</b>	<b>Project Status</b>	<b>Control Equipment</b>
02A	Lines 52, 53, and 54	Modified	Baghouse
	Line 55	Unaffected	Baghouse
15A	D Mod CVC (Lines 62 – 65, and 68)	Modified	High efficiency baghouse
	D Mod CVC (Lines 67 and 69)	Unaffected	
18A	A & B Mod CVCs (Lines 52 – 54, 58, and 59)	Modified	High efficiency baghouse
	A & B Mod CVCs (Lines 55, 60, and 61)	Unaffected	
35A	AGM (Lines 62, 63, 65, and 68)	Modified	High efficiency baghouse
36A	AGM (Line 52)	Modified	High efficiency baghouse
	AGM (Lines 66, 67, and 69)	Unaffected	
37A	AGM (Lines 53, 54, and 64)	Modified	High efficiency baghouse
	AGM (Line 55)	Unaffected	
38A	AGM (Lines 58 and 59)	Modified	High efficiency baghouse
	AGM (Lines 60 and 61)	Unaffected	
43A	Building 11 Central Dust Receiver (Lines 52 – 55 and 58 – 69)	Modified	High efficiency baghouse
Fugitive	Paved Haul Road	Modified	None

Although the timing of the increased material throughput for Lines 52 – 54, 58 – 59, 62 – 65, and 68 and the installation of Lines 51, 56, and 57 is close enough to question whether the projects are separate, the Procter & Gamble Paper Products Company has stated that the increased material throughput for Lines 52 – 54, 58 – 59, 62 – 65, and 68 and the installation of Lines 51, 56, and 57 meet separate production goals, are not part of the same capital investment, and are managed separately; therefore, the Missouri Air Pollution Control has decided to issue separate permits for the increased material throughput for Lines 52 – 54, 58 – 59, 62 – 65, and 68 (this permit), and the installation of Lines 51 and 57 (Permit 092015-002) and Line 56 (Permit 122015-004).

#### EMISSIONS/CONTROLS EVALUATION

Particulate emission factors previously used by the other diaper lines at the installation were submitted as part of the application’s emissions calculations for 02A, 15A, 18A, 35A, 36A, 37A, 38A, and 43A. Stack testing conducted in October 2008 and June 2010

demonstrates that the emission factors are conservative and appropriate for calculating emissions from 18A, 43A, and the FSC portion of 02A. The emission factors for AGM and CSX have not been verified by stack testing at this installation, but are considered sufficient to estimate project emissions.

As this project involves the modification of existing equipment, project emissions should be determined using an actuals-to-projected-actuals or an actuals-to-potentials calculation; however, as the potential to emit of the modified equipment is below the de minimis levels it was deemed unnecessary to calculate baseline actuals. If in the future the installation needs to more accurately determine project emissions, they can submit an actuals-to-projected-actuals or an actuals-to-potentials analysis.

Emissions from the 1.0 mile paved haul road were calculated using Equation 2 from the EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Section 13.2.1 “Paved Haul Roads” (January 2011), a silt loading of 2 g/m<sup>2</sup>, a mean vehicle weight of 20 tons, and 105 days per year with at least 0.01” of precipitation.

The following table provides an emissions summary for this project. Existing potential emissions were taken from Construction Permit 122015-004. Existing actual emissions were taken from the installation’s 2014 EIQ. Potential emissions of the application represent the potential to emit of the modified equipment, assuming continuous operation (8,760 hours per year).

**Table 3: Emissions Summary (tons per year)**

Pollutant	Regulatory De Minimis Levels	Existing Potential Emissions	Existing Actual Emissions (2014 EIQ)	Potential Emissions of the Application
PM	25.0	N/D	N/A	10.67
PM <sub>10</sub>	15.0	469.3	48.18	8.65
PM <sub>2.5</sub>	10.0	88.32	14.53	8.30
SO <sub>x</sub>	40.0	92.92	0.74	N/A
NO <sub>x</sub>	40.0	446.88	94.75	N/A
VOC	40.0	770.43	192.56	N/A
CO	100.0	819.00	100.95	N/A
HAPs	10.0/25.0	<10.0/25.0	4.53/4.69	N/A

N/A = Not Applicable; N/D = Not Determined

### PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060 *Construction Permits Required*. Potential emissions of all pollutants are below de minimis levels; however, a permit was required as project PM<sub>10</sub> emissions exceed the insignificant emission exemption level in 10 CSR 10-6.061(3)(A)3.A.

### APPLICABLE REQUIREMENTS

The Procter & Gamble Paper Products Company shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the

application, has been verified at the time this application was approved. For a complete list of applicable requirements for your installation, please consult your operating permit.

#### GENERAL REQUIREMENTS

- 10 CSR 10-6.065 *Operating Permits*
- 10 CSR 10-6.110 *Submission of Emission Data, Emission Fees and Process Information*
- 10 CSR 10-6.165 *Restriction of Emission of Odors*
- 10 CSR 10-6.170 *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*
- 10 CSR 10-6.220 *Restriction of Emission of Visible Air Contaminants*

#### SPECIFIC REQUIREMENTS

- 10 CSR 10-6.400 *Restriction of Emission of Particulate Matter From Industrial Processes* will not apply to the modified emission sources, per 10 CSR 10-6.400(1)(B)15, as each emission source is required to operate a particulate matter control device that controls at least 90% of the particulate matter emissions.

#### STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060 *Construction Permits Required*, it is recommended that this permit be granted with special conditions.

#### PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated November 15, 2015, received January 22, 2016, designating The Procter & Gamble Company as the owner and operator of the installation.

