



May 19, 2020

Jill Guetersloh  
EHS Manager  
GlaxoSmithKline Consumer Healthcare Holdings (U.S.) LLC  
320 South Broadway  
St. Louis, MO 63102

RE: New Source Review Permit Amendment - Permit Number: 072015-009A  
Project Number: 2019-08-004; Installation Number: 510-1217

Dear Jill Guetersloh:

In a letter dated July 30, 2019, it was stated that the St. Louis facility has installed and equipped in-line broken bag detectors meant to shut-down the equipment in the event particulate matter is detected. The broken bag detectors help ensure that the control devices are operating as required to prevent visible emissions. The installation of the broken bag detectors started in 2016 and was completed on December 19, 2017. Since the completion of the installation of broken bag detectors, no visual observations of particulate have been observed. Therefore, the site would like to propose amending the daily inspection requirements and go to a weekly inspection requirement. This would align with GSK's weekly inspection frequency for operating pressure drop gauges. The revisions to Permit #072015-009 is as follows:

- **Revise** Special Condition 1.D. to update monitoring frequency (See Special Conditions attached with this amendment).
- **Remove** Special Condition 1.G

This installation no longer makes OsCal so EP-08 has been changed from OSCal Filter Receiver to Fines Removal Receiver. EP-16 is currently not in service but will remain on the Emission Point list because it may be used in the future. EP-37 is a new baghouse that will take approximately 50% of the load from EP-20. There is no increase in emissions, just rerouted.

Included in this amendment is an updated Emission Point List that includes all previous Construction Permit Nos. 072015-009 and 012019-004 and no permit required letters (Project 2015-10-009 and 2016-08-009).

Table 1: Emission Point Description

| Emission Point | Point Description                  | Control Device             | GSK Equipment No. |
|----------------|------------------------------------|----------------------------|-------------------|
| EP-01          | Dust Collector No. 1 (Dryer No. 1) | Fabric Filter <sup>a</sup> | 3126              |
| EP-02          | Dust Collector No. 2 (Dryer No. 2) | Fabric Filter <sup>b</sup> | 3144              |
| EP-03          | Calcium Carbonate Receiver         | Fabric Filter <sup>c</sup> | 3055              |
| EP-04          | Sugar Receiver No. 1               | Fabric Filter <sup>c</sup> | 3060              |
| EP-05          | Sugar Receiver No. 2               | Fabric Filter <sup>c</sup> | 3178              |
| EP-06          | Sodium Hex Receiver                | Fabric Filter <sup>c</sup> | 3239              |

|                    |   |   |           |
|--------------------|---|---|-----------|
| EP-07              | Adipic Acid Receivers Nos. 1 & 2                  | Fabric Filter <sup>c</sup>  | 4164/4165 |
| EP-08              | Fines Removal Receiver                            | Fabric Filter <sup>c</sup>  | 3507      |
| EP-09              | Scale Vessel No. 1                                | Fabric Filter <sup>c</sup>  | 3070      |
| EP-10              | Scale Vessel No. 2                                | Fabric Filter <sup>c</sup>  | 3075      |
| EP-11              | Fines Vacumax                                     | Fabric Filter <sup>c</sup>  | 3079      |
| EP-12              | Fines Vacuum Receiver                             | Fabric Filter <sup>c</sup>  | 3200      |
| EP-13              | Coarse Vacuum Receiver                            | Fabric Filter <sup>c</sup>  | 3194      |
| EP-14              | Silos 1, 2 & 3 Vacuum Receivers                   | Fabric Filter <sup>d</sup>  | 3125*     |
| EP-15              | Silos 4, 5 & 6 Vacuum Receivers                   | Fabric Filter <sup>d</sup>  | 3143**    |
| EP-16              | No longer in use but may use in the future        | Fabric Filter <sup>e</sup>  |           |
| EP-17              | Dust Control System No. 1 (2 <sup>nd</sup> floor) | Fabric Filter <sup>f</sup>  | 5287      |
| EP-18              | Dust Control System No. 2 (3 <sup>rd</sup> floor) | Fabric Filter <sup>g</sup>  | 5378      |
| EP-19              | Dust Control System No. 3 (4 <sup>th</sup> floor) | Fabric Filter <sup>h</sup>  | 7088      |
| EP-20              | Dust Control System No. 4 (4 <sup>th</sup> floor) | Fabric Filter <sup>i</sup>  | 7094      |
| EP-21              | Dust Control System No. 5 (4 <sup>th</sup> floor) | Fabric Filter <sup>j</sup>  | 7087      |
| EP-22              | Removed from the facility                         | Fabric Filter <sup>k</sup>  |           |
| EP-23              | Removed from the facility                         | Fabric Filter <sup>k</sup>  |           |
| EP-24              | House Vacuum System No. 3 (2 <sup>nd</sup> floor) | Fabric Filter <sup>k</sup>  | 5738/5742 |
| EP-25              | House Vacuum System No. 4 (3 <sup>rd</sup> floor) | Fabric Filter <sup>e</sup>  | 3637      |
| EP-26              | House Vacuum System No. 5 (4 <sup>th</sup> floor) | Fabric Filter <sup>k</sup>  | 3487      |
| EP-27              | Cooling Tower                                     |   |           |
| EP-28              | Isopropanol (IPA)(70%) Usage                      |   |           |
| EP-29              | Ink and Makeup Solvent Usage                      |   |           |
| EP-30              | CaCO <sub>3</sub> (Smooth Dissolve) Receivers     | Fabric Filter <sup>c</sup>  | 4009/4011 |
| EP-31              | Calcium Unloader Receiver                         | Fabric Filter <sup>c</sup>  | 3681      |
| EP-32              | Sorbitol Receivers                                | Fabric Filter <sup>c</sup>  | 3999/4001 |
| EP-33              | Avicel Receivers                                  | Fabric Filter <sup>c</sup>  | 4156      |
| EP-34 <sup>l</sup> | Dust Control Device (3 <sup>rd</sup> floor)       | Stearate Dust Collector <sup>c</sup>                                    | 4556      |
| EP-35 <sup>m</sup> | Dextrose Line Blower                              | Fabric Filter <sup>c</sup>  | 4730      |
| EP-36 <sup>m</sup> | Dextrose Line Dust Collector Bulk Bag Unloader    | Fabric Filter <sup>c</sup>  | 4726      |
| EP-37 <sup>n</sup> | Pre-Weigh Dust Collector (3 <sup>rd</sup> floor)  | Fabric Filter <sup>e</sup>  | 6314      |
|                    | Mineral Oil Storage Tank No. 1                    | These tanks are not emission units since they contain only mineral oil. |           |
|                    | Mineral Oil Storage Tank No. 2                    |   |           |
|                    | Mineral Oil Storage Tank No. 3                    |   |           |
|                    | Mineral Oil Day Tank                              |   |           |

