



# Department of Environmental Protection

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**SEPTEMBER 12, 2024**

## **Response to Comments The Gillette Company, LLC – Andover**

This Response to Comments (RTC) document concerns comments received by the Massachusetts Department of Environmental Protection (MassDEP) regarding the Gillette Company, LLC non-major Comprehensive Plan Application (“Application”) filed pursuant to Regulation 310 CMR 7.02 Plan Approval and Emission Limitations as contained in 310 CMR 7.00 “Air Pollution Control” regulations adopted by MassDEP pursuant to the authority granted by Massachusetts General Laws, Chapter 111, Section 142A-O. The Gillette facility is located at 30 Burt Road in Andover, Massachusetts (the “Facility”).

The Application proposes installation, construction and operation of three new emission units related to blades and razors manufacturing operations. The first new emission unit, Emission Unit (EU) 27 will emit Volatile Organic Compounds (VOC) and Particulate Matter (PM) less than or equal to 2.5 microns in diameter (PM<sub>2.5</sub>) from perforation press lubricating oil that will be used in the operation of three perforation press machines. The second Emission Unit (EU) 28 will emit VOC emissions from isopropanol used in quality assurance/quality control (QA/QC) cleaning of injection molding equipment. The third Emission Unit (EU) 29 will consist of one razor lubricating material extrusion machine, one blade washer, three blade sharpening lines, one blade sharpening oil filtration system, one blade final quality treatment operation 1, and one blade final quality treatment operation 2.

Gillette has also indicated that additional equipment will be installed and operated as part of the proposed project. This additional equipment is exempt from permitting, as such it will not be included as emission units in this plan approval. The proposed exempted equipment includes: eight plastic injection molding units, exempt under 310 CMR 7.02(2)(b)19; one three-cell cooling tower, exempt under 310 CMR 7.02(2)6; and two QA/QC lab hoods, exempt under 310 CMR 7.02(2)(b)16.

Gillette is also proposing to install two diesel fire pumps and one diesel emergency engine which will not be considered emission units as part of this plan application, but will be subject to the Environmental Results Program (ERP) certification under 310 CMR 7.26(42).

All emissions related to these exempt sources as well as any insignificant sources will be included in the Facility-wide emission limits as shown on Table 2 of the Air Quality Plan Approval No. NE-23-016.

On June 5, 2024, MassDEP published a Notice of Public Comment Period on the Executive Office of Energy and Environmental Affairs ePLACE Public Access Portal announcing the opportunity for public comment for the Air Quality Plan Approval No. NE-23-016 proposed to be issued to the Gillette Company, LLC (the Permittee), 30 Burt Road, Andover, Massachusetts for the Application No. 23-AQ02P-0014-APP. The Notice of Public Comment contained information regarding access to the Proposed Approval, the application materials, as well as details regarding the 30-day period for submittal of comments. Comments were submitted by five parties through email and the ePLACE Public Access Portal.

MassDEP personnel have read and considered each comment in its entirety and provides its response in this RTC. MassDEP has generally grouped related comments together for response below. No significance should be given to the format in which MassDEP chose to cite or summarize the original comment or the order in which the responses in this RTC are presented. As described in this RTC, MassDEP did not change any of the provisions of the proposed Air Quality Approval in response to the submitted testimony and written comments.

**Comment 1:**

Comment was made expressing concerns about a possible release of Per- and Polyfluoroalkyl Substances (PFAS) emissions as part of proposed Emission Unit 29 operations related to the “various blade treatments.”

**MassDEP Response:**

The comment is acknowledged. MassDEP greatly appreciates attention to this important matter from several public comments. However, MassDEP would like to clarify that any comments related to PFAS is outside of the scope of this Proposed Plan Application. The Massachusetts Air Pollution Control Regulations, 310 CMR 7.00, do not address any emission requirements concerning PFAS, or Teflon limits in air quality plan approvals.

In its review of the Proposed Plan Application, MassDEP analyzed the Best Available Control Technology (BACT) based on the two air pollutants that are included in this Proposed Plan Approval: Volatile Organic Compounds (VOC) and Particulate Matter (PM). To satisfy the requirements of this Application, Gillette will employ BACT emissions control technology for the VOC and PM emissions. BACT regulations and federal and state guidance on implementing BACT does not require evaluation of any detailed analysis of PFAS or water contaminants. As such, MassDEP has not included any revisions concerning PFAS or included any related water regulations.

**Comment 2:**

Comment was made that cited online articles regarding patents owned by Gillette suggesting that “most razor blades consist of: 1) a metal blade, 2) with a chromium anti-

rust coating, and 3) a top anti-friction coating of polytetrafluoroethylene (PTFE aka Teflon).” “I’ll therefore assume that ‘operation 1’ is applying the chromium coating and ‘operation 2’ is applying the Teflon coating. The comment stated that “given the lack of specific process details for ‘operation 2’, it’s hard to assess the true risk it poses to the surrounding communities. I therefore request that the MassDEP work with Gillette to determine if Teflon is in fact used in the razor blade manufacturing. If it is, then I request that approval of their application be contingent on proper pollution control devices, coupled with recurring PFAS monitoring of the air and surrounding soil and water.”

**MassDEP Response:** The comment is acknowledged. MassDEP greatly appreciates attention to this important matter from public comments. However, MassDEP would like to clarify that any comments related to PFAS is outside of the scope of this Proposed Plan Application. The Massachusetts Air Pollution Control Regulations, 310 CMR 7.00, do not address any emission requirements concerning PFAS, or Teflon limits in air approvals/permits.

In response to submitted public comments on this matter, Gillette states that the PTFE usage in its manufacturing is minimal, i.e., the amount of PTFE used to manufacture one razor blade is so small it would take four million blades to equal the amount of PTFE used in just one coated non-stick pan. Gillette also stated that their plastics injection molding and mold cleaning agents are not formulated with PTFE or PFAS.

Gillette also clarified comments referencing online articles on Gillette patents and stated that “the comments refer to a number of outdated patents to show that our technology could lead to potential risks for emissions. We are no longer using the same technology that were cited in those documents. For example, Gillette does not currently use in Boston, nor does it intend to use in Andover, either nanoparticle fluoropolymers or ionizing radiation as technologies”.

**Comment 3:**

Comment was made requesting more information on PFAS related air emissions: “There appears to be no PFAS air emission limits from the application of this coating? Is that because the PFAS releases are counted as contained in PM<sub>2.5</sub>; the coating does not have emissions or releases; does not contain VOCs, HAPS, or PM<sub>2.5</sub>; or contain any air contaminant with an increase in potential emissions of more than one ton; or contains substances that DEP’s does not have authority to regulate?”

**MassDEP Response:** The comment is acknowledged. MassDEP greatly appreciates attention to this important matter from public comments. However, MassDEP would like to clarify that any comments related to PFAS is outside of the scope of this Proposed Plan Application. The Massachusetts Air Pollution Control Regulations, 310 CMR 7.00, do not address any emission requirements concerning PFAS, or Teflon limits in air approvals/permits.

The Commonwealth of Massachusetts has established water testing requirements for a total of six specific PFAS compounds. The Environmental Protection Agency (EPA) and the Center for Disease Control (CDC) have also identified certain PFAS compounds of concern. None of these federally or state regulated PFAS materials or compounds of concern are being used at the Gillette Andover Facility.

In addition, Gillette also addressed comments suggesting that high heating temperature used in the blades has potential to release PFAS. Gillette commented that the blade temperature and the temperature of materials used in the manufacturing process are tightly controlled and do not approach decomposition temperatures for PTFE.

**Comment 4:**

Comment was made regarding the proposed Emission Unit 28. “Impacts from plastic injection molding (EU28) are limited to the isopropanol used for cleaning the molds. There is no mention of the plastic itself, its additives (such as colorants), or processing aids, which may include PFAS”.

**MassDEP Response:** The comment is acknowledged. MassDEP greatly appreciates attention to this important matter from several public comments. However, MassDEP would like to clarify that any comments related to PFAS is outside of the scope of this Proposed Plan Application. The Massachusetts Air Pollution Control Regulations, 310 CMR 7.00, do not address any emission requirements concerning PFAS, or Teflon limits in air approvals/permits.

Gillette provided comment to address the public comments related to the impact of PFAS in the plastic injection molds. Gillette does use PTFE/Teflon in a highly limited manner in its manufacturing processes. However, PTFE/Teflon is a fluoropolymer that is distinct from other, harmful types of PFAS. Additionally, Gillette has stated that their plastics injection molding and mold cleaning agents are not formulated with PTFE and PFAS.

**Comment 5:**

Comment was made that the proposed approval mentions lubricating oil used in the metal perforation press operation as a generic reference only associated to particulate matter (PM). Therefore, “an inventory of chemicals and materials used in the plan is completely lacking making even a minimal assessment of the project impossible”.

**MassDEP Response:**

The comment is acknowledged. During the technical review, MassDEP evaluated all air pollutants related to the proposed emission units and operations related to this Proposed Plan Application. As described in the Application’s project description, the perforation press lubricating oil used in blade perforation is a light oil with a relatively low vapor pressure which is thinly sprayed onto the metal blade strips within the mechanical metal perforation press. This operation uses filters inherent to the design of the process units and as such have not shown any signs of capturing any oil mist. Emissions from the

perforation press lubricating oil have properties of both an oil mist and a VOC that evaporates. Thus, as a conservative measure in its Application, Gillette proposed the perforation press lubricating oil to be considered both VOC and PM in the form of oil mist. MassDEP has therefore found this information to be descriptive and technically acceptable. MassDEP proposed emission limits to these air pollutants.

**Comment 6:**

Comment was made that “oil mist also has other risks particularly dermal and respiratory exposure for employees. Industrial lubricants also frequently contain PFAS and this should be clarified at Andover.”

**MassDEP Response:**

The comment is acknowledged. MassDEP does not regulate indoor air quality, thus the comment regarding health risks for employees is outside the scope of this Proposed Plan Approval.

**Comment 7:**

Comment was made that the South Boston Gillette Facility “have consistently reported chromium and nickel presumably for the steel alloy of razor blades, which along with any polytetrafluorethylene (PTFE) could be released as particulate during the blade manufacturing process including metal perforation, blade sharpening and other undescribed blade treatments.”

**MassDEP Response:**

The Comment is acknowledged. MassDEP finds this comment to be outside of the scope of this Proposed Plan Approval since it addresses blade manufacturing operations at the South Boston Gillette Facility which are no longer used. This Plan Approval addresses the new perforating press that will be used in blade perforating operations, new quality assurance/quality control cleaning of injection molding equipment, and the various new blade treatment and razors manufacturing operations that are proposed for the Andover Facility. MassDEP has reviewed all the Application materials and determined that the emission limits provided for VOC and PM<sub>2.5</sub> represent BACT for razor blade manufacturing.

**Comment 8:**

Comment was made that “there is also historical evidence of complex chemicals used in blade washing operations and the global warming potential of any of the chemicals used on site is not mentioned in the application.”

**MassDEP Response:**

The comment is acknowledged. MassDEP determined that the Application is in conformance with the Massachusetts Air Pollution Control regulations and current air pollution control engineering practices. The Application was analyzed for Best Available Control Technology (BACT) based on the two air pollutants that are included in this Proposed Plan Approval: Volatile Organic Compounds (VOC) and Particulate Matter (PM). The proposed Air Quality Approval requires that Gillette minimize and mitigate to the extent feasible VOC and PM

emissions. To satisfy the requirements of this Application, Gillette will employ BACT emissions control technology for the Andover Facility.

## **Conclusion**

After review of all the comments received, MassDEP has made the decision to issue the Final Air Quality Plan Approval. MassDEP's decision-making process has benefited from the review of the Public Comments and additional information submitted. It is MassDEP's determination that the Air Quality Plan Approval, as written, adequately addresses all the public comments received and is not in need of modification prior to final issuance.

MassDEP is issuing the Air Quality Plan Approval today, simultaneously with this RTC.

As noted above, the permitting for this matter has been conducted using the ePLACE Public Access Portal. Accordingly, any person may access the Air Quality Plan Approval, the RTC, the Draft Air Quality Plan Approval issued for Public Comment, the Air Quality Plan Approval Application and related documents (including the Public Comments) through the online permitting system. To view the Application and related documents, you may use the publicly accessible online portal:

<https://eeaonline.eea.state.ma.us/EEA/PublicApp>

- on the Main page, click on the orange "Search" button
- enter the "Site Name / Owner" (in this case, "THE GILLETTE COMPANY LLC") and
- click "Search" to access the application list

**Need Help?** For technical assistance in using this web application, please call the ePLACE Help Desk Team at (844) 733-7522 or (844) 73-ePLAC between the hours of 7:30 AM-5:00 PM Monday-Friday, with the exception of all Commonwealth and Federally observed holidays. If you prefer, you can also e-mail us at [ePLACE\\_helpdesk@mass.gov](mailto:ePLACE_helpdesk@mass.gov). For assistance with non-technical questions, please contact MassDEP using the email and phone number below.

The Final Air Quality Plan Approval and RTC are available on MassDEP's website at Executive Office of Energy and Environmental Affairs (EEA) ePLACE Public Access Portal. MassDEP is providing copies (electronic or hard copy) of the Final Air Quality Plan Approval and RTC to everyone who commented on the Draft Air Quality Plan Approval or who requested copies of these documents. Copies of the Final Air Quality Plan Approval also may be obtained by writing or calling MassDEP between the hours of 8:45 AM and 5:00 PM, Monday through Friday, excluding holidays:

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<b>PUBLIC COMMENTS</b>		
<b>NAME</b>	<b>AFFILIATION</b>	<b>RECEIVED</b>
1. David Borrelli	Andover Resident	E-mail
2. Richard Bizzozero	Andover Resident	E-mail
3. Harry Voorhees	Andover Green Advisory Board	E-mail
4. Philip Martin	Andover Resident	E-mail
5. Clint Richmond	Massachusetts Sierra Club	E-mail