## APPENDIX A

### Abbreviations and Acronyms

<b>%</b> .....	percent	<b>m/s</b> .....	meters per second
<b>°F</b> .....	degrees Fahrenheit	<b>Mgal</b> .....	1,000 gallons
<b>acfm</b> .....	actual cubic feet per minute	<b>MW</b> .....	megawatt
<b>BACT</b> .....	Best Available Control Technology	<b>MHDR</b> .....	maximum hourly design rate
<b>BMPs</b> .....	Best Management Practices	<b>MMBtu</b> ....	Million British thermal units
<b>Btu</b> .....	British thermal unit	<b>MMCF</b> .....	million cubic feet
<b>CAM</b> .....	Compliance Assurance Monitoring	<b>MSDS</b> .....	Material Safety Data Sheet
<b>CAS</b> .....	Chemical Abstracts Service	<b>NAAQS</b> ...	National Ambient Air Quality Standards
<b>CEMS</b> .....	Continuous Emission Monitor System	<b>NESHAPs</b>	National Emissions Standards for Hazardous Air Pollutants
<b>CFR</b> .....	Code of Federal Regulations	<b>NO<sub>x</sub></b> .....	nitrogen oxides
<b>CO</b> .....	carbon monoxide	<b>NSPS</b> .....	New Source Performance Standards
<b>CO<sub>2</sub></b> .....	carbon dioxide	<b>NSR</b> .....	New Source Review
<b>CO<sub>2e</sub></b> .....	carbon dioxide equivalent	<b>PM</b> .....	particulate matter
<b>COMS</b> .....	Continuous Opacity Monitoring System	<b>PM<sub>2.5</sub></b> .....	particulate matter less than 2.5 microns in aerodynamic diameter
<b>CSR</b> .....	Code of State Regulations	<b>PM<sub>10</sub></b> .....	particulate matter less than 10 microns in aerodynamic diameter
<b>dscf</b> .....	dry standard cubic feet	<b>ppm</b> .....	parts per million
<b>EQ</b> .....	Emission Inventory Questionnaire	<b>PSD</b> .....	Prevention of Significant Deterioration
<b>EP</b> .....	Emission Point	<b>PTE</b> .....	potential to emit
<b>EPA</b> .....	Environmental Protection Agency	<b>RACT</b> .....	Reasonable Available Control Technology
<b>EU</b> .....	Emission Unit	<b>RAL</b> .....	Risk Assessment Level
<b>fps</b> .....	feet per second	<b>SCC</b> .....	Source Classification Code
<b>ft</b> .....	feet	<b>scfm</b> .....	standard cubic feet per minute
<b>GACT</b> .....	Generally Available Control Technology	<b>SDS</b> .....	Safety Data Sheet
<b>GHG</b> .....	Greenhouse Gas	<b>SIC</b> .....	Standard Industrial Classification
<b>gpm</b> .....	gallons per minute	<b>SIP</b> .....	State Implementation Plan
<b>gr</b> .....	grains	<b>SMAL</b> .....	Screening Model Action Levels
<b>GWP</b> .....	Global Warming Potential	<b>SO<sub>x</sub></b> .....	sulfur oxides
<b>HAP</b> .....	Hazardous Air Pollutant	<b>SO<sub>2</sub></b> .....	sulfur dioxide
<b>hr</b> .....	hour	<b>tph</b> .....	tons per hour
<b>hp</b> .....	horsepower	<b>tpy</b> .....	tons per year
<b>lb</b> .....	pound	<b>VMT</b> .....	vehicle miles traveled
<b>lbs/hr</b> .....	pounds per hour	<b>VOC</b> .....	Volatile Organic Compound
<b>MACT</b> .....	Maximum Achievable Control Technology		
<b>µg/m<sup>3</sup></b> .....	micrograms per cubic meter		

Mr. Arthur Meng  
Plant Manager  
The Procter & Gamble Paper Products Company  
14484 State Highway 177  
Jackson, MO 63755

RE: New Source Review Permit - Project Number: 2016-01-041

Dear Mr. Meng:

Enclosed with this letter is your permit to construct. Please study it carefully and refer to Appendix A for a list of common abbreviations and acronyms used in the permit. Also, note the special conditions on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files. Operation in accordance with these conditions, your new source review permit application, and revision of your operating permit renewal application is necessary for continued compliance. The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

This permit may include requirements with which you may not be familiar. If you would like the department to meet with you to discuss how to understand and satisfy the requirements contained in this permit, an appointment referred to as a Compliance Assistance Visit (CAV) can be set up with you. To request a CAV, please contact your local regional office or fill out an online request. The regional office contact information can be found at the following website: <http://dnr.mo.gov/regions/>. The online CAV request can be found at <http://dnr.mo.gov/cav/compliance.htm>.

If you were adversely affected by this permit decision, you may be entitled to pursue an appeal before the administrative hearing commission pursuant to Sections 621.250 and 643.075.6 RSMo. To appeal, you must file a petition with the administrative hearing commission within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the administrative hearing commission, whose contact information is: Administrative Hearing Commission, United States Post Office Building, 131 West High Street, Third Floor, P.O. Box 1557, Jefferson City, Missouri 65102, phone: 573-751-2422, fax: 573-751-5018, website: [www.oa.mo.gov/ahc](http://www.oa.mo.gov/ahc).

If you have any questions regarding this permit, please do not hesitate to contact Alana Hess, at the Department of Natural Resources' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Susan Heckenkamp  
New Source Review Unit Chief

SH:ah

Enclosures

c: Southeast Regional Office  
PAMS File: 2016-01-041

Permit Number: