ERM

Climate Leadership and Community Protection Act (CLCPA) Analysis

Air State Facility (ASF) Permit Modification and Renewal Application

DEC ID # 9-2911-00036

Prepared for

GOODYEAR

The Goodyear Tire & Rubber Company

DATE

1 May 2026

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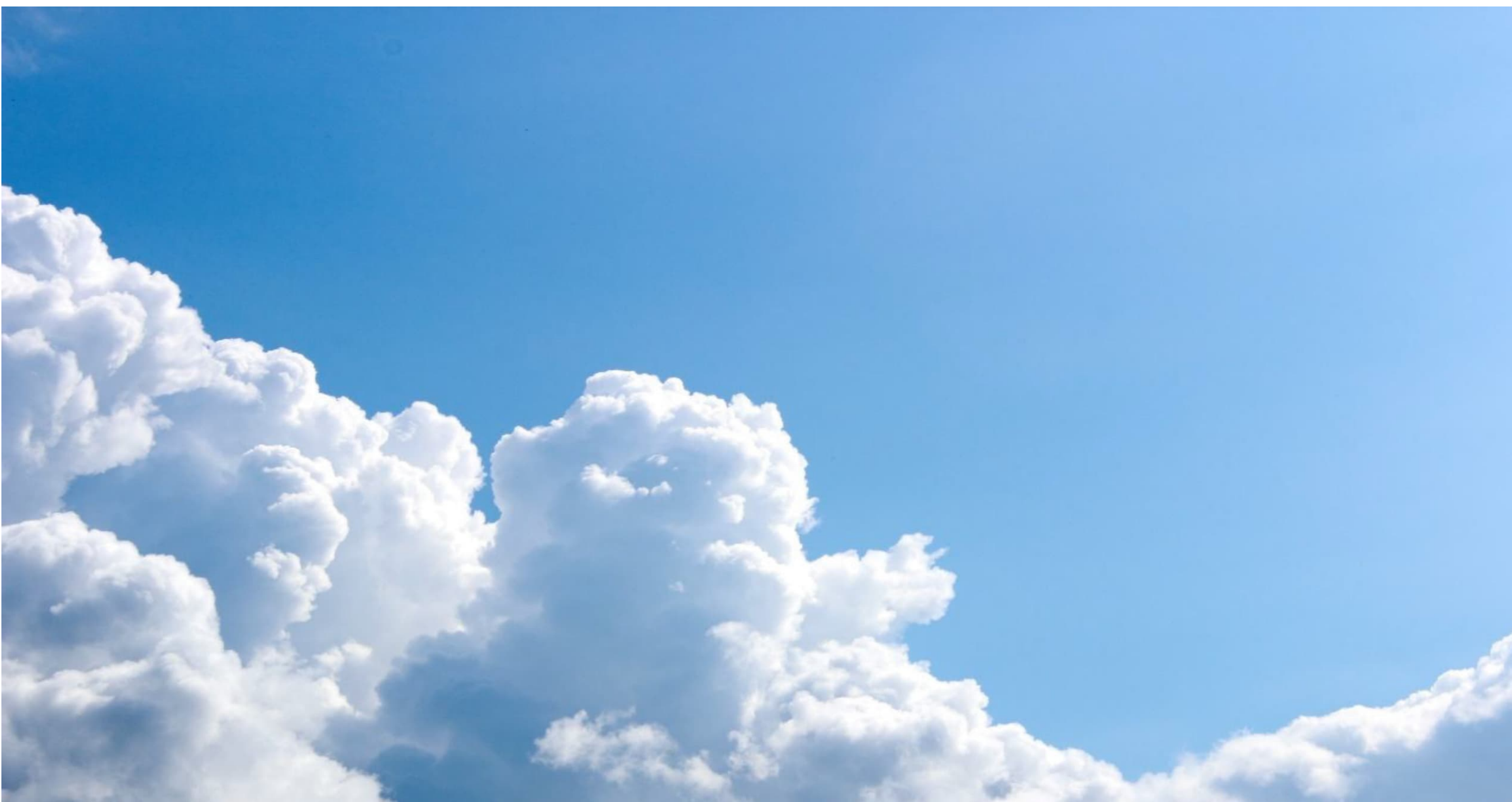

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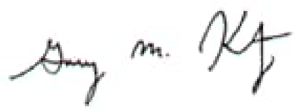
The Goodyear Tire & Rubber Company
DEC Permit ID No. 9-2911-00036/00151

ERM Project No. 0771139



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Acronyms and ABBREVIATIONS

Acronym	Description
AGC	Annual Guideline Concentrations
ASF	Air State Facility Permit
CFR	Code of Federal Regulations
CH_4	Methane
CJWP	Climate Justice Working Group
CLCPA	Climate Leadership and Community Protection Act
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalents
DAC	Disadvantaged Community
DAR-21	Division of Air Resources (21: NYSDEC Program Policy, “The Climate Leadership and Community Protection Act and Air Permit Applications”, dated December 14, 2022)
DEP 24-1	Division of Environmental Permits (24-1: NYSDEC Program Policy, “Permitting and Disadvantaged Communities,” dated May 8,2024)
eGRID	Emissions & Generation Resource Integrated Database
ERM	ERM Consulting & Engineering, Inc.
GHG	Greenhouse Gas
GWP	Global Warming Potential
HAP	Hazardous Air Pollutant
HTAC	High Toxicity Air Contaminant
kWh	Kilowatt-hours
lb/yr	Pounds per year
LED	Light-emitting diode

Acronyms and ABBREVIATIONS

MACT	Maximum Achievable Control Technology
MT	Metric tonnes
N_2O	Nitrous Oxide
NYCRR	New York Code, Rules and Regulations
NYSDEC	New York State Department of Environmental Conservation
O-T	ortho-Toluidine
PM	Particulate Matter
POTW	Publicly Owned Treatment Works
PTE	Potential-to-Emit
PVC	Polyvinyl Chloride
RTO	Regenerative Thermal Oxidizer
SGC	Short-term guideline concentration
tpy	Tons per year
USEPA	United States Environmental Protection Agency
VFD	Variable Frequency Drives
VOC	Volatile Organic Compounds

1. FACILITY OVERVIEW

The Goodyear Tire & Rubber Company owns and operates a manufacturing site located at 5500 Goodyear Drive in the City of Niagara Falls, New York (Facility). The Facility was originally built in 1946 for polyvinyl chloride (PVC) manufacturing and began production of rubber antioxidant products in 1957. Although PVC production was discontinued in 1996, the Facility continued to manufacture an antioxidant product. The Facility is located on 28 acres of land encompassing 210,000 square feet of building space that contains three reactor systems and two finishing lines.

2. SCOPE

As part of the Air State Facility (ASF) Permit (DEC Permit ID No. 9-2911-00036/00151) renewal and modification application (Updated July 17, 2025), the New York State Department of Environmental Conservation (NYSDEC) requires Goodyear to prepare and submit a Climate Leadership and Community Protection Act (CLCPA) analysis that includes information regarding the renewal and modification of the equipment changes and emission calculations, an AERMOD air dispersion modeling protocol, a Public Participation Plan (PPP) pursuant to CP-29, and an analysis following the procedures described in Division of Air Resources (DAR) Program Policy DAR-21 and Division of Environmental Permits (DEP) Program Policy DEP-24-1. This CLCPA analysis fulfills the requirement for Goodyear to submit a CLCPA addressing Section 7(2) and Section 7(3) as discussed in the following sections.

3. REGULATORY BACKGROUND

3.1 AIR PERMIT

The Facility has an ASF Permit, which became effective on June 15, 2009, and was modified on April 21, 2011, with no expiration date assigned by the NYSDEC. Permit conditions cap facility-wide potential emissions to less than major source thresholds through production limits. Specifically, volatile organic compounds (VOCs) are limited to less than 50 tons per year (tpy), total hazardous air pollutants (HAPs) are limited to less than 25 tpy, and o-xylene is limited to less than 10 tpy. Emissions testing correlates these limits with a production limit of 3,450 batches annually.

Goodyear is seeking to modify and renew the Facility's existing ASF Permit. In 2018, the NYSDEC DAR requested Goodyear apply to renew the ASF Permit in accordance with regulatory updates to Title 6 of the New York Code, Rules, and Regulations (6 NYCRR) Part 201 to establish 10-year term limits to ASF permits issued by the NYSDEC.

During the review of the ASF Permit renewal application, the NYSDEC requested Goodyear conduct air emissions testing of select emissions equipment and emission points (i.e., stacks). Goodyear conducted emissions testing in 2022 to fulfill NYSDEC's request. The results of the testing programs indicated that emissions of ortho-Toluidine (O-T) and other materials emitted to the atmosphere by the Facility were predicted, through air dispersion modeling performed by the NYSDEC, to exceed their respective Annual Guideline Concentrations (AGCs) and Short-term

Guideline Concentrations (SGCs) established by the NYSDEC in its Program Policy DAR-1: *Guidelines for the Evaluation and Control of Air Contaminants Under 6 NYCRR Part 212*.

On January 14, 2025, Goodyear entered into an Order on Consent (Order No. R9-20241125-128, hereafter referred to as the "Order") with the NYSDEC, requiring Goodyear to submit an Air Pollution Control Engineering Study (the "Study") to the NYSDEC within 60 days of the effective date of the Order. The Order required the Study to include the details and schedule needed for the design, procurement, installation, commissioning, and performance emissions testing of the upgraded emission sources and permanent control technology.

The Study conducted by Goodyear proposed to replace the existing Tri-Mer Whirl Wet® Scrubber with a new scrubber and incorporate a new Regenerative Thermal Oxidizer (RTO) into the air emissions control systems for the equipment that exhausts through the current scrubber and to redirect the air emissions from Elimination Tank No. 2 through the RTO as well. Once these upgraded air emissions control systems are in place, the resultant facility-wide air emissions profile from the Goodyear Facility is expected to demonstrate compliance with the regulatory requirements of New York Part 212 for Air Emissions from Process Sources.

The Order also requires Goodyear to submit to the NYSDEC, within 45 days of the Department's approval of the Study, an application including the information regarding the renewal and modification of the air permit detailing equipment changes and emission calculations, an AERMOD modeling protocol, a Public Participation Plan pursuant to CP-29, and a CLCPA analysis following the procedures described in DAR 21 and DEP 24-1.

3.2 CLCPA

In July 2019, Governor Andrew Cuomo signed the CLCPA, Chapter 106 of the Laws of 2019. When issuing permits, Section 7(2) of the CLCPA requires all state agencies to consider "whether such decisions are inconsistent with, or will interfere with, the attainment of the statewide greenhouse gas (GHG) emission limits established in Article 75 of the environmental conservation law." On 14 December 2022, the NYSDEC issued the final version of NYSDEC Program Policy DAR-21, which provides guidance for preparing a CLCPA analysis in support of an air permit application.

For purposes of the CLCPA, GHG emissions are calculated on a twenty-year global warming potential ("GWP20") and statewide GHG emissions including upstream out-of-state GHG emissions associated with the generation of electricity imported into the State, or the extraction, transmission, and use of fossil fuels imported into the State, and any downstream emissions attributable to the project.

Under section 7(3) of the CLCPA, the NYSDEC is required to "prioritize reductions of GHG emissions and co-pollutants in Disadvantaged Communities (DAC)" and in considering and issuing permits, "shall not disproportionately burden disadvantaged communities". If a facility is located in or potentially impacts a DAC, it is understood that the CLCPA analysis should provide calculations for all co-pollutants. Under § 75-0101 of the Environmental Conservation Law, "co-pollutants" are defined as "hazardous air pollutants produced by GHG emission sources", where a "greenhouse gas emission source" is defined as "any anthropogenic source or category of anthropogenic sources of greenhouse gas emissions, determined by the department: (a) whose participation in the program will enable the department to effectively reduce greenhouse gas emissions; and (b) that are capable of being monitored for compliance." On May 8, 2024, the NYSDEC issued the final version of NYSDEC Program Policy DEP 24-1, which outlines the analysis required for permit applications associated with facilities located in or could potentially impact a nearby DAC.

4. CLCPA ANALYSIS

In accordance with the NYSDEC, the following sections detail the requirements of the CLCPA analysis.

4.1.1 SECTION 7(2) DAR-21

Per Section 7(2) DAR-21, this analysis addresses "any new or modified emission sources that have the potential-to-emit GHG, including increases and decreases in emissions of GHG from existing equipment. In addition, the analysis includes any upstream, downstream, and indirect emissions known to be attributable to the project, including upstream out-of-state emissions from fossil fuel production, transmission, and imported electricity."

4.1.2 SECTION 7(3) DEP 24-1

In accordance with CLCPA Section 7(3) DEP 24-1, this analysis also includes review of "Increases in GHG emissions or co-pollutants resulting from a project associated with any new, modified, or renewed emission sources, including those from stationary or mobile sources directly related to and essential to the proposed action, and those from existing equipment or facilities…". The requested renewal does not involve any new sources of GHGs or co-pollutants or any increases in GHGs or co-pollutants. This CLCPA analysis has been performed for all sources of GHG emissions and co-pollutants at the Facility.

4.2 CLCPA EMISSION CALCULATIONS

The following sections assess the Facility's greenhouse gas emissions as carbon dioxide equivalents (CO_2e) (based on GWP20 factors included in Part 496) and its consistency with the CLCPA pursuant to CLCPA Section 7(2); and assess the Facility's co-pollutant emissions pursuant to CLCPA Section 7(3).

Because the Goodyear Facility is located in a DAC, consistent with DEP 24-1, calculations were completed for co-pollutants (Hazardous Air Pollutants). Emissions of all co-pollutants were calculated on a potential-to-emit (PTE) basis, past actual basis, and future projected annual emissions basis.

4.2.1 GHG EMISSIONS

The Facility's GHG emissions are associated with building and process heating, propane forklifts, off-road vehicle diesel, and vehicle fleet gasoline. Per DAR-21, "the past actual emissions are defined as the highest 24-month average GHG emissions during the five years preceding the date the permit application was received unless another period is more representative". Based on this, the five-year period of calendar years 2020 – 2024 was reviewed and the baseline period was determined to be 2021-2022 with average emissions of 4,918 MT of CO_2e. Table 1 shows the summary of greenhouse emissions from different fuel sources at the Niagara Falls Facility.

All calculations of CO_2e are based on the 6 NYCRR Part 496 GWP20 factors.

TABLE 1 ACTUAL ONSITE EMISSIONS OF GHGS (2020-2024)

YEAR	Fuel	Quantity (Gas/Fuel) MMBtu/yr	Direct Onsite CO_2e Emissions* MT/yr	Upstream CO_2e Emissions* MT/yr	Total CO_2e Emissions* MT/yr
2020	Natural Gas	40,808	2,535	1,152	3,687
	Propane	249			
	Gasoline	10			
	Diesel	14			
2021	Natural Gas	52,578	3,286	1,479	4,765
	Propane	296			
	Gasoline	10			
	Diesel	28			
2022	Natural Gas	48,794	3,051	2,019	5,070
	Propane	318			
	Gasoline	10			
	Diesel	24			
2023	Natural Gas	48,364	3,025	1,153	4,178
	Propane	294			
	Gasoline	18			
	Diesel	44			
2024	Natural Gas	44,219	2,767	1,247	4,014
	Propane	351			
	Gasoline	13			
	Diesel	14			

*Emission calculations have been updated to reflect the factors in the 2025 Statewide GHG Emissions Report, Appendix A, NYSDEC. December 2025.

4.3 FACILITY POTENTIAL TO EMIT GREENHOUSE GAS EMISSIONS

Per the requirements of DAR-21 emissions of GHGs were calculated on a PTE basis, including upstream and direct emissions. The PTE calculations include the estimated maximum natural gas usage for a new RTO that will be installed in early 2026; 2,828 MT of the total CO_2e PTE are from the RTO. Table 2 provides the summary of calculated PTE GHGs. Detailed calculations of GHG PTE are provided in Appendix B-1.

