UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1201 ELM STREET, SUITE 500
DALLAS, TEXAS 75270

August 5, 2022

Ms. Tonya Baer, Deputy Director
Office of Air
Texas Commission on Environmental Quality (MC 122)
Post Office Box 13087
Austin, Texas 78711-3087

Re: Objection to Title V Permit No. O2771
Building Materials Investment Corporation Asphalt Shingle and Coating Materials Manufacturing – GAF Materials Dallas Plant
Dallas County, Texas

Dear Ms. Baer:

This letter is in response to the Texas Commission on Environmental Quality (TCEQ) submittal containing the proposed renewal of the Title V permit for the Building Materials Investment Corporation (GAF) Asphalt Shingle and Coating Materials Manufacturing facility referenced above. EPA's 45-day review period began on June 28, 2022 and ends on August 12, 2022. We have reviewed the proposed Title V permit action and Statement of Basis. In accordance with 40 CFR § 70.8(c) and 42 U.S.C. § 7661d(b)(1), EPA is objecting to the proposed permitting action. Section 505(b)(1) of the federal Clean Air Act (Act) requires EPA to object to the issuance of a proposed Title V permit during its 45-day review period if EPA determines that the permit is not in compliance with applicable requirements of the Act or requirements under 40 CFR part 70. The Enclosure to this letter provides the specific reasons for each objection and a description of the terms and conditions that the permit must include to respond to the objections.

Section 505(c) of the Act and 40 CFR § 70.8(c)(4) provide that if the permitting authority fails, within 90 days of the date of the objection, to submit a proposed permit revised to address the objections, then EPA will issue or deny the permit in accordance with the requirements of 40 CFR Part 71. Because the State must respond to our objection within 90 days, we suggest that the revised permit be submitted with sufficient advance notice so that any outstanding objection issues may be resolved prior to the expiration of the 90-day period.

We are committed to working with the TCEQ to ensure that the final title V permit is consistent with all applicable title V permitting requirements and the EPA approved Texas Title V air permitting program.

If you have questions or wish to discuss this further, please contact Cynthia Kaleri, Air Permits Section Chief at (214) 665-6772, or Jonathan Ehrhart of her staff at (214) 665-2295. Thank you for your cooperation.

Sincerely,

DZUNG NGO KIDD

Digitally signed by DZUNG NGO KIDD
Date: 2022.08.05 12:58:32 -05'00'

Dzung Kim Ngo Kidd for David Garcia
Director
Air & Radiation Division

cc: Wayne Scott, Building Materials Investment Corporation Plant Site Manager
Mr. Sam Short, Director, Air Permits Division, Texas Commission on Environmental Quality (MC-163)

Enclosure

EPA OBJECTIONS TO
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ)
CLEAN AIR ACT (CAA) TITLE V PERMIT O2771
Building Materials Investment Corporation, GAF Materials (GAF), Dallas Plant

Objection for Failure to Include Adequate Monitoring, Testing, and Recordkeeping to Assure Compliance with lb/hr and TPY limits for GAF's Thermal Oxidizer and Waste Heat Boiler Stacks

The Clean Air Act (CAA) requires that each title V operating permit "sets[s] forth" monitoring sufficient to assure compliance with all applicable requirements. 42 U.S.C § 7661c(c); *see id.* § 7661c(a); 40 C.F.R. § 70.6(a), (a)(3), (c); 30 TAC 122.142(c).[1] As a general matter, permitting authorities must take three steps to satisfy the monitoring requirements in EPA's part 70 regulations.

- First, under 40 C.F.R. § 70.6(a)(3)(i)(A), permitting authorities must ensure that monitoring requirements contained in applicable requirements are properly incorporated into the title V permit.
- Second, if the applicable requirements contain no periodic monitoring, permitting authorities must add periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit. 40 C.F.R. § 70.6(a)(3)(i)(B).
- Third, if there is some periodic monitoring in the applicable requirement, but that monitoring is not sufficient to assure compliance with permit terms and conditions, permitting authorities must supplement monitoring to assure such compliance. 40 C.F.R. § 70.6(c)(l).

See In the Matter of Mettiki Coal, LLC, Order on Petition No. III-2013-1 (September 28, 2014) at 6-7. *In the matter of Citgo Refining and Chemicals, West Plant, Corpus Christi,* Order on Petition No. VI-2007-01 (May 28, 2009) at 6-7; *In the Matter of United States Steel Corporation - Granite City Works,* Order on Petition No. V-2009-03 (January 31, 2011) at 15-16.

The Act and the EPA's title V regulations require permitting authorities to issue permits specifying the monitoring methodology needed to assure compliance with the applicable requirements in the title V permit. *In the Matter of Wheelabrator Baltimore. L.P.,* Order on Permit No. 24-510-01886 (April 14, 2010) at 10. Thus, the title V monitoring requirements must be adequate to assure compliance with emissions limits.

[1] 42 U.S.C. § 7661c(a) ("Each permit issued under [title V of the CAA] shall *include* . . . such other conditions as are necessary to assure compliance with applicable requirements of this chapter, including the requirements of the applicable implementation plan."), 7661c(c) ("Each permit issued under [title V of the CAA] shall *set forth* ... monitoring and reporting requirements to assure compliance with the permit terms and conditions."); 40 C.F.R. § 70.6(a) ("Each permit issued under this part shall *include* . . . "), 70.6(a)(3)(i) ("Each permit shall *contain* the following requirements with respect to monitoring: . . . . "); 70.6(c) ("All part 70 permits shall *contain* the following with respect to compliance: . . . testing, monitoring, reporting, and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit."); 30 TAC§ 122.142(c) ("Each permit shall *contain* periodic monitoring requirements that are sufficient to yield reliable data from the relevant time period that are representative of the emission unit's compliance with the applicable requirement, and testing, monitoring, reporting, or recordkeeping sufficient to assure compliance with the applicable requirement.") (all emphasis added).

The April 22, 2022 version of NSR Permit 7711A, incorporated by reference into the proposed title V permit O2771, establishes pound per hour (lb/hr) and ton per year (TPY) emission limits for the plant's thermal oxidizer and waste heat boiler stacks (EPNs 8/8A). These emission limits are 29.35 lb/hr SO_2, 128.55 TPY SO_2, 2.62 lb/hr $PM_{10}/PM_{2.5}$, 11.46 TPY $PM_{10}/PM_{2.5}$, 11.34 lb/hr CO, 49.65 TPY CO, 1.9 lb/hr NOx, 8.31 TPY NOx, and 0.09 lb/hr VOC, and 0.37 TPY VOC. As explained in more detail in the following paragraphs, with respect to the monitoring terms in NSR Permit 7711A and title V permit O2771, it is unclear what specific monitoring, recordkeeping, or reporting requirements GAF must comply with to assure ongoing compliance with the lb/hr and TPY emission limitations identified in the MAERT for the thermal oxidizer and waste heat boiler.

NSR Permit 7711A includes limits on the maximum allowable hourly asphalt throughput (Special Condition 14), maximum allowable production rates for finished shingles (Special Condition 15), and operational requirements for the thermal oxidizer to maintain an average temperature of 1450°F based on a one-hour averaging period during normal operations (Special Condition 13). Special Condition 38.C and 38.D require recordkeeping of hourly asphalt throughput rates in addition to hourly and annual production rates of finished shingles. EPA acknowledges that in response to comments received, TCEQ has updated the particulate matter periodic monitoring requirements in O2771 which now specifies a minimum exhaust temperature of 1450°F to be maintained during normal operations. However, neither the title V permit, nor the incorporated NSR Permit, identify how such recordkeeping demonstrates compliance with all lb/hr and TPY emission limits for EPN 8/8A. Additionally, the proposed title V permit also incorporates the requirements of 40 CFR Part 60 Subpart UU and 40 CFR Part 63 Subpart AAAAAAA (7A) for asphalt processing and asphalt roofing manufacturing which apply to various emission units at the Dallas plant. These units, or groups of units, include LINE1 and LINE3. Emission standards from these requirements include various PM and opacity limits as identified in the Proposed Permit's Applicable Requirement Summary table and Periodic Monitoring Summaries that specify various monitoring and recordkeeping requirements to demonstrate compliance with such NSPS UU and NESHAP 7A requirements. However, it is unclear how compliance with the aforementioned requirements (including NSPS/NESHAP requirements, throughput and/or required parametric monitoring) also demonstrates ongoing compliance with all of the numeric lb/hr and TPY limits identified in the MAERT of NSR Permit 7711A.

According to Appendix C (Emission Calculations Spreadsheets) contained in the December 2008 7711A NSR amendment application submitted for project 143272, with the exception of VOCs, "Hourly emissions are based on average stack test results for the 'Thermal Oxidizer Exhaust thru Waste Heat Boiler Stack' (EPN 8A) conducted in April 2008."[2] With respect to the development of TPY emission limits for EPN 8/8A, it appears that the lb/hr emission rates derived from the average results of the April 2008 stack test were multiplied by 8760. Currently, the frequency of stack testing required by NSR Permit 7711A, which is incorporated into the proposed title V permit, is outlined in Special Condition 22 in the section titled "Demonstration of Continuous Compliance" which indicates the following:

[2] *See* Permit No. 7711A, Agency Review Document, WCC Content ID Number 1153128 (January 01, 2009) at 345.

> Upon request by the TCEQ Executive Director or the TCEQ Regional Director having jurisdiction, the holder of this permit shall perform stack sampling and/or other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere to demonstrate compliance with the MAERT and with emission performance levels as specified in the special conditions and/or otherwise prove satisfactory equipment performance. Sampling must be conducted in accordance with the TCEQ *Sampling Procedures Manual* and in accordance with the applicable EPA 40 CFR procedures. Any deviations from those procedures must be approved by the TCEQ Executive Director or the appropriate TCEQ Regional Director prior to conducting sampling.

Despite the apparent reliance on stack test-derived emission factors, subsequent stack testing for EPN 8/8A is only required at the request of the Executive Director or TCEQ Regional Director having jurisdiction. It is unclear and the record does not justify how a stack test last conducted 14 years ago during GAF's normal operations[3] is still representative of current operations; or how this stack test serves as a reliable indicator of current emissions and is sufficient to demonstrate compliance with the current thermal oxidizer/waste heat boiler emission limits. Such rationale for selected monitoring requirements must be clear and documented in the permit record. 40 CFR § 70.7(a)(5). Relatedly, within the December 2008 7711A NSR amendment application submitted for project 143272, GAF indicated that asphalt roofing manufacturers utilize an asphalt waste stream, called Flux, from refineries as a raw input and that SO_2 emission increases from the 2008 project were a result of "variances in the refinery waste stream."[4] GAF also acknowledged potential variability in the raw material used, stating "Since each refinery has a different by-product stream, the constituents of the waste stream vary." *Id.* Naturally, such variability calls into question whether the emission factors derived from the 2008 stack test are still indicative of current operations, and whether the control device itself (or associated conveyance) has degraded, potentially altering the quantity of actual emissions released from these emission points.

It is unclear to EPA why GAF is not required to conduct periodic stack testing of its thermal oxidizer at a minimum frequency of at least once per permit term (ex. every five years) for VOC, SO_2, CO, NOx, PM_{10}, $PM_{2.5}$ (filterable and condensable), and any relevant HAPs. If stack tests are relied on to demonstrate compliance with numeric permit limits and TCEQ concludes that no further stack testing is needed after the initial performance test, TCEQ must explain how it has determined that the emission characteristics of the Thermal Oxidizer/Waste Heat Boiler have not changed since the latest stack test and are not expected to change over the term of the Proposed Permit. Conversely, if TCEQ believes that the emissions characteristics are reasonably likely to change over time, TCEQ must amend the permit to require periodic stack testing with a specified frequency. Further, TCEQ must amend the Proposed Permit to require the use of the emission

[3] EPA understands that there may have been subsequent stack tests for VOC during standby operations (without blowstills operating) in 2009 to establish a lower minimum incineration temperature for the thermal oxidizer/WHB. *See* Permit No. 7711A, Agency Review Document, WCC Content ID Number 1153128 (January 01, 2009) at 114-115.

[4] *See* Permit No. 7711A, Agency Review Document, WCC Content ID Number 1153128 (January 01, 2009) at 304.

factors from the most recent stack test and ensure the calculations used to determine compliance are made part of the permit. For example, if the emission factors developed from the April 2008 stack test (or a subsequent stack test) are integral to demonstrating compliance with lb/hr and TPY limits, the title V permit (and incorporated NSR permit) should make clear as to what these emission factors are (e.g., lbs of pollution/ton of asphalt blown) or where they are located. Because the Proposed Permit does not identify with enough specificity a particular monitoring or recordkeeping requirement associated with the related units, neither the public nor the EPA can ascertain from the permit what monitoring or recordkeeping methodology the source has elected to use, or whether this methodology is sufficient to assure compliance with all applicable requirements. This effectively prevents both the public and the EPA from determining if the chosen monitoring, recordkeeping, and reporting satisfies CAA requirements. See 42 U.S.C. § 7661(c); see also 40 C.F.R.§ 70.6(a)(3).

In addition, the Proposed Permit does not explicitly identify the methodology to be used to calculate emissions, including the time frame of emission calculations or what parameters or variables might go into this calculation to demonstrate compliance with the MAERT limits for EPN 8/8A. TCEQ should explicitly include in the title V permit (or adequately incorporate by reference) the specific monitoring, recordkeeping, and reporting requirements that are maintained to demonstrate compliance with the limits identified in the MAERT for EPN 8/8A. This could be achieved by adding additional monitoring and/or testing requirements to the underlying NSR Permit 7711A and promptly revising the title V permit to incorporate such monitoring, or by adding monitoring requirements directly into the title V permit.

To the extent that any of the current monitoring requirements outlined in NSR Permit 7711A, the title V permit incorporating it, any NSPS, NESHAP or other applicable requirement, are utilized to demonstrate compliance with the lb/hr and TPY limits identified in the MAERT for EPNS 8/8A, TCEQ should explicitly identify such requirements and identify how they are used to demonstrate compliance with the numeric lb/hr and TPY limits for the relevant units. *See, e.g.*, *In the Matter of Owens-Brockway Glass Container Inc.*, Order on Petition No. X-2020-2 at 14–15 (May 10, 2021); *In the Matter of ExxonMobil Fuels & Lubricant Company*, Order on Petition No. VI-2020-4, VI-2020-6, and VI-2021-2 at 19 n.34 (March 18, 2022). Similarly, if application representations are intended to serve as monitoring or recordkeeping requirements that are necessary to demonstrate compliance with lb/hr or TPY limits for EPN 8/8A, TCEQ should either incorporate such terms directly into the permit(s) or specifically identify and reference the location of such representations to ensure they are adequately included/referenced in the title V permit.[5] When referencing monitoring or emission calculation representations contained in an

[5] The EPA understands that TCEQ's EPA-approved regulations provide that sources in Texas are bound by representations made in their applications for NSR permits, such that these application representations can become legally enforceable. *See* 30 TAC § 116.116(a). However, the fact that application representations may be legally enforceable has little to no bearing on whether these representations are properly "set forth," "included," or "contained" in a title V permit, as required by the Act, the EPA's regulations, and TCEQ's EPA-approved regulations. *E.g.*, 42 U.S.C. § 7661c(c). That is, a source's obligation to independently comply with a requirement to which it is subject—whether it be contained in a NSPS, NESHAP, SIP, court-approved Consent Decree, NSR permit, or NSR permit application representation—does not inherently or automatically result in that requirement being included in a title V permit. For a requirement to be included in a title V permit, the permit must include it.

application, EPA has consistently stated that such information must be readily available and the permit must clearly identify the specific location of the incorporated information, for example, by providing a page or section number from the application as necessary. The specific identification and location of such information is particularly important when the permit record or application documentation contains hundreds of pages. *See, e.g., In the Matter of Valero Refining Texas L.P., Valero Houston Refinery,* Order on Petition No. VI-2021-8 at 58 (June 30, 2022); *In the Matter of ExxonMobil Corp., Baytown Chemical Plant,* Order on Petition No. VI-2020-9 at 21-22 (March 18, 2022); *In the Matter of Kinder Morgan Crude & Condensate LLC, Galena Park Terminal,* Order on Petition No. VI-2017-15 at 18- 20 (December 16, 2021); *In the Matter of Premcor Refining Group Inc., Valero Port Arthur Refinery,* Order on Petition No. VI-2018-4 at 26-28 (November 30, 2021).

Lastly, to the extent that TCEQ intends for a source's permit compliance certification (PCC) report to serve as an indicator that the Proposed Permit contains adequate monitoring recordkeeping and reporting, please note that the source's obligation to keep records and submit compliance certifications or deviation reports is not relevant to the CAA requirement that the Proposed Permit itself includes, effectively IBRs, or assures compliance with the applicable requirements. Conditions necessary to assure compliance with a permit term must either be included, or properly incorporated by reference, into a title V permit in order for the title V permit to assure compliance with all applicable requirements. *See* e.g., 42 U.S.C. § 766lc(a), (c). Ultimately, TCEQ must ensure that the title V permit includes monitoring, recordkeeping, and reporting sufficient to assure compliance with the hourly and annual emission limits established under NSR Permit No. 7711A.

Objection for Failure to Include Adequate Monitoring, Testing, and Recordkeeping to Assure Compliance the Site-wide TPY Limits for Hazardous Air Pollutants

The April 22, 2022 version of NSR Permit 7711A incorporated by reference into the proposed title V permit O2771 establishes TPY emission limits for the plant's site-wide hazardous air pollutant (HAP) emissions. These limits require that the emissions of any individual HAP from the entire source shall be limited to less than 10 TPY, and the emissions from any combination of HAPs from the entire source shall be limited to less than 25 TPY. With respect to monitoring and recordkeeping used to demonstrate compliance with the TPY limits identified in the MAERT, Special Condition 38.E of NSR Permit 7711A includes the following language, in relevant part:

> Records of asphalt stored and used, that have the potential to emit Hazardous Air Pollutants (HAPs), kept in sufficient detail in order to allow all required emission rates to be fully and accurately calculated. Using this recorded data, a report shall be produced for the emission of HAPs (in tons per year) over the previous 12 consecutive months;

The title V permit, and incorporated NSR permit, do not explain in sufficient detail the method by which such records are used to demonstrate compliance with the numeric site-wide TPY HAP limits identified in the MAERT for permit No. 7711A. In an attempt to locate speciated HAP emission calculations in the permit record, it appears that calculations related to site-wide HAPs

and annual emissions may be located in the December 19, 2008 confidential file.[6] The CAA limits the types of information that may be treated as confidential under title V, and therefore withheld from the public. As a general matter, some information may be protected as a trade secret under section 114(c) of the CAA. 42 U.S.C. § 7414(c). However, the CAA specifically limits this protection: "The contents of a [title V] permit shall not be entitled to [confidential] protection under section [114(c)]." 42 U.S.C. § 7661b(e). Regarding the contents of a title V permit, the CAA further requires that "terms and conditions in a part 70 permit… are enforceable by the Administrator and citizens under the Act." 40 C.F.R. §70.6(b)(1). It is not clear in the current permit record whether the title V permit contains all the necessary emissions limitations and standards, including those emission methodologies and inputs, operational requirements and limitations that assure compliance with all applicable requirements, or if some of that information may be inappropriately treated as confidential, resulting in the title V permit not complying with the CAA.

TCEQ should explicitly include and identify in the title V permit (or adequately incorporate by reference) specific monitoring, recordkeeping, and reporting requirements that are maintained to demonstrate compliance with the limits identified in the MAERT for site-wide HAP emissions. If HAP emissions are determined using asphalt throughput, AP-42 emission factors, emission factors from the Asphalt Roofing Manufacturer's Association, site-specific stack testing, or some other source, the title V permit should either include all relevant HAP emission factors directly or reference their specific location. Additionally, the record should include how monitoring requirements and associated emission factors are used to determine compliance with the TPY emission limits to ensure that HAP emissions remain below the major source threshold. To the extent that any of the current monitoring requirements outlined in NSR Permit 7711A, the title V permit incorporating it, any NSPS, NESHAP, or other applicable requirements are utilized to demonstrate compliance with the TPY limits identified in the MAERT for site-wide HAP emissions, TCEQ should explicitly identify such requirements and identify how they are used to demonstrate compliance with the numeric limits for the relevant units. *See, e.g.*, *In the Matter of Owens-Brockway Glass Container Inc.*, Order on Petition No. X-2020-2 at 14–15 (May 10, 2021); *In the Matter of ExxonMobil Fuels & Lubricant Company,* Order on Petition No. VI-2020-4, VI-2020-6, and VI-2021-2 at 19 n.34 (March 18, 2022). Similarly, if any application representations are intended to serve as monitoring or recordkeeping requirements to demonstrate compliance with site-wide TPY HAP limits, TCEQ should either incorporate such terms directly into the permit(s) or specifically reference the location of such representations to ensure they are adequately included/referenced in the title V permit.[7] Conversely, if TCEQ has determined that additional monitoring is not necessary to demonstrate compliance with the TPY site-wide HAP emission limits identified in the MAERT, TCEQ should provide justification (or the current location of this justification) in the permit record of such a determination.

[6] *See* Permit No. 7711A, Agency Review Document, WCC Content ID Number 1153128 (January 01, 2009) at 44 (describing the location of expected site-wide HAPs and their annual emissions within the December 18, 2008 confidential file).
[7] *See supra* note 5.

Objection for Failure to Include Adequate Monitoring, Testing, and Recordkeeping to Assure Compliance with lb/hr and TPY Particulate Matter (PM) emissions for GAF's Cooling Section Stacks (EPN COOL1 and COOL3).

The April 22, 2022 version of NSR Permit 7711A incorporated by reference into the proposed title V permit establishes emission limits for the uncontrolled cooling section stacks. The line 1 cooling section stacks under EPN COOL1 are limited to 8.52 lb/hr and 37.30 TPY $PM_{2.5/10}$ and 1.65 lb/hr and 7.23 TPY VOC. The line 3 cooling section stacks under EPN COOL3 are limited to 6.74 lb/hr and 29.52 TPY $PM_{2.5/10}$ and 2.76 lb/hr and 12.09 TPY VOC. As is explained in more detailed in the following paragraphs, with respect to the monitoring terms in NSR Permit 7711A and title V permit O2771, it is unclear what specific monitoring, recordkeeping, or reporting requirements GAF must comply with to assure ongoing compliance with the lb/hr and TPY particulate matter emission limitations identified in the MAERT for the cooling section stacks.

According to Appendix C (Emission Calculations Spreadsheets) contained in the December 2008 7711A NSR amendment application submitted for project 143272, lb/hr PM emission rates for these emission points are based on "Stack testing conducted in April 2008…" and "The hourly emission rates correspond to the sum of the average values per stack, for each line."[8] Special Condition 25 of NSR Permit 7711A stipulates monitoring requirements that include quarterly visible emissions observations utilized to demonstrate compliance with the permit's relevant opacity limitations. EPA acknowledges that in response to public comments, the Periodic Monitoring Summary table in the Proposed Permit was amended to require more frequent (weekly) visible emissions monitoring requirements for EPN COOL1, which is subject to a 30% opacity limit per 30 TAC 111.111(a)(1)(A). With respect to EPN COOL3, although it is not identified in the Proposed Permit's Applicable Requirement Summary Table, Permit Shield Table, Periodic Monitoring Summary Tables or in the Statement of Basis' Determination of Applicable Requirements Table, EPA assumes that it is subject to the site-wide 20% opacity requirements of 30 TAC Chapter 111 and the weekly visible observation frequency outlined in Special Condition 3 of the Proposed Permit. However, for both of these EPNs, the title V permit and underlying NSR permit do not reference how ongoing compliance with the numeric limits identified in the MAERT are determined. TCEQ should explicitly include in the title V permit (or adequately incorporate by reference) specific monitoring, recordkeeping, and reporting requirements that are maintained to demonstrate compliance with the hourly and annual PM limits identified in the MAERT for EPN COOL1 and COOL3.

To the extent that 2008 stack tests for COOL1/COOL3 were utilized to derive emission factors based on the sum of the average stack test values, and these emissions factors are still relied on to demonstrate compliance, the title V permit must specify (or incorporate) such factors and the permit record must justify why such stack tests last conducted in 2008 ensure compliance with the numeric lb/hr emission limits identified in the MAERT. Such rationale for the selected monitoring requirements must be clear and documented in the permit record. 40 CFR § 70.7(a)(5). If stack tests are relied on to demonstrate compliance with numeric permit limits and TCEQ concludes that no periodic stack testing is needed, TCEQ must also explain how it has determined that the emission characteristics of the cooling sections of line 1 and 2 have not

[8] *See* Permit No. 7711A, Agency Review Document, WCC Content ID Number 1153128 (January 01, 2009) at 348.

changed since the latest stack test (presumably in 2008) and is not expected to change over the term of the Proposed Permit. To the extent that weekly visible emissions observations to demonstrate compliance with 30 TAC 111.111(a)(1) are utilized as an indicator of performance, and ultimately to demonstrate compliance with numeric PM emissions, the permit record should explain how such weekly visual observations of COOL1 and COOL3, will ensure compliance with hourly and annual PM limits. To the extent that GAF is relying on any other preexisting requirements to demonstrate compliance with the hourly or annual PM limits found in the 7711A MAERT for EPNs COOL1 and COOL3, the permits must clearly state the connection between the NSPS/NESHAP requirements and these relevant limits, and the permit record must explain how those requirements assure compliance with the PM limits for COOL1 and COOL3. *See, e.g., In the Matter of Owens-Brockway Glass Container Inc.,* Order on Petition No. X-2020-2 at 14–15 (May 10, 2021); *In the Matter of ExxonMobil Fuels & Lubricant Company,* Order on Petition No. VI-2020-4, VI-2020-6, and VI-2021-2 at 19 n.34 (March 18, 2022).

Lastly, if any application representations are intended to serve as monitoring or recordkeeping requirements to demonstrate compliance with lb/hr or TPY limits for EPNs COOL1/COOL3, TCEQ should either incorporate such terms directly into the permit(s) or specifically identify and reference the location of such representations to ensure they are adequately included/referenced in the title V permit.[9] Conditions necessary to assure compliance with a permit term must either be included, or properly incorporated by reference, into a title V permit in order for the title V permit to assure compliance with all applicable requirements. *See* e.g., 42 U.S.C. § 766lc(a) and (c). Ultimately, TCEQ must ensure that the title V permit includes monitoring, recordkeeping, and reporting sufficient to assure compliance with the hourly and annual emission limits established under NSR Permit 7711A.

Objection for Failure to Include Adequate Monitoring, Testing, and Recordkeeping to Assure Compliance with Permitted Emission Limitations

TCEQ received various comments on the proposed title V permit related to monitoring and recordkeeping requirements that are used to demonstrate compliance with applicable requirements. EPA has reviewed both the response to comments and proposed permit and requests that TCEQ provide additional justification.

Commenters raised concerns with Special Condition 29 (previously Special Condition 28) of the April 22, 2022 version of the incorporated NSR Permit 7711A. Special Condition 29 in the NSR permit section titled “Compliance Assurance Monitoring” states:

> The 3-hour average inlet gas temperature for the Coalescing Filter Mist Elimination Systems (Line 1 and Line 3 Asphalt Coaters) with ESP as Backup (EPN CFL/34) shall be maintained within the operating range established as specified in 40 CFR § 63.11562(a)(2) and (b)(3). The 3-hour average pressure drop across the device shall be maintained within the approved operating range established as specified in 40 CFR § 63.11562(a)(2) and (b)(3).

[9] *See supra* note 5.

Commenters raise concerns that the required operating range for the inlet gas temperature and pressure drop are not specified, thus preventing the public from reviewing these specific applicable requirements. It does not appear that the TCEQ Executive Director responds to this concern in the RTC or that it provides justification for why these ranges (in conjunction with opacity monitoring) are not necessary to demonstrate compliance with other applicable requirements. EPA notes that the GAF Materials shingle manufacturing plant in Ennis, Texas, which is authorized in part by NSR Permit 7329, specifies a maximum limit on pressure drop for its coating section mist eliminator.[10] TCEQ should adequately respond to the significant comments regarding the adequacy of monitoring, recordkeeping, and reporting for EPN CFL/34. If the permit record contains justification for the absence of these values or how these values are not critical to demonstrating compliance, TCEQ should specifically cite to those portions of the record, including page numbers, when responding to the significant comments.

Objection for Failure to Include Adequate Monitoring, Recordkeeping and Reporting Requirements that Assure Compliance with Incorporated Permit by Rule (PBR) Requirements.

In response to PBR programmatic commitments,[11] comments received on the draft permit, and in an effort to clarify applicable requirements under 30 TAC Chapter 106, TCEQ has incorporated several changes to the Proposed Permit and application representations which include: listing all PBRs applicable to the site, revising Special Condition 7 and the Statement of Basis to include a reference to the PBR Supplemental Tables, and identifying monitoring, recordkeeping, and reporting utilized by the source to demonstrate compliance with the emission limitations and operational requirements of PBRs that apply to non-insignificant emission units.

However, with respect to monitoring and/or recordkeeping associated with claimed (unregistered) and registered PBRs that do not contain adequate underlying monitoring to demonstrate compliance, the PBR Supplemental Tables do not appear to sufficiently incorporate adequate PBR-specific monitoring for units authorized under these PBRs. The Clean Air Act requires that each title V permit "sets[s] forth" monitoring sufficient to assure compliance with all applicable requirements. 42 U.S.C § 7661c(c); *see id.* § 7661c(a); 40 C.F.R. § 70.6(a), (a)(3), (c); 30 TAC 122.142(c). EPA requests that TCEQ review the PBR Supplemental tables provided by the applicant to ensure they either include or adequately incorporate practically enforceable monitoring and/or recordkeeping provisions that could be used to demonstrate compliance with all applicable PBR requirements.

<u>Registered PBR:</u>

As a part of the Line 3 Sealant Application System authorized under certified PBR registration 147140 (amended 12/30/2021), emissions from facility identification number (FIN) SEALAP, TK-AD, and T-22 all route to the Line 3 Mist Elimination System (EPN CFL2) for 99.5%

[10] *See* Permit No. 7329, Permit Conditions Document, WCC Content ID Number 4859320 (March 15, 2019) at 2.
[11] *See* Letter from Tonya Baer, Deputy Director of Air, TCEQ, to David Garcia, Director, Air and Radiation Division, Region 6, U.S. EPA, Permits by Rule Programmatic Changes at 2- 3 (May 11, 2020).

control of PM emissions.[12] Emissions from SEALAP (self-seal applicator) are authorized under PBR 30 TAC §§ 106.261 and 106.262 and the proposed title V permit now incorporates monitoring requirements via the PBR Supplemental Table dated March 8, 2022 for this unit which states:

> Record annual throughput, material stored, and use underlying emission calculation methods to determine actual annual emissions. For hourly emissions, record the maximum hourly usage and use underlying emission calculation methods to determine actual emissions.

EPA notes that the underlying requirements at 30 TAC §§ 106.261(a)(5) and 106.262(a)(6) require that visible emissions, except uncombined water, to the atmosphere from any point or fugitive source shall not exceed 5.0% opacity in any six-minute period. However, the proposed title V permit, underlying NSR/PBR requirements, and PBR Supplemental Table do not appear to require visible emission observations or an associated observation frequency to demonstrate compliance with the 5.0% opacity requirement for this facility. EPA understands that beyond the monitoring requirements listed in the PBR Supplemental Table and underlying PBR rule, that TCEQ may intend for Special Term and Condition 9 of the Proposed Permit to serve as the general monitoring requirements sufficient to demonstrate compliance with PBR emission and operational limits. However, as EPA has explained in several recent title V petition orders, Special Condition 9 does not specify any particular monitoring, recordkeeping, or reporting requirements to demonstrate compliance. *See, e.g., In the Matter of Valero Refining Texas L.P., Valero Houston Refinery,* Order on Petition No. VI-2021-8 at 23 (June 30, 2022).

TCEQ should identify what monitoring is necessary to demonstrate compliance with the referenced 5% opacity limitation. To the extent that some other applicable monitoring and/or recordkeeping requirement applies to SEALAP, such as the periodic visible emission observations required under Special Condition 3 of the Proposed Permit (relating to the requirements at 30 TAC § 111.111), TCEQ should clarify for the record the applicability of such monitoring provisions (e.g., visible observations) in the PBR Supplemental Table if they are utilized to demonstrate compliance with the opacity requirements of 30 TAC §§ 106.261 and 106.262. Alternatively, if it is impossible for SEALAP to produce visible emissions, TCEQ should provide justification in the record explaining such determination and why visible emission observations are unnecessary to demonstrate compliance with the associated opacity limitation. Lastly, please clarify for the record whether emissions from EPN CFL2 (Line 3 Mist Elimination System) authorized by PBR 147140 are associated in any way with emissions from EPN CFL/34 (Line 1/3 Coalescing Filter Mist Elimination Systems) under NSR Permit 7711A.

<u>Claimed PBRs:</u>

With respect to claimed (not registered) PBRs, the PBR Supplemental Table identifies units HTR1, HTR7, HTR8, HTR9, T-16, T-19, T-20, T-21, T-41, T-80, and SITE_MSS as subject to various PBRs including 106.183, 106.227, 106.263, 106.454, and 106.472. The Table lists monitoring requirements for each of these units which includes recording fuel usage, material

[12] *See* Permit No. 147140, Application Document, WCC Content ID Number 5882272, (December 30, 2021) at 6 and 102-105.

stored, and throughput. The monitoring requirements also state that the applicant uses "… underlying emission factors to calculate emissions and demonstrate compliance with PBR limits." Since each of these units are claimed by the applicant and there is no readily available underlying application, it is unclear what specific underlying emission factors (e.g., AP-42, mfr. guarantee, etc.) are utilized to calculate and demonstrate compliance with the TPY emission limitations incorporated by reference into the title V permit. As with registered PBRs, the title V permit must contain adequate monitoring and/or recordkeeping that assures compliance with the requirements of the claimed PBRs that apply to non-insignificant units. This includes units that are subject to the general limits under 30 TAC § 106.4 or other PBR-specific limits under the various 106.4 subchapters.

TCEQ should determine whether the PBR Supplemental Table in conjunction with the underlying PBR requirements include sufficient information to determine compliance with the applicable requirements associated with claimed PBRs. If the title V permit, Chapter 116 NSR permits, NSPSs, NESHAPs, or enforceable representations in an application already contain adequate terms to assure compliance with PBRs, then TCEQ should amend the Proposed Permit to identify such terms and explain in the permit record how these other requirements assure compliance with the requirements and emission limits for each PBR that applies to significant units. However, if the title V permit and all enforceable, properly incorporated documents do not contain adequate monitoring, recordkeeping, and reporting that assures compliance with the requirements and limits identified, then TCEQ should add such terms to the Proposed Permit. Alternatively, if TCEQ believes these sources are not capable of exceeding the authorized emission limits and no additional monitoring or recordkeeping information is necessary to demonstrate compliance with applicable limits, such justification should be included in the permit record.

Additional Comments Outside of EPA's Objections

Upon review of the Proposed Permit EPA identified additional issues, and while they are not being raised as specific objections, EPA provides the following feedback.

1. PBR Supplemental Table

   In response to public comments, TCEQ indicated that reference to the PBR Supplemental Table via Special Condition 7 has been modified to state:

   > Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule *(including the terms, conditions, monitoring, recordkeeping, and reporting identified in registered PBR and permits by rule identified in the PBR Supplemental Tables dated 03/08/2022 in the application for project 30975)*, standard permits, flexible permits, special permits, permits for existing facilities including …" (emphasis added)

   However, Special Condition 7 in the Proposed Permit currently states:

> Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule *(including the permits by rule identified in the PBR Supplemental Table dated 03/08/2022 in the application for project 30975)*, standard permits, flexible permits, special permits, permits for existing facilities including …" (emphasis added)

To the extent that TCEQ is relying on the PBR Supplemental Tables to incorporate additional requirements such as monitoring, the Proposed Permit must ensure that the terms identified in the PBR Supplemental Table are adequately incorporated into the title V permit. EPA suggests that Special Condition 7 include the clarifying language as written in TCEQ's Response to Comments document for this permit. This additional language provides clarity in that not only do the requirements of the PBR (rule itself) apply but the modified/expanded monitoring terms in the PBR Supplemental Table also apply. With that said, EPA appreciates that the modified special condition in the Proposed Permit includes an issuance date and project number to aid in locating the document.

2. Nuisance Complaints by Local Community

Upon review of the response to comments prepared by TCEQ, EPA identified dozens of comments involving concerns of routine nuisance conditions associated with GAF's Dallas plant. Specifically, commenters claim to have experienced and observed significant and routine occurrences of noxious/offensive odors (rotten egg/burning rubber), plumes of dust and smog emanating from the plant, and waxy black substances covering outdoor surfaces and automobiles. Additionally, commenters cite to General Condition 13 of NSR Permit 7711A which prohibits nuisance conditions such as odor. Commenters also reference Special Condition 16 which states "An opacity violation or odor nuisance condition, as confirmed by the TCEQ or any local air pollution control program with jurisdiction, may be cause for additional controls. If the nuisance condition persists, subsequent stack sampling may also be required." Commenters allege that despite routine nuisance events, no additional controls have been required that are sufficient to abate the nuisance. Ultimately, commenters argue that GAF is in non-compliance with the general nuisance provisions incorporated into the title V permit and seek the inclusion of a compliance plan that outlines a schedule to remedy this alleged violation.

In response to nuisance related comments and the request for a compliance plan, TCEQ states, in relevant part:

> In regard to Commenter's concerns about odor, the ED notes the permit holder must comply with all applicable requirements including 30 Texas Administrative Code § 101.4, which prohibits nuisance conditions such as odor. The rule states that "no person shall discharge from any source" air contaminants which are or

> may "tend to be injurious to or adversely affect human health or welfare, animal life, vegetation, or property, or as to interfere with the normal use and enjoyment of animal life, vegetation, or property." "Air contaminant" is defined in the Texas Clean Air Act (TCAA) § 382.003(2), to include "particulate matter, radioactive material, dust, fumes, gas, mist, smoke, vapor, or odor." Emissions from the facility are not expected to produce nuisance odors. However, individuals are encouraged to report any concerns about nuisance issues by contacting the Regional Office at 817-588-5800, or by calling the twenty-four hour toll-free Environmental Complaints Hotline at 1-888-777-3186. The TCEQ investigates all complaints received. If the facility is found to be out of compliance with the terms and conditions of the permit, it will be subject to possible enforcement action.
>
> The Commenter's assert that no compliance plan is included in the Draft Permit. Per 30 TAC § 122.142(d) (Permit Content Requirements), for any emission units not in compliance with the applicable requirements at the time of renewal application, the permit holder is required to submit a compliance schedule consistent with § 122.132(d)(4)(C). An OP-ACPS (Application Compliance Plan and Schedule) form contained in a renewal application received by TCEQ on 07/30/2020 indicated that all units were in compliance with the applicable requirements. Since no compliance schedule was included in the renewal application it is not included in the SOP.
>
> RTC at 32.

EPA is concerned by the seemingly large number of nuisance complaints reported by citizens near the GAF facility over the years.[13] According to the three latest nuisance investigation reports currently available on TCEQ's Central File Room Online, odors were detected by investigators in each report across multiple days. For example, in the most recent available investigation report conducted between January 26, 2022 and February 14, 2022, odors consisting of asphalt tar were detected. The report indicates that "The specific cause of the odors is suspected to be from the daily operations and activities of the GAF materials plant…"[14] The investigation report for site visits conducted between November 8 and 18 of 2021 also notes that "strong odor[s]" of asphalt were detected.[15] In response to the investigators inquiry regarding railcar unloading, a GAF representative stated that

> "Our facility is a 24-hour, 7-day a week operation. Railcars are sealed and cold as delivered. We attach steam lines to the jacket of the railcar and heat them, while still sealed, until warm enough to be able to be pumped. Unload hoses are

[13] *See* TCEQ, Central Registry, Air Quality Complaints at GAF Materials, available at: https://www15.tceq.texas.gov/crpub/index.cfm?fuseaction=iwr.complincdetail&addn_id=451600072009251&re_id=273589952001318

[14] *See* OCE / Air Compliance Investigation Document, WCC Content ID 6177600 (January 28, 2022) at 6.

[15] *See* OCE / Air Compliance Investigation Document, WCC Content ID 5887269 (November 8, 2021) at 4.

> attached to the rail car and a pump transfers the material from the railcar to a storage tank. While that transfer is going on the top hatch on the railcar is cracked open to allow air to draw into the railcar and not pull a vacuum and collapse it. This would pull air into the railcar rather than venting anything out. The asphalt transfers into a storage tank which is vented to the thermal oxidizer which controls any fumes in the air displaced from the storage tank." *Id.* at 5.

In addition, on August 18, 23, and 31 of 2021, an environmental investigator with the Dallas Local Air Program conducted an Air Quality Complaint investigation near the GAF facility to observe if the location was adhering to 30 TAC § 101.4. On both August 18th and 23rd, the investigator detected odors. Specially, the investigation document recounts observations made on August 23, 2021, indicating that

> "On the side of the plant near the Dallas West Library, there are railcars, and a black railcar or trailer was emitting smoke. Observation of smoke started at 10:16 hours to 10:31 hours and investigator could smell the odor of burning rubber. After the smoke disappears, the odor will stop briefly for 10 seconds but appeared again once the smoke started back. Pictures and videos were taken at the site and the investigator left at 10:45. The investigator contacted the plant's Senior Environmental Engineer, Mr. Kevin Bush, and scheduled to take a tour this week to confirm the source."[16]

During review of the permit record, EPA also identified historic nuisance odor complaints and investigations dating back to the early 2000s. For example, a document titled "Comprehensive Compliance Inspection" dated June 12, 2001 concluded that

> "The plant does generate odors which leave the properly line, only a few complaints about the odor have been received by this office. The odor issue has been discussed with the facility and the plant is exploring ways to minimize asphalt odors generated by the plant."[17]

Additionally, a November 6, 2001 email between TNRCC staff describes observations made during a site visit conducted on October 17, 2001, stating that

> "We arrived at the GAF facility with winds out of the south and observed strong tar-like odors near properly-line of the facility. Two of us experienced mild nasal irritation when the strong odors were present."[18]

To EPA's knowledge, recent and past investigations by TCEQ and City of Dallas over the last 20 years have not resulted in a finding of failure to control the discharge of air contaminants resulting in nuisance conditions (based on the frequency, intensity, duration, or offensiveness of odors) or a violation of 30 TAC § 101.4. Despite this reality, EPA remains concerned with the apparent track record of the plant to allow potentially

[16] *See* OCE / Air Compliance Investigation Document, WCC Content ID 5816424 (August 18, 2021) at 4.
[17] *See* Permit No. 7711A, Agency Review Document, WCC Content ID Number 1632941 (January 01, 2002) at 180.
[18] *See* Permit No. 7711A, Agency Review Document, WCC Content ID Number 1632942 (January 01, 2001) at 70.

offensive odors to migrate beyond the property line. Multiple investigation reports indicate that asphalt odors are present off-site but the offensiveness the odors do not rise to the level of a nuisance violation. However, based on the consistent frequency and nature of odor complaints, nuisance events still appear to be adversely and disparately impacting West Dallas residents' quality of life and interfering with the normal use and enjoyment of property. Can TCEQ explain what measures, including any associated monitoring, that GAF has implemented that ensures ongoing compliance with the nuisance provisions outlined in 30 TAC § 101.4 or any other information that may provide the EPA and the public certainty that odors leaving the plant are not in violation of nuisance provisions? Has TCEQ been on-site during the heating and unloading of railcars while the "top hatch on the railcar is cracked open" and confirmed whether such unloading operations are a source of emissions/odors at the site? Lastly, complainants and investigators have identified both odors and "smoke" at the site. Has GAF and/or TCEQ considered voluntarily adding new pollution controls and work practice standards to reduce off-site odors as well as SO_2 and $PM_{2.5}$ emissions to minimize potential impacts on the community?

3. Environmental Justice in Permitting

Environmental justice (EJ) is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. On January 20, 2021, President Biden issued Executive Order 13985, *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*.[19] In Section 8, Engagement with Members of Underserved Communities, Federal agencies were directed to "consult with members of communities that have historically been underrepresented in the Federal Government and underserved by, or subject to discrimination in, Federal policies and programs. The head of each agency shall evaluate opportunities, consistent with applicable law, to increase coordination, communication, and engagement with community-based organizations and civil rights organizations."

EPA's goal is for everyone to enjoy (1) the same degree of protection from environmental health hazards, and (2) equal access to the decision-making process to have a healthy environment in which to live, learn, and work. The resource *EPA Legal Tools to Advance Environmental Justice* was recently published as a resource and can be found on this website: https://www.epa.gov/ogc/epa-legal-tools-advance-environmental-justice. In addition, EJScreen[20] is a mapping and screening tool that provides a nationally consistent dataset and approach for combining environmental and demographic indicators for assessing possible environmental justice concerns. Since EJScreen is EPA's preferred screening tool across media for considering potential affects to communities such as, but

[19] *See* https://www.federalregister.gov/documents/2021/01/25/2021-01753/advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government.
[20] *See* https://www.epa.gov/ejscreen.

not limited to, Air Toxics Cancer Risk, NAAQS, and proximity to National Priorities List sites, EPA provided major updates to the tool in 2020 and in 2022.

While Executive Order 13985 is a directive written by the President to the Executive Branch of the federal government, its contents may prove fruitful for consideration as the TCEQ conducts its title V work. Tools to address environmental justice are being developed not just by EPA, but also by various state partners across EPA regions. In order to fully assess equity considerations for overburdened communities during the permitting process, EPA believes that an environmental justice analysis may include input received from the community, an evaluation of exiting environmental data, use of known demographic information, and other relevant information as much as possible. EPA has the following recommendations based upon our experience to date and those federal tools and resources currently available.

Recommendation 1: TCEQ should engage early in the permitting process with communities and applicants to address environmental justice.

EPA believes that early engagement to enable community participation in the permitting process is necessary to advance environmental justice and ensure that equity concerns are being understood and addressed throughout the entire permitting process. For example, TCEQ should be able to identify upcoming permit actions that potentially affect disproportionately impacted communities at the permit application stage and should continuously look for new opportunities to enhance environmental justice in its overall air permitting process. TCEQ should also be able to partner with applicants early to look for opportunities to work with communities and more effectively communicate how they plan to mitigate air pollution impacts in disproportionately impacted communities through practically enforceable permit conditions. EPA is certainly open to discussing mitigation options that could be considered pursuant to both existing regulatory and discretionary authorities.

Recommendation 2: TCEQ should avail itself of EPA's most recent EJ resources and tools, such as use of the most up-to-date EJScreen tool and EJ related trainings available.

TCEQ should ensure that all current air permit staff are trained to use EJScreen, since there have been major updates in 2020 and 2022 to improve performance and user interface/reporting. In addition, EJScreen can be used to help enhance outreach efforts to inform communities of permit actions – for example, public information of upcoming permit actions can be translated into languages where English proficiency[21] may impact effective communications during the permitting process. For example, EPA has provided interpreters as necessary for such communities at public hearings to also help with communicating the permit process and obtaining public comments

[21] ***See*** https://www.epa.gov/ogc/assisting-people-limited-english-proficiency#:~:text=On%20August%2011%2C%202000%2C%20President,limited%20English%20proficiency%20(LEP)%2C.

from all members of the community. TCEQ should also bear in mind that EJScreen is one of the tools used in evaluating existing demographic and public health data about affected communities, however, other factors such as known monitoring and/or air modeling information for the area surrounding the facility of interest that is available can also be used to evaluate how to address community concerns specific to the permit action being taken.

As TCEQ is aware, EPA civil rights law and implementing regulations prohibit state, local or other entities that receive federal financial assistance, either directly or indirectly from EPA ("recipients") from taking actions that are intentionally discriminatory as well as practices that have an unjustified discriminatory effect, including on the bases of race, color, or national origin.[22] Environmental justice and civil rights compliance are complementary. Integrating environmental justice in decision-making and ensuring compliance with civil rights laws can, together, address the strong correlation between the distribution of environmental burdens and benefits and the racial and ethnic composition, as well as income level, of communities. EPA is committed to advancing environmental justice and incorporating equity considerations into all aspects of our work. One of these aspects includes assessing and considering environmental justice and civil rights issues raised in permitting decisions that may have adverse and disproportionate impacts on communities already overburdened by pollution. EPA acknowledges that TCEQ is in the process of implementing the Public Participation Plan, Language Access Plan, and Disability Nondiscrimination Plan per an Informal Resolution Agreement (IRA) with EPA regarding a Title VI investigation complaint signed on November 3, 2020. However, EPA welcomes TCEQ's partnership in using tools available to address EJ concerns as outlined in our above recommendations.

Like several commenters, EPA conducted a review of EJScreen reports to assess key demographic and environmental indicators within a three mile-radius around the Facility, as well as the census block group. The Environmental Justice Index is a series of eleven environmental and demographic data sets that are used to populate twelve EJScreen indicators. The area around the GAF facility has elevated levels in the State of Texas for many pollution indicators used by EPA's environmental justice screening tool, EJScreen. However, when running an EJScreen analysis on a 1-mile radius, the indicator results are considerably higher for the community immediately around GAF. The following information is based on a 3-mile radius as to include a larger population. The Environmental Justice Index for all twelve EJScreen indicators in the approximately 28 square mile area around GAF exceed the 70th percentile in the State of Texas. These indices are: particulate matter of less than 2.5 microns in diameter; ozone; diesel particulate matter; air toxics cancer risk; air toxics respiratory hazard; traffic proximity; lead paint; Superfund proximity; Risk Management Plan facility proximity; hazardous waste proximity; underground storage tanks; and wastewater discharge. Four of the

[22] *See* 40 CFR 7.35(b) and (c)

twelve indicators exceed the 90th percentile, including indices for lead paint, superfund proximity, RMP facility proximity, and hazardous waste proximity. According to EJScreen, the area contains a total population of 91,190 residents based on the 2010 Census. Additionally, EJScreen identified that the population in the area round the Facility is disproportionately low income (48% compared to 34% for the state), people of color (82% compared to 58% for the state) and includes linguistically isolated persons (19% compared to 8% for the state).

Based on the elevated values of the EJ indices, demographic data, and proximity to residential housing and schools, EPA believes there is viable opportunity for TCEQ to demonstrate that proactive mitigation measures can be taken to address environmental justice concerns. Due to GAF's consistent odor complaints as well as our commitment to evaluate environmental justice considerations, EPA suggests that TCEQ strengthen GAF's title V permit to implement additional enforceable provisions, including monitoring and recordkeeping requirements related to nuisance odor and particulate matter. For example, including best management practices and associated monitoring requirements for controlling odors directly in the permit would garner some confidence that GAF will address the applicable nuisance provisions in a meaningful manner. If GAF and TCEQ have not considered implementing additional controls or work practice standards at the facility to reduce off-site odors and/or to possibly reduce SO_2 and $PM_{2.5}$ emissions, EPA strongly encourages this proactive dialogue and consideration to determine what mitigation opportunities can be implemented to minimize the impacts on neighborhoods adjacent to the facility and further protect the health and welfare of the immediate community.