<sup>a</sup>MAC FRTSPCL fabric filter with broken bag detection. Exhausts to the atmosphere.

<sup>b</sup>MAC fabric filter with broken bag detection. Exhausts to the atmosphere.

<sup>c</sup>Fabric filter with broken bag detection exhausting inside building. Filter is inherent part of pneumatic conveying/storage function of the receiver.

<sup>d</sup>Fabric filters with broken bag detection on each of three receivers, with one blower exhausting inside building. Filters are inherent part of the pneumatic conveying/storage function of the receivers.

<sup>e</sup>Fabric filter with broken bag detection, exhausting to the atmosphere.

<sup>f</sup>Collects from bottle fillers, vibrating feeders with enclosures/hood. Discharges into the building. Fabric filter with broken bag detection

<sup>g</sup>Collects from tablet presses (3<sup>rd</sup> floor), bottle fillers (2<sup>nd</sup> & 3<sup>rd</sup> floor). Discharges into the room. Fabric filter with broken bag detection

<sup>h</sup>Collects from tablet presses (4<sup>th</sup> floor), transfer to conveyor, conveyors. Discharges into HVAC air handling unit.

<sup>i</sup>Collects from tote filling/cleaning (4<sup>th</sup> & 5<sup>th</sup> floors), screener, Discharges into the room. Fabric filter with broken

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bag detection

<sup>j</sup>Collects Korsch tablet presses. Discharges into the room. Fabric filter with broken bag detection

<sup>k</sup>Quick connect vacuum lines at multiple locations for housekeeping. Fabric filter with broken bag detection

<sup>l</sup>EP-34 was added as a "No Permit Required" in Project 2015-10-009. Collects from Calcium Stearate Dumper and discharges inside the building

<sup>m</sup>EP-35 and EP-36 were added in Construction Permit 122019-004. EP-36 collects from the Bulk Bag unloader station and discharges inside the building.

<sup>n</sup>EP-37 is added in this amendment to update equipment list

\*Blower for Vacuum Receivers Nos. 3149, 3152 & 3155.

\*\*Blower for Vacuum Receivers Nos. 3160, 3162 & 3165.

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.ia.mo.gov/ahc](http://www.ia.mo.gov/ahc).

If you have any questions regarding this amendment, please do not hesitate to contact Kathy Kolb, at the department's 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



Kendall B. Hale  
Permits Section Chief

KBH:kka

Enclosures

c: St. Louis Regional Office  
PAMS File: 2019-08-004

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**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 paragraph (3)(E). "Conditions required by permitting authority."*

GlaxoSmithKline Consumer Healthcare Holdings (U.S.) LLC  
St. Louis City County, Land Grant 00363

1. **Superseding Condition**  
The conditions of this permit supersede Special Conditions 1.D. and 1.G. found in the previously issued Construction Permit 072015-009 issued by the Air Pollution Control Program.
2. **Control Device Requirement-Fabric Filter**
  - A. GlaxoSmithKline Consumer Healthcare shall monitor and record the operating pressure drop across the fabric filters at least once every week either manually or electronically in the facility's process system.
  - B. GlaxoSmithKline Consumer Healthcare shall install and operate a broken bag detector on emission points EP-1 through 26 and 33 through 37.
  - C. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance specifications.
  - D. At least weekly at the time of monitoring and recording of the operating pressure drop, a visual inspection will be made logging the date/time and observation. If the visual inspection indicates any visible particulate, then a pressure drop reading will be monitored and logged. Visual inspections will be performed weekly as long as fabric filter broken bag detectors are in proper operating condition and maintained in accordance with the manufacturer instructions.
  - E. In the event that a broken bag detector is not operating properly, GlaxoSmithKline shall conducted daily visual inspections until the broken detector has returned to proper operation.