TABLE 2 PTE OF GHG EMISSIONS

Fuel Type	Potential to Emit GHGs, without RTO (MT of CO_2e/year)	Potential to Emit GHGs, with RTO (MT of CO_2e/year)
Natural Gas	6,700	9,545
Propane	60	60
Gasoline	3	3
Diesel	8	8

4.4 CY2030 AND CY2050 PROJECTIONS OF GHG EMISSIONS

For calendar year 2030, Goodyear expects that its GHG emissions will remain consistent with the current year GHG emissions profile (about 4,000 MT per year of CO_2e emissions), with minor adjustments that will reduce the actual GHG emissions as energy reduction initiatives and projects are implemented.

For calendar year 2050, Goodyear expects that its GHG emissions will remain consistent with the calendar year 2024 GHG emissions profile (about 4,000 MT per year of CO_2e emissions). The Niagara Falls facility's GHG emissions are expected to continue to be reduced as the Company implements its net-zero GHG emissions and sustainability initiatives across its global footprint, including initiatives related to operations at the Niagara Falls Facility. However, at this time it is difficult to quantify the CO_2e emissions that would result from such initiatives. To avoid overstating the potential GHG emissions reductions, Goodyear's current projections for CY2050 will remain consistent with CY2024 GHG emissions calculations.

5. IDENTIFICATION OF ALTERNATIVES AND MITIGATION

Goodyear is committed to lowering GHG emissions and energy consumption through various mitigation and reduction projects. In 2021, Goodyear announced its climate ambition, which includes a goal to reach net-zero Scope 1, 2 and certain Scope 3 greenhouse gas emissions by 2050, as well as a commitment to achieve near-term science-based targets by 2030, including reducing Scope 1 and 2 emissions by 46 percent and certain Scope 3 emissions by 28 percent, as compared to a 2019 baseline. Goodyear publishes an Annual Corporate Responsibility Report — charting the company's progress towards its sustainability goal. This is something the company has done since 1996. The most recent Corporate Responsibility Report and more information on

Goodyear's commitment to sustainability can be found at Goodyear.com/responsibility. The initiatives described below related to the Niagara Falls Facility reinforce that commitment.

5.1 RECENT AND ONGOING MITIGATION EFFORTS

Goodyear implemented a re-lamping program beginning in 2019 to replace facility-wide light bulbs with light-emitting diode (LED) lamps to improve energy efficiency and lower overall carbon emissions. Re-lamping in the warehouse was completed in 2023 by replacing 4-foot fluorescent bulbs with LED lamps. Seventy-five percent (75%) of the metal halide bulbs in the production area were replaced with LED lamps and in some cases the lighting fixtures were replaced. Outside lighting is currently in the process of being replaced with LED alternatives. To date Goodyear has replaced 1,300 4-foot fluorescent light bulbs with LED lamps, 60 High Bay metal halide bulbs with LED fixtures and lamps, and 35 metal halide flood lights with LED flood lights. The re-lamping initiative is ongoing with expected completion in 2028.

Electric powered forklifts have become increasingly more energy efficient, and as powerful as propane-fueled forklifts. Currently, there are five forklifts used in the facility warehouse that are powered by propane, and 2 battery-powered forklifts. Current propane use is approximately 400, 20-pound bottles per year. However, Goodyear has implemented a program to replace older forklifts that use propane with electric forklifts whenever each forklift is permanently retired. Replacing the propane operated forklifts with battery powered forklifts will contribute to overall reduction in facility-wide GHG emissions.

Goodyear is in the process of restoring the main water basin to restore efficiency in treating water before it is sent out to the local utility. The project includes the installation of more energy efficient pumps, restoring the filter system and preparing and implementing an annual maintenance plan to optimize system performance. Additionally, the pumps will maximize the water filtration process resulting in cleaner wastewater that is discharged to the local Publicly Owned Treatment Works (POTW).

5.2 HISTORICAL PROJECTS THAT REDUCED GHG EMISSIONS

Leaks in compressed air systems can represent a significant source of wasted energy and create operational inefficiencies. Goodyear implemented a leak study of the facility air compressor pumps and lines in 2022. The project scope was to identify and repair potential pump and piping leaks that can contribute to energy inefficiencies. Compressor piping leaks were discovered at various locations throughout the facility. Goodyear implemented corrective actions and repaired the leaks resulting in energy use reductions. Also, a continuous run compressor was replaced with a higher efficiency-on demand style resulting in additional increased energy efficiencies.

5.3 PROJECTS UNDER EVALUATION TO REDUCE GHG EMISSIONS

Goodyear is currently evaluating cooling tower improvement options to maximize efficiency while reducing energy consumption and ultimately its carbon footprint. Options being considered include implementing variable frequency drives (VFDs) for fans and pumps to minimize continuous "full power" operation, evaluating different types of storage tanks to use for the project, new type of piping, and a new storage tank. If implemented, completion of this project can be expected by 2028.

6. SECTION 7(3) EVALUATION

The Goodyear Facility is located in a DAC and must demonstrate that the renewal and modification of the ASF permit will not have a disproportionate burden on the DAC.

Currently, Goodyear is in the process of installing a new wet scrubber to replace the current Tri-Mer scrubber, and a new RTO. Both Elimination Tanks #1 and #2 emissions and the centrifuge of Emission Unit U-000N3 emissions will be routed through the new scrubber and RTO. The new scrubber is designed to control particulate emissions by at least 90%, and the RTO is expected to destroy 90% of organic emissions from these sources.

In addition to the replacement of the current Tri-Mer Whirl-Wet Scrubber and installing a new add-on RTO, Goodyear installed a temporary carbon adsorption system on the exhaust gases from Elimination Tank No. 2 that will continue to serve as an interim control measure until such time that the permanent solution (i.e., the replacement wet scrubber and RTO system) is installed and operational. This interim carbon control system, operational since April 10, 2025, is currently achieving greater than 90% control efficiency of the exhaust gases emitted from Elimination Tank No. 2.

The installation of the interim air emissions control system and the permanent air emissions control systems will reduce the impacts and any disproportionate burden on the surrounding DAC.

This section quantifies the co-pollutants emitted at the Facility on past actual, potential-to-emit (PTE), and future bases.

6.1 EMISSIONS OF CO-POLLUTANTS FROM GHG SOURCES

For each stationary and mobile source type at the Facility that emits a GHG, calculations were made to determine the emissions of co-pollutants on past actual, PTE, and future bases. Appendix B includes details of the calculated PTE values for individual HAPs, for each fuel type.

The Facility currently operates natural gas burners to heat Dowtherm, a heat transfer fluid, which is used to provide efficient process heat. The Facility uses propane powered forklifts, as well as gasoline and diesel-powered motor vehicles (Note that no HAP emission factors have been published specifically for gasoline or diesel motor vehicles. HAPs from these sources use the relevant stationary source AP-42 factors). The new RTO for control of HAPs and VOCs will be natural gas fired and is rated at a maximum heat input of 4 MMBtu/hr. Although the RTO will increase HAPs from fuel combustion, the amount of process VOC and HAP destruction is far larger (See Table 5, "Future Emissions" row). Emissions of criteria pollutants from gasoline, diesel, and propane mobile sources were determined using the "Payback On-Road Calculator" and "Payback Off-Road Calculator" in *AFLEET Online*[1]. The results of these Calculators are found in Appendix F-3.

[1] URL: https://afleet.esia.anl.gov/afleet/payback-offroad-calculator. Accessed March 2026

TABLE 3 CO-POLLUTANT PTE (GHG SOURCES)

Fuel Type	Potential-to-Emit Co-Pollutant Emissions from GHG Sources					
	HAPs (lbs/year)	NOx (lbs/year)	SO_2 (lbs/year)	CO (lbs/year)	PM (lbs/year)	VOCs (lbs/year)
Natural Gas	217.19	11,508	69.05	9,667	874.63	632.95
Propane	0.65	130.09	0	1,124.93	20.16	14.07
Gasoline	0.07	0.04	0	1.50	0.03	0.13
Diesel	0.17	2.33	0.82	0.82	1.05	0.10

TABLE 4 CO-POLLUTANT ACTUAL EMISSIONS (GHG SOURCES)

Fuel Type	Actual Co-Pollutant Emissions from GHG Sources					
	HAPs (lbs/year)	NOx (lbs/year)	SO_2 (lbs/year)	CO (lbs/year)	PM (lbs/year)	VOC (lbs/year)
Natural Gas	90.31	4,969	30	4,174	378	273
Propane	0.59	94.6	0	908	14.6	10.9
Gasoline	0	0.04	0	1.50	0.03	0.13
Diesel	0.10	1.67	0.8	0.5800	0.24	0.08

6.2 EMISSIONS OF CO-POLLUTANTS FROM NON-GHG SOURCES

Goodyear's emissions also include HAPs from sources that do not emit GHGs. The manufacturing processes at the Facility produce emissions of aniline, hydroquinone, phenol, o-toluidine, o-xylene, and xylidine.

At present, VOC and HAP emissions from Elimination Tank No. 2 are being controlled by an interim activated carbon emissions control system. Goodyear is in the process of designing and purchasing a regenerative thermal oxidizer (RTO), that will replace the activated carbon system. Installation of the RTO is expected to be completed and commissioned by October 31, 2026 and is expected to reduce emissions of HAPs and VOCs by at least 90%. As shown in Table 5, the RTO is expected to reduce overall facility-wide HAP emissions by approximately 50%.

TABLE 5 CO-POLLUTANT EMISSIONS (PROCESS SOURCES)

Calculation Type	Co-Pollutant Emissions from Process Sources					
	HAPs (lbs/year)	NOx (lbs/year)	SO_2 (lbs/year)	CO (lbs/year)	PM (lbs/year)	VOC (lbs/year)
Potential to Emit	8,300	--	--	--	860	17,740
Current Actual Emissions	3,750	--	--	--	210	1,000
Future Actual Emissions	1,900	--	--	--	210	1,000

6.3 DISPROPORTIONATE BURDEN ANALYSIS

New York's Climate Justice Working Group (CJWG), comprised of representatives from state agencies and environmental justice groups across the State, was formed to identify DACs. The CJWG used 45 indicators to identify 35% of New York as DACs. The criteria include multiple indicators that represent the environmental burdens or climate change risks within a community, or population characteristics and health vulnerabilities that can contribute to more severe adverse effects of climate change. Consideration of these criteria is what led the CJWG to designate the Census Tract where the Goodyear Facility is located as a DAC.

The CLCPA requires the consideration of DACs in project siting and permitting. The Disadvantaged Community Assessment Tool (DACAT) is a screening tool created by NYSDEC to help assess disproportionality and consider whether a potentially affected DAC has an increased likelihood of experiencing a moderate to large impact based on existing burdens or vulnerabilities as compared to relevant non-DACs as required under the New York Environmental Justice Siting Law. Based on the NYS's Disadvantaged Communities Criteria Map, the area of Niagara County in which the Facility resides is classified as a DAC for environmental burden (49^{th} percentile) and population vulnerability (60^{th} percentile). Several of the specific DAC criteria that apply to the Facility's Census Tract 36063022000 are discussed below, including potential pollution exposures, land use, and facilities associated with historical discrimination.

6.3.1 POTENTIAL POLLUTION EXPOSURES

Tables 2 through 5 list the actual and potential-to-emit air contaminant emissions from the Facility. Any impacts from these emissions would be significantly below the applicable federal NAAQS and New York State air quality requirements, both of which are designed to be protective of human health and the environment. Accordingly, the Facility emissions do not now and will not after Permit renewal adversely impact human health or the environment in the community.

Table 6 below outlines the percentile this DAC falls under for each of the listed environmental burdens and climate change risk.

TABLE 6 ENVIRONMENTAL BURDEN AND CLIMATE CHANGE RISK – NYSDEC CRITERIA

Category	Environmental Burden and Climate Change Risk	State Percentile
Land Use and Historic Discrimination	Remediation sites	96
	Regulated Management Plan (Chemical) sites	100
	Major oil storage facilities	0
	Power generation facilities	51
	Active landfills	0
	Municipal waste combustors	75
	Scrap metal processing	0
	Industrial/manufacturing/mining land	94

Source: NYSDEC 2025

6.3.2 LAND USE AND HISTORIC DISCRIMINATION

6.3.2.1 PROXIMITY TO REMEDIATION SITES

This DAC is in the 96th percentile for proximity to remediation sites. According to the NYSDEC Environmental Site Remediation database[2], there are 12 hazardous waste remediation sites within 2,000 feet of the Facility. Because the Facility itself is not a remediation site, the impacts to the DAC from this criterion are relatively high but are not attributable to and are not under the control of the Facility.

6.3.2.2 PROXIMITY TO REGULATED MANAGEMENT PLAN FACILITIES

This DAC is in the 100th percentile for proximity to risk management plan (RMP) facilities (i.e., facilities with listed toxic or flammable substances above a threshold quantity). The Goodyear Facility itself is not a listed RMP facility. However, there are three other facilities in the DAC that do qualify as RMP facilities.[3] The Goodyear Facility does not store chemicals in quantities or concentrations that require the preparation of an RMP in accordance with 40 CFR Part 68. Because the Facility is not subject to RMP requirements and given the existence of other facilities in the vicinity subject to the RMP rule, the impacts to the DAC from this criterion are high but not attributable to and are not attributable to the Goodyear Facility.

[2] https://dec.ny.gov/environmental-protection/site-cleanup/database-search
[3] The EPA's RMP map shows three RMP facilities in the DAC, including the Durez Corporation, Niacet Corporation, and Michael C. O'Laughlin Municipal Water Plant. https://rmpmap.org/#@43.0816,-79.0345,11.8z

6.3.2.3 PROXIMITY TO MAJOR OIL STORAGE FACILITIES

The Facility is not a Major Oil Storage Facility (MOSF)[4] and the DAC is in the 0th percentile for this criterion. Therefore, additional analysis of this criterion is not required.

6.3.2.4 PROXIMITY TO POWER GENERATION FACILITIES

This DAC is in the 51st percentile for proximity to power generation facilities. The Robert Moses Niagara Hydroelectric Power Station is a generating facility located on the Niagara River within close proximity to the DAC; however, the potential air quality impacts from this power generating facility are negligible due to the nature of its renewable energy production. The Goodyear Facility is not a power generating facility, and minimizes the impacts from the power it uses through its ongoing energy reduction initiatives, and through the use of energy-efficient air pollution control devices.

6.3.2.5 PROXIMITY TO ACTIVE LANDFILLS

This DAC scored in the 0th percentile for proximity to active landfills. The Facility is not an active landfill, is not located near an active landfill, and therefore, additional analysis of this criterion is not required.

6.3.2.6 PROXIMITY TO MUNICIPAL WASTE COMBUSTORS

This DAC is in the 75th percentile for proximity to municipal waste combustors. There is a municipal waste-to-energy facility located within the Niagara Falls area that is the likely candidate that causes the relatively high scoring for this criterion; however, the Goodyear Facility doe not operate a municipal waste combustor, nor does it process waste onsite. Therefore, additional analysis of this criterion is not required.

6.3.2.7 PROXIMITY TO SCRAP METAL PROCESSORS

This DAC is in the 0th percentile for proximity to scrap metal processors. The Goodyear Facility is not a scrap metal processor, nor does it process scrap metal onsite, and no scrap metal processing facilities are located with the DAC. Therefore, additional analysis of this criterion is not required.

6.3.2.8 INDUSTRIAL/MANUFACTURING/MINING LAND USE

This DAC is in the 94th percentile for industrial, manufacturing, and/or mining land use. While the Facility is in an area that is zoned for industrial and manufacturing use, the Goodyear Facility delivers significant socio-economic benefits to the community including serving as a source for job creation and employee payroll, increased tax revenue for the City of Niagara Falls, Niagara Falls County, and New York State.

6.3.3 HEALTH IMPACTS AND BURDENS

Table 7 below outlines the percentile that this DAC falls under for each of the listed health impact and burdens. The sections that following Table 7 provide a summary of the Goodyear Facility contribution/impacts to these criteria

[4] MOSF facilities store a total of 400,000 gallons or more of petroleum in aboveground and underground storage tanks.

TABLE 7 POPULATION CHARACTERISTICS AND VULNERABILITY

Category	Population Characteristics and Vulnerability	State Percentile
Health Impacts and Burdens	Asthma ED Visits	63
	Chronic obstructive pulmonary disease ED visits	82
	Heart attack (MI) hospitalization	100
	Premature deaths	81
	Low birthweight	84
	Percent of population without health insurance	60
	Percent of population with disabilities	79
	Percent of adults age 65+	45

Source: NYSDEC 2025
ED = emergency department; MI = myocardial infarction

6.3.3.1 ASTHMA EMERGENCY DEPARTMENT VISITS

This DAC is in the 63rd percentile for asthma emergency department visits. This criterion is relevant because particulate matter emissions, particularly $PM_{2.5}$ and PM_{10}, have been linked to various health impacts, including asthma attacks, emergency room visits, and restricted activity days.

Facility emissions are minimized through the Facility's use of advanced air pollution control devices to achieve offsite ambient air concentrations of air emissions that are compliant with the applicable NAAQS and New York State requirements. The use of these air pollution control systems limits the Facility's contribution to particulate matter concentrations.

6.3.3.2 COPD EMERGENCY DEPARTMENT VISITS

This DAC is in the 82nd percentile for chronic obstructive pulmonary disease (COPD) emergency department visits. Air quality impacts from the Facility are minimized through the Facility's use of advanced air pollution control devices. These air pollution controls reduce air emissions to acceptable levels below the applicable NAAQS and New York State requirements. The use of these air pollution control systems limits the Facility's contribution of particulate matter and volatile organic compound emissions that would otherwise results in impacts to community members with COPD.

6.3.3.3 HEART ATTACK (MI) HOSPITALIZATION

This DAC is in the 100th percentile for heart attack hospitalization. The same considerations discussed in Sections 6.3.3.2 and 6.3.3.3 (e.g., control devices that ensure the Facility emissions are below applicable requirements) serve to limit Facility emissions and potential contribution to cardiac events. The high score for this criterion is more likely associated with other industrial facilities located within or within close proximity to the DAC.

6.3.3.4 PREMATURE DEATHS

This DAC is in the 81st percentile for premature deaths; however, the Facility's contribution to this criterion is minimal due to considerations mentioned in Sections above such as air pollution control devices that ensure the Facility air emissions are within acceptable applicable requirements. The high score for this criterion is more likely associated with other industrial facilities located within or within close proximity to the DAC.

6.3.3.5 LOW BIRTHWEIGHT

This DAC is in the 84th percentile for low birthweight. However, the Facility's contribution to this criterion is minimal due to its compliance with existing Permit limits and the considerations discussed in Sections above such as control devices that ensure the Facility emissions are below applicable requirements. The high score for this criterion is more likely associated with other industrial facilities located within or within close proximity to the DAC.

6.3.3.6 PERCENT WITHOUT HEALTH INSURANCE

This DAC is in the 60th percentile for people who do not have health insurance. To the extent the Facility has any impact on community-wide health insurance, the Facility provides high-paying jobs that include private health insurance benefits for its employees.

6.3.3.7 PERCENT WITH DISABILITIES

The DAC is in the 79th percentile for individuals with disabilities.[5] Individuals with disabilities can be more vulnerable to the impacts of climate change. However, the Facility's contribution to this criterion is minimal due to its compliance with existing Permit limits and the considerations discussed in Sections above such as air pollution control devices that ensure the Facility emissions are below applicable requirements.

6.3.3.8 PERCENT ADULTS AGED 65+

The DAC is in the 25th percentile for adults 65 years of age or older. However, the Facility's contribution to this criterion is minimal due to its compliance with existing Permit limits and the considerations discussed in Sections above such as control devices that ensure the Facility emissions are below applicable requirements.

7. CONSISTENCY WITH CLCPA GOALS

Renewal and modification of the Air State Facility Permit for The Goodyear Tire & Rubber Company's Niagara Falls facility includes calculations and estimates of GHG, co-pollutant and other federally regulated air contaminant emissions that are subject to and will continue to be compliant with the New York State and Federal-level Clean Air Act regulations (as authorized under the

[5] Percentage of tract population with at least one of 6 reported disability types: hearing difficulty, vision difficulty, cognitive difficulty, ambulatory difficulty, self-care difficulty, and independent living difficulty.

USEPA-delegated authority to the NYSDEC). Through New York's Environmental Conservation Law, which is enacted under the New York State Legislature's authority to protect the public health and safety and the environment, the GHGs, co-pollutants, and other federally regulated air contaminants do not pose a disproportionate burden on the adjacent DAC and will not interfere with the CLCPA's statewide goals, or result in a disproportionate burden on the disadvantaged community.

The currently installed and operating interim air emissions control system and the planned permanent air emissions control devices, once installed and operational, will result in a significant decrease in the amount of HAPs, HTACs, and VOC emissions from the Facility, further reducing the impacts from the Goodyear Facility to the surrounding DAC.

8. REFERENCES

Code of Federal Regulations. 40 CFR Part 98 – Mandatory Greenhouse Gas Reporting: Tables C-1 and C-2.

New York State Department of Environmental Conservation. DAR-21: *The Climate Leadership and Community Protection Act and Air Permit Applications*. Christopher M. LaLone, PE.; 12/14/2022.

New York State Department of Environmental Conservation. 6 NYCRR Part 496 Statewide Greenhouse Gas Emission Limits. Albany, NY.

New York State Department of Environmental Conservation. CP-49: *Climate Change and DEC Action*. Commissioner Basil Seggos, 12/14/2022.

New York State Department of Environmental Conservation, DEP-24-1*: Permitting and Disadvantaged Communities under the Climate Leadership and Community Protection Act*. Danel Whitehead. May 8, 2024. Albany, NY.

2025 Statewide GHG Emissions Report, Summary Report, Appendix A, New York State Department of Environmental Conservation, Albany, NY. December 2025.

URL: https://afleet.esia.anl.gov/afleet/payback-offroad-calculator. Accessed March 2026

APPENDIX F-1 CLCPA GREENHOUSE GAS SOURCES POTENTIAL TO EMIT

APPENDIX F-2 CLCPA GREENHOUSE GAS SOURCES ACTUAL EMISSIONS

APPENDIX F-3 CLCPA AFLEET MOBILE SOURCE RESULTS

APPENDIX F-4 PTE OF EXCLUSIVELY RTO

APPENDIX F-5 DBA WORKSHEET

EMISSION SOURCES

Natural Gas	MAXIMUM HEAT INPUT (MMBtu/hr)	COMMENTS
RTO	4	*Maximum Heat Input = 4,000 scfh x 1,000 Btu/scf HHV of 1,000 Btu/scf; Max flow of 4,000 scfh* *RTO has not been installed as of application submittal. The expected start of construction is in the 2nd half of 2025.*
Dowtherm Burner No. 1	3.1	
Dowtherm Burner No. 2	3.3	
Dowtherm Burner No. 3	3.0	
TOTAL	13.40	

Propane	MAXIMUM HEAT INPUT (MMBtu/yr)	COMMENTS
	669	Based on the highest propane usage of the past 5 years (occurred in 2024)
TOTAL	669	

Gasoline	MAXIMUM HEAT INPUT (MMBtu/yr)	COMMENTS
	18	Based on the highest gasoline usage of the past 5 years (occurred in 2023)
TOTAL	18	

Diesel	MAXIMUM HEAT INPUT (MMBtu/yr)	COMMENTS
	82	Based on the highest diesel usage of the past 5 years (occurred in 2023)
TOTAL	82	

POTENTIAL TO EMIT GHG's FOR IDENTIFIED SOURCES FIRING NATURAL GAS

0 Process Information

		COMMENTS
Maximum Potential Operating Hours (hrs/yr) =	8760	
Maximum Heat Input for Natural Gas (MMBtu/hr) =	13.40	
Maximum Heat Input for Natural Gas (MMBtu/yr) =	117,384	*= (Maximum Heat Input Rating for Boilers, MMBtu/hr) x (Maximum Potential Operating Hours, hrs/yr)*

1 PTE - "Upstream" GHG Emissions Resulting from Extraction, Production & Transmission of Natural Gas

	GREENHOUSE GASES				
	CO_2	CH_4	N_2O	TOTAL CO2e (20 yr GWP)	*NOTES*
Upstream Emission Factor (g/MMBtu) [1]	4,984	270	0.06	*27,641*	
Upstream Emission Factor (lb/MMBtu)	10.978	5.95E-01	1.3E-04	*60.883*	*= (Upstream Emission Factor, g/MMBtu) x [lb / 454 g]*
Upstream Emissions (lb/yr)	1.29E+06	6.98E+04	1.6E+01	*7.15E+06*	*= (Maximum Natural Gas Usage, MMBtu/yr) x (Upstream EF, lb/MMBtu)*
Upstream Emissions (ton/yr)	644.32	34.90	0.01	*3.57E+03*	*= (Upstream Emissions, lb/yr) x [ton/ 2000 lb]*
20-yr Global Warming Potential (GWP) [2]	1	84	264	---	
Upstream Emissions as CO2e (tons/yr)	644.32	2,932.01	2.05	3,578.38	*= (Upstream Emissions, ton/yr) x (20-yr GWP)*

[1] *Emission factors from the Appendix of NYSDEC "2024 NYS Statewide GHG Emissions Report", Table A1.*

[2] *GWP values from 6 NYCRR 496.5. (NOTE: These values reflect the 20-year GWP values for each compound. These values differ from the 100-yr GWP values that are used for permitting and NSR evaluations).*

2 PTE - Direct GHG Emissions from Combustion of Natural Gas

	GREENHOUSE GASES				
	CO_2	CH_4	N_2O	TOTAL CO2e (20 yr GWP)	*NOTES*
Combustion Emission Factor (kg/MMBtu) [1]	53.06	1.0E-03	1.0E-04	---	
Combustion Emission Factor (lb/MMBtu)	116.7	2.2E-03	2.2E-04	---	*= (Combustion Emission Factor, kg/MMBtu) x [2.2 lb / kg]*
Combustion Emissions (lb/yr)	1.37E+07	2.6E+02	2.6E+01	---	*= (Maximum Natural Gas Usage, MMBtu/yr) x (Combustion EF, lb/MMBtu)*
Combustion Emissions (ton/yr)	6.85E+03	1.3E-01	1.3E-02	---	*= (Combustion Emissions, lb/yr) x [ton/ 2000 lb]*
20-yr Global Warming Potential (GWP) [2]	1	84	264	---	
Combustion Emissions as CO2e (tons/yr)	6,851	10.85	3.41	6,865	*= (Combustion Emissions, ton/yr) x (20-yr GWP)*

[1] *Emission factors from 40 CFR Part 98 Subpart C, Tables C-1 & C-2.*

[2] *GWP values from 6 NYCRR 496.5. (NOTE: These values reflect the 20-year GWP values for each compound. These values differ from the 100-yr GWP values that are used for permitting and NSR evaluations).*

3 PTE - Total GHG Emissions from Use of Natural Gas

	GREENHOUSE GASES				
	CO_2	CH_4	N_2O	TOTAL CO2e (20 yr GWP)	*NOTES*
Total Emissions (tons/yr)	7,496	35.03	0.02	---	*= (Upstream GHG Emissions, tons/yr) + (Direct GHG Emissions, tons/yr)*
Total Emissions as CO2e (tons/yr)	7,496	2,943	5.46	10,444	*= (Upstream GHG Emissions, tons as CO2e/yr) + (Direct GHG Emissions, tons as CO2e/yr)*
Total Emissions as CO2e (metric tonnes/yr)	*6,800*	*2,670*	*4.95*	*9,475*	*= (Total Emissions as CO2e, tons/yr) x [(0.9072 metric tonne)/ (ton)]*

4 PTE - Emissions of Co-Pollutants (Hazardous Air Pollutants) from Combustion of Natural Gas

	POTENTIAL TO EMIT FOR CO-POLLUTANTS																
	TOTAL POM	Formaldehyde	Benzene	Naphthalene	Toluene	Hexane	Arsenic	Beryllium	Cadmium	Chromium	Cobalt	Lead	Manganese	Mercury	Nickel	Selenium	TOTAL HAPs [2]
Emission Factor (lb/MMBtu) [1]	6.83E-07	7.35E-05	2.06E-06	5.98E-07	3.33E-06	1.76E-03	1.96E-07	1.18E-08	1.08E-06	1.37E-06	8.24E-08	4.90E-07	3.73E-07	2.55E-07	2.06E-06	2.35E-08	---
Emissions (lb/yr)	8.01E-02	8.63E+00	2.42E-01	7.02E-02	3.91E-01	2.07E+02	2.30E-02	1.38E-03	1.27E-01	1.61E-01	9.67E-03	5.75E-02	4.37E-02	2.99E-02	2.42E-01	2.76E-03	217.19
Emissions (ton/yr)	4.01E-05	4.32E-03	1.21E-04	3.51E-05	1.96E-04	1.04E-01	1.15E-05	6.90E-07	6.33E-05	8.06E-05	4.83E-06	2.88E-05	2.19E-05	1.50E-05	1.21E-04	1.38E-06	0.11

Natural Gas[3]	NO_x	CO	SO_2	Total PM	VOCs
Emission Factor (lb/MMBtu)	9.80E-02	8.24E-02	5.88E-04	7.45E-03	5.39E-03
Emissions (lbs/year)	11,508.24	9,666.92	69.05	874.63	632.95

[1] *Emission factors (lb/MMBtu fuel input) taken from AP-42, Section 1.4 ("Natural Gas Combustion"),Tables 1.4-2, 1.4-3 & 1.4-4.*

[2] *Naphthalene is a listed HAP as well as part of "TOTAL POM". For the computation of "TOTAL HAPs", the value for "Naphthalene" as a listed HAP has been excluded so that Naphthalene is not double-counted.*

POTENTIAL TO EMIT GHG's FOR IDENTIFIED SOURCES FIRING MOTOR DIESEL

0 Process Information

		COMMENTS
Maximum Heat Input for Diesel (MMBtu/yr) =	82	Based on the highest diesel usage of the past 5 years (occurred in 2023)

1 PTE - "Upstream" GHG Emissions Resulting from Extraction, Production & Transmission of Diesel

	GREENHOUSE GASES				
	CO_2	CH_4	N_2O	TOTAL CO2e (20 yr GWP)	NOTES
Upstream Emission Factor (g/MMBtu) [1]	13,542	115	0.25	23,249	
Upstream Emission Factor (lb/MMBtu)	29.828	2.53E-01	5.5E-04	*51.21*	*= (Upstream Emission Factor, g/MMBtu) x [lb / 454 g]*
Upstream Emissions (lb/yr)	2,446	21	0.05	4,199	*= (Maximum Diesel Usage, MMBtu/yr) x (Upstream EF, lb/MMBtu)*
Upstream Emissions (ton/yr)	1.22E+00	1.04E-02	2.3E-05	*2.1*	*= (Upstream Emissions, lb/yr) x [ton/ 2000 lb]*
20-yr Global Warming Potential (GWP) [2]	1	84	264	---	
Upstream Emissions as CO2e (tons/yr)	1.22	0.87	0.006	2.10	*= (Upstream Emissions, ton/yr) x (20-yr GWP)*

[1] *Emission factors from the Appendix of NYSDEC "2024 NYS Statewide GHG Emissions Report", Table A1.*

[2] *GWP values from 6 NYCRR 496.5. (NOTE: These values reflect the 20-year GWP values for each compound. These values differ from the 100-yr GWP values that are used for permitting and NSR evaluations).*

2 PTE - Direct GHG Emissions from Combustion of Diesel

	GREENHOUSE GASES				
	CO_2	CH_4	N_2O	TOTAL CO2e (20 yr GWP)	NOTES
Combustion Emission Factor (kg/MMBtu) [1]	73.96	3.0E-03	6.0E-04	---	
Combustion Emission Factor (lb/MMBtu)	162.7	6.6E-03	1.3E-03	---	*= (Combustion Emission Factor, kg/MMBtu) x [2.2 lb / kg]*
Combustion Emissions (lb/yr)	13,342	0.5	0.11	---	*= (Maximum Diesel Usage, MMBtu/yr) x (Combustion EF, lb/MMBtu)*
Combustion Emissions (ton/yr)	6.67E+00	2.7E-04	5.4E-05	---	*= (Combustion Emissions, lb/yr) x [ton/ 2000 lb]*
20-yr Global Warming Potential (GWP) [2]	1	84	264	---	
Combustion Emissions as CO2e (tons/yr)	6.67	0.02	0.01	6.71	*= (Combustion Emissions, ton/yr) x (20-yr GWP)*

[1] *Emission factors from 40 CFR Part 98 Subpart C, Tables C-1 & C-2.*

[2] *GWP values from 6 NYCRR 496.5. (NOTE: These values reflect the 20-year GWP values for each compound. These values differ from the 100-yr GWP values that are used for permitting and NSR evaluations).*

3 PTE - Total GHG Emissions from Use of Diesel

	GREENHOUSE GASES				
	CO_2	CH_4	N_2O	TOTAL CO2e (20 yr GWP)	NOTES
Total Emissions (tons/yr)	7.89	0.01	7.67E-05	---	*= (Upstream GHG Emissions, tons/yr) + (Direct GHG Emissions, tons/yr)*
Total Emissions as CO2e (tons/yr)	7.89	0.90	0.02	8.81	*= (Upstream GHG Emissions, tons as CO2e/yr) + (Direct GHG Emissions, tons as CO2e/yr)*
Total Emissions as CO2e (metric tonnes/yr)	*7.16*	*0.81*	*0.02*	*7.99*	*= (Total Emissions as CO2e, tons/yr) x [(0.9072 metric tonne)/ (ton)]*

4 PTE - Emissions of Co-Pollutants (Hazardous Air Pollutants) from Combustion of Motor Diesel

	POTENTIAL TO EMIT FOR CO-POLLUTANTS							
	TOTAL POM	Formaldehyde	Benzene	Acetaldehyde	Acrolein	1,3-Butadiene	Toluene	Xylenes
Emission Factor (lb/MMBtu) [1]	1.68E-04	1.18E-03	9.33E-04	7.67E-04	9.25E-05	3.91E-05	4.09E-04	2.85E-04
Emissions (lb/yr)	0.01	0.10	0.08	0.06	0.008	0.003	0.03	0.02
Emissions (ton/yr)	6.89E-06	4.84E-05	3.83E-05	3.14E-05	3.79E-06	1.60E-06	1.68E-05	1.17E-05

Diesel[2]	NO_x	CO	SO_2	Total PM	VOCs
Emission Factor (lb/MMBtu)	AFLEET	AFLEET	AFLEET	AFLEET	AFLEET
Emissions (lbs/year)	2.33	0.82	0.04	1.05	0.10
Emissions (ton/yr)	1.17E-03	4.10E-04	2.00E-05	5.25E-04	5.00E-05

[1] *Since mobile source HAP emission factors are unavailable, emission factors are taken from AP-42, Section 3.3 ("Gasoline and Diesel Industrial Engines"), Table 3.3-2.*

[2] *Calculated using the AFLEET Tool: https://afleet.esia.anl.gov/afleet*

POTENTIAL TO EMIT GHG's FOR IDENTIFIED SOURCES FIRING PROPANE

0 Process Information

		COMMENTS
Maximum Heat Input for Propane (MMBtu/yr) =	669	Based on the highest propane usage of the past 5 years (occurred in 2024)

1 PTE - "Upstream" GHG Emissions Resulting from Extraction, Production & Transmission of Propane

	GREENHOUSE GASES				
	CO_2	CH_4	N_2O	TOTAL CO2e (20 yr GWP)	NOTES
Upstream Emission Factor (g/MMBtu) [1]	16,429	119	0.27	26,184	
Upstream Emission Factor (lb/MMBtu)	36.187	0.26	5.9E-04	*57.674*	*= (Upstream Emission Factor, g/MMBtu) x [lb / 454 g]*
Upstream Emissions (lb/yr)	24,209.25	175.35	0.40	6,770,006	*= (Maximum Propane Usage, MMBtu/yr) x (Upstream EF, lb/MMBtu)*
Upstream Emissions (ton/yr)	12.10	0.09	1.99E-04	*3385.00*	*= (Upstream Emissions, lb/yr) x [ton/ 2000 lb]*
20-yr Global Warming Potential (GWP) [2]	1	84	264	---	
Upstream Emissions as CO2e (tons/yr)	12.10	7.36	0.05	19.52	*= (Upstream Emissions, ton/yr) x (20-yr GWP)*

[1] *Emission factors from the Appendix of NYSDEC "2024 NYS Statewide GHG Emissions Report", Table A1.*

[2] *GWP values from 6 NYCRR 496.5. (NOTE: These values reflect the 20-year GWP values for each compound. These values differ from the 100-yr GWP values that are used for permitting and NSR evaluations).*

2 PTE - Direct GHG Emissions from Combustion of Propane

	GREENHOUSE GASES				
	CO_2	CH_4	N_2O	TOTAL CO2e (20 yr GWP)	NOTES
Combustion Emission Factor (kg/MMBtu) [1]	62.87	3.0E-03	6.0E-04	---	
Combustion Emission Factor (lb/MMBtu)	138.3	6.6E-03	1.3E-03	---	*= (Combustion Emission Factor, kg/MMBtu) x [2.2 lb / kg]*
Combustion Emissions (lb/yr)	92,532	4.42	0.88	---	*= (Maximum Propane Usage, MMBtu/yr) x (Combustion EF, lb/MMBtu)*
Combustion Emissions (ton/yr)	4.63E+01	2.2E-03	4.4E-04	---	*= (Combustion Emissions, lb/yr) x [ton/ 2000 lb]*
20-yr Global Warming Potential (GWP) [2]	1	84	264	---	
Combustion Emissions as CO2e (tons/yr)	46.27	0.19	0.12	46.57	*= (Combustion Emissions, ton/yr) x (20-yr GWP)*

[1] *Emission factors from 40 CFR Part 98 Subpart C, Tables C-1 & C-2.*

[2] *GWP values from 6 NYCRR 496.5. (NOTE: These values reflect the 20-year GWP values for each compound. These values differ from the 100-yr GWP values that are used for permitting and NSR evaluations).*

3 PTE - Total GHG Emissions from Use of Propane

	GREENHOUSE GASES				
	CO_2	CH_4	N_2O	TOTAL CO2e (20 yr GWP)	NOTES
Total Emissions (tons/yr)	58.37	0.09	6.40E-04	---	*= (Upstream GHG Emissions, tons/yr) + (Direct GHG Emissions, tons/yr)*
Total Emissions as CO2e (tons/yr)	58.37	7.55	0.17	66.09	*= (Upstream GHG Emissions, tons as CO2e/yr) + (Direct GHG Emissions, tons as CO2e/yr)*
Total Emissions as CO2e (metric tonnes/yr)	*52.95*	*6.85*	*0.15*	*59.96*	*= (Total Emissions as CO2e, tons/yr) x [(0.9072 metric tonne)/ (ton)]*

4 PTE - Emissions of Co-Pollutants (Hazardous Air Pollutants) from Combustion of Propane

	POTENTIAL TO EMIT FOR CO-POLLUTANTS																
	TOTAL POM	Formaldehyde	Benzene	Naphthalene	Toluene	Hexane	Arsenic	Beryllium	Cadmium	Chromium	Cobalt	Lead	Manganese	Mercury	Nickel	Selenium	TOTAL HAPs [2]
Emission Factor (lb/MMBtu) [1]	6.83E-07	7.35E-05	2.06E-06	5.98E-07	3.33E-06	1.76E-03	1.96E-07	1.18E-08	1.08E-06	1.37E-06	8.24E-08	4.90E-07	3.73E-07	2.55E-07	2.06E-06	2.35E-08	---
Emissions (lb/yr)	4.57E-04	0.05	1.38E-03	4.00E-04	0.002	1.18	1.31E-04	7.87E-06	7.21E-04	9.18E-04	5.51E-05	3.28E-04	2.49E-04	1.71E-04	1.38E-03	1.57E-05	1.24
Emissions (ton/yr)	2.28E-07	2.46E-05	6.89E-07	2.00E-07	1.12E-06	5.90E-04	6.56E-08	3.94E-09	3.61E-07	4.59E-07	2.75E-08	1.64E-07	1.25E-07	8.53E-08	6.89E-07	7.87E-09	0.0006

Propane [2]	NO_x	CO	SO_2	Total PM	VOCs
Emission Factor (lb/MMBtu)	AFLEET	AFLEET	AFLEET	AFLEET	AFLEET
Emissions (lbs/year)	130.09	1,124.93	0.00	20.16	14.07
Emissions (ton/yr)	6.50E-02	5.62E-01	0.00E+00	1.01E-02	7.04E-03

[1] *Since mobile source HAP emission factors are unavailable, emission factors are taken from AP-42, Section 3.3 ("Gasoline and Diesel Industrial Engines"), Table 3.3-2.*

[2] *Calculated using the AFLEET Tool: https://afleet.esia.anl.gov/afleet*

POTENTIAL TO EMIT GHG's FOR IDENTIFIED SOURCES FIRING MOTOR GASOLINE

0 Process Information

		COMMENTS
Maximum Heat Input for Gasoline (MMBtu/yr) =	18	Based on the highest gasoline usage of the past 5 years (occurred in 2023)

1 PTE - "Upstream" GHG Emissions Resulting from Extraction, Production & Transmission of Gasoline

	GREENHOUSE GASES				
	CO_2	CH_4	N_2O	TOTAL CO2e (20 yr GWP)	NOTES
Upstream Emission Factor (g/MMBtu) [1]	18,338	124	0.32	28,570	
Upstream Emission Factor (lb/MMBtu)	40.39	0.27	0.00	*62.93*	*= (Upstream Emission Factor, g/MMBtu) x [lb / 454 g]*
Upstream Emissions (lb/yr)	2,780.71	0.12	0.02	5,160.22	*= (Maximum Gasoline Usage, MMBtu/yr) x (Upstream EF, lb/MMBtu)*
Upstream Emissions (ton/yr)	1.39	5.94E-05	1.19E-05	*2.58*	*= (Upstream Emissions, lb/yr) x [ton/ 2000 lb]*
20-yr Global Warming Potential (GWP) [2]	1	84	264	---	
Upstream Emissions as CO2e (tons/yr)	1.39	4.99E-03	3.14E-03	1.40	*= (Upstream Emissions, ton/yr) x (20-yr GWP)*

[1] *Emission factors from the Appendix of NYSDEC "2024 NYS Statewide GHG Emissions Report", Table A1.*

[2] *GWP values from 6 NYCRR 496.5. (NOTE: These values reflect the 20-year GWP values for each compound. These values differ from the 100-yr GWP values that are used for permitting and NSR evaluations).*

2 PTE - Direct GHG Emissions from Combustion of Gasoline

	GREENHOUSE GASES				
	CO_2	CH_4	N_2O	TOTAL CO2e (20 yr GWP)	NOTES
Combustion Emission Factor (kg/MMBtu) [1]	70.22	3.0E-03	6.0E-04	---	
Combustion Emission Factor (lb/MMBtu)	154.5	0.007	0.001	---	*= (Combustion Emission Factor, kg/MMBtu) x [2.2 lb / kg]*
Combustion Emissions (lb/yr)	2,781	0.12	0.02	---	*= (Maximum Gasoline Usage, MMBtu/yr) x (Combustion EF, lb/MMBtu)*
Combustion Emissions (ton/yr)	1.39	5.94E-05	1.19E-05	---	*= (Combustion Emissions, lb/yr) x [ton/ 2000 lb]*
20-yr Global Warming Potential (GWP) [2]	1	84	264	---	
Combustion Emissions as CO2e (tons/yr)	1.39	0.005	0.003	1.40	*= (Combustion Emissions, ton/yr) x (20-yr GWP)*

[1] *Emission factors from 40 CFR Part 98 Subpart C, Tables C-1 & C-2.*

[2] *GWP values from 6 NYCRR 496.5. (NOTE: These values reflect the 20-year GWP values for each compound. These values differ from the 100-yr GWP values that are used for permitting and NSR evaluations).*

3 PTE - Total GHG Emissions from Use of Gasoline

	GREENHOUSE GASES				
	CO_2	CH_4	N_2O	TOTAL CO2e (20 yr GWP)	NOTES
Total Emissions (tons/yr)	2.78	1.19E-04	2.38E-05	---	*= (Upstream GHG Emissions, tons/yr) + (Direct GHG Emissions, tons/yr)*
Total Emissions as CO2e (tons/yr)	2.78	0.01	0.01	2.80	*= (Upstream GHG Emissions, tons as CO2e/yr) + (Direct GHG Emissions, tons as CO2e/yr)*
Total Emissions as CO2e (metric tonnes/yr)	*2.52*	*0.01*	*0.01*	*2.54*	*= (Total Emissions as CO2e, tons/yr) x [(0.9072 metric tonne)/ (ton)]*

4 PTE - Emissions of Co-Pollutants (Hazardous Air Pollutants) from Combustion of Gasoline

	POTENTIAL TO EMIT FOR CO-POLLUTANTS							
	TOTAL POM	Formaldehyde	Benzene	Acetaldehyde	Acrolein	1,3-Butadiene	Toluene	Xylenes
Emission Factor (lb/MMBtu) [1]	1.68E-04	1.18E-03	9.33E-04	7.67E-04	9.25E-05	3.91E-05	4.09E-04	2.85E-04
Emissions (lb/yr)	0.003	0.02	0.02	0.01	0.002	0.001	0.01	0.01
Emissions (ton/yr)	1.51E-06	1.06E-05	8.40E-06	6.90E-06	8.33E-07	3.52E-07	3.68E-06	2.57E-06
Gasoline[2]	NO_x	CO	SO_2	Total PM	VOCs			
Emission Factor (lb/MMBtu)	AFLEET	AFLEET	AFLEET	AFLEET	AFLEET			
Emissions (lbs/year)	0.04	1.50	0.00	0.03	0.13			
Emissions (ton/yr)	2.00E-05	7.50E-04	0.00E+00	1.50E-05	6.50E-05			

[1] *Since mobile source HAP emission factors are unavailable, emission factors are taken from AP-42, Section 3.3 ("Gasoline and Diesel Industrial Engines"), Table 3.3-2.*

[2] *Calculated using the AFLEET Tool: https://afleet.esia.anl.gov/afleet*

2020 Combustion Emissions (GHG and Co-Pollutants)

2020 Facility-Wide Fuel Usage			
Fuel Type	**Source**	**MMBtu**	**Gallons**
Natural Gas	Facility Wide NG Usage	40,808	
Propane	Off-Road Propane Usage	249	2,560
Diesel	Off-road Diesel Usage	14	100
Gasoline	Vehicle Gas Usage	10	80

Facility-Wide Upstream Actual GHG Emissions[1]				
Natural Gas	CO_2	CH_4	N_2O	
Upstream Emission Factor (g/MMBtu)	4,984	270	0.06	
Upstream Emissions (MT)	203	11	0.0024	
Propane				
Upstream Emission Factor (g/MMBtu)	16,326	117	0.27	
Upstream Emissions (MT)	4	0.03	0.0001	
Diesel				
Upstream Emission Factor (g/MMBtu)	13,542	115	0.25	
Upstream Emissions (MT)	0.187	0.002	0.000003	
Gasoline				
Upstream Emission Factor (g/MMBtu)	18,276	122	0.32	
Upstream Emissions (MT)	0.18	1.22E-03	3.20E-06	
20-year Global Warming Potential (GWP)	1	84	264	**Grand Total CO_2e(Upstream)**
Total Upstream Emissions as CO2e (MT/year)	223	928	1	1,152

[1] *Emission factors from the Appendix of NYSDEC "2025 NYS Statewide GHG Emissions Report", Table A1.*

Facility-Wide Direct Actual GHG Emissions[2]				
Natural Gas	CO_2	CH_4	N_2O	
Combustion Emission Factor (kg/MMBtu)	61.71	0.003	0.0006	
Direct Emissions (MT)	2518.27	0.12	0.02	
Propane				
Combustion Emission Factor (kg/MMBtu)	62.87	0.003	0.0006	
Direct Emissions (MT)	15.67	0.0007	0.0001	
Diesel				
Combustion Emission Factor (kg/MMBtu)	73.96	0.003	0.0006	
Direct Emissions (MT)	1.02	0.00004	0.00001	
Gasoline				
Combustion Emission Factor (kg/MMBtu)	70.22	0.003	0.0006	
Direct Emissions (MT)	0.70	3.00E-05	6.00E-06	
20-year Global Warming Potential (GWP)	1	84	264	**Grand Total CO_2e(Direct)**
Total Direct Emissions as