

STATE OF MISSOURI



PERMIT BOOK

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: 092015-002

Project Number: 2015-05-085
Installation Number: 031-0053

Parent Company: The Procter & Gamble Company

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

Installation Name: The Procter & Gamble Paper Products Company

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

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

Application for Authority to Construct was made for:
The installation of two new diaper lines – Lines 51 and 57. 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

SEP 03 2015

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 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 Department's Air Pollution Control Program of the anticipated date of start up of these air contaminant sources. The information must be made available within 30 days of actual startup. Also, you must notify the Department of Natural Resources' Southeast Regional Office within 15 days after the actual start up of these air contaminant sources.

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' 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 sources(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 at (573) 751-4817. If you prefer to write, please address your correspondence to the Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention: Construction Permit Unit.

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. Control Device Requirement – Baghouses
 - A. The Procter & Gamble Paper Products Company shall control emissions from 44A Lines 51 & 57 AGM, 18A Process B Dust Control – A & B Module CVC, and 43A Building 11 Central Dust Receiver using high efficiency baghouses as specified in the permit application.
 - B. The baghouses shall be operated and maintained in accordance with the manufacturer's specifications. Each baghouse 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 high efficiency filters 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 of operation of the emission sources. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance specifications.
 - E. The Procter & Gamble Paper Products Company shall maintain a copy of the baghouse manufacturer's performance specifications on site.
 - F. The Procter & Gamble Paper Products Company shall maintain an operating and maintenance log for the baghouses which shall include the 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.

SPECIAL CONDITIONS:

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

2. **Control Device Requirement –Drum Filters**
 - A. The Procter & Gamble Paper Products Company shall control emissions from 45A Line 51 CSX and FSC and 46A Line 57 CSX and FSC using high efficiency drum filters as specified in the permit application.
 - B. The drum filters shall be operated and maintained in accordance with the manufacturer's specifications. Each drum filter 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 shall be kept on hand at all times. The filters 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 drum filters at least once every 24 hours of operation of the emission sources. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance specifications.
 - E. The Procter & Gamble Paper Products Company shall maintain a copy of the drum filter manufacturer's performance specifications on site.
 - F. The Procter & Gamble Paper Products Company shall maintain an operating and maintenance log for the drum filters which shall include the 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. **Operational Requirement - Solvent/Inks/Perfumes**

The Procter & Gamble Paper Products Company shall keep all solvents, inks, and perfumes in sealed containers whenever the materials are not in use. The Procter & Gamble Paper Products Company shall provide and maintain suitable, easily read, permanent markings on all solvents, inks, and perfumes used by Lines 51 and 57.
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. These records shall include SDS for all materials used.

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

Project Number: 2015-05-085
Installation ID Number: 031-0053
Permit Number:

Installation Address:

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

Parent Company:

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

Cape Girardeau County, S4 & S5, T32N, R14E

REVIEW SUMMARY

- The Procter & Gamble Paper Products Company has applied for authority to install two new diaper lines – Lines 51 and 57.
- The application was deemed complete on August 6, 2015.
- 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 drum filters 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 to institute federally enforceable control device requirements on the new diaper lines.
- 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 is required to include the new emission sources in their Part 70 Renewal application due by no later than October 20, 2015.
- 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.

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

PROJECT DESCRIPTION

The Procter & Gamble Paper Products Company has applied for authority to install two new diaper lines – Lines 51 and 57. The Procter & Gamble Paper Products Company has requested that the following project information remain confidential (see confidential file 2015-05-086):

- ♦ 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 new diaper lines will be similar in nature to other diaper lines already permitted at the installation, but with a slightly different diaper pad formula. The emission sources associated with the new diaper lines are:

Table 2: Project Equipment List

Emission Source	Description	Project Status	Control Equipment
44A	Lines 51 & 57 AGM	New	High efficiency baghouse
45A	Line 57 CSX & FSC		High efficiency drum filter
46A	Line 51 CSX & FSC		High efficiency drum filter
18A	Process B Dust Control - A & B Mod CVC	Modified	High efficiency baghouse
43A	Building 11 Central Dust Receiver		High efficiency baghouse
Fugitive	Paved Haul Road		None
Fugitive	Packaging Solvent		None
Fugitive	Packaging Ink		None

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 18A, 43A, 44A, 45A, and 46A. 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 portions of 45A and 46A. The emission factors for 44A and the CSX portions of 45A and 46A have not been verified by stack testing at this installation. Although there is a possibility that differences in diaper pad formula may result in an increase to the appropriate emission factor for 44A and the CSX portions of 45A and 46A, no stack testing is required by this permit as the emission factors would have to be more than six times higher than those currently employed before this project would exceed the de minimis levels. As it is highly unlikely that the differences in diaper pad formula would result in six times the emissions, the existing emission factors were considered sufficient to estimate project emissions.

VOC emissions from the new diaper lines were calculated using a mass balance approach. The VOC content of the materials was obtained from SDS supplied by the installation. The SDS indicate that these materials do not contain any HAP.

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/m², 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 092012-006. Existing actual emissions were taken from the installation’s 2014 EIQ. Potential emissions of the application represent the potential to emit of the new equipment and the potential emissions increase from 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	3.89
PM ₁₀	15.0	464.20	48.18	3.20
PM _{2.5}	10.0	83.45	14.53	3.09
SO _x	40.0	92.92	0.74	N/A
NO _x	40.0	446.88	94.75	N/A
VOC	40.0	763.66	192.56	3.50
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 to institute federally enforceable control device requirements on the new diaper lines.

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 new or 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 May 22, 2015, received May 29, 2015, revised July 29, 2015 designating The Procter & Gamble Company as the owner and operator of the installation.

APPENDIX A

Abbreviations and Acronyms

%	percent	m/s	meters per second
°F	degrees Fahrenheit	Mgal	1,000 gallons
acfm	actual cubic feet per minute	MW	megawatt
BACT	Best Available Control Technology	MHDR	maximum hourly design rate
BMPs	Best Management Practices	MMBtu	Million British thermal units
Btu	British thermal unit	MMCF	million cubic feet
CAM	Compliance Assurance Monitoring	MSDS	Material Safety Data Sheet
CAS	Chemical Abstracts Service	NAAQS ...	National Ambient Air Quality Standards
CEMS	Continuous Emission Monitor System	NESHAPs	National Emissions Standards for Hazardous Air Pollutants
CFR	Code of Federal Regulations	NO_x	nitrogen oxides
CO	carbon monoxide	NSPS	New Source Performance Standards
CO₂	carbon dioxide	NSR	New Source Review
CO_{2e}	carbon dioxide equivalent	PM	particulate matter
COMS	Continuous Opacity Monitoring System	PM_{2.5}	particulate matter less than 2.5 microns in aerodynamic diameter
CSR	Code of State Regulations	PM₁₀	particulate matter less than 10 microns in aerodynamic diameter
dscf	dry standard cubic feet	ppm	parts per million
EQ	Emission Inventory Questionnaire	PSD	Prevention of Significant Deterioration
EP	Emission Point	PTE	potential to emit
EPA	Environmental Protection Agency	RACT	Reasonable Available Control Technology
EU	Emission Unit	RAL	Risk Assessment Level
fps	feet per second	SCC	Source Classification Code
ft	feet	scfm	standard cubic feet per minute
GACT	Generally Available Control Technology	SDS	Safety Data Sheet
GHG	Greenhouse Gas	SIC	Standard Industrial Classification
gpm	gallons per minute	SIP	State Implementation Plan
gr	grains	SMAL	Screening Model Action Levels
GWP	Global Warming Potential	SO_x	sulfur oxides
HAP	Hazardous Air Pollutant	SO₂	sulfur dioxide
hr	hour	tph	tons per hour
hp	horsepower	tpy	tons per year
lb	pound	VMT	vehicle miles traveled
lbs/hr	pounds per hour	VOC	Volatile Organic Compound
MACT	Maximum Achievable Control Technology		
µg/m³	micrograms per cubic meter		

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

RE: New Source Review Permit - Project Number: 2015-05-085

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 submittal of an 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.

If you were adversely affected by this permit decision, you may be entitled to pursue an appeal before the administrative hearing commission pursuant to §§621.250 and 643.075.6 RSMo. To appeal, you must file a petition with the administrative hearing commission 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 other method it will be deemed filed on the date it is received by the administrative hearing commission, Administrative Hearing Commission, Truman State Office Building, www.oa.mo.gov/ahc. If you have questions regarding this permit contact Alana Hess, Department of Natural Resources' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Susan Heckenkamp
New Source Review Unit Chief

SH:ahl

Enclosures

c: Southeast Regional Office
PAMS File: 2015-05-085
Permit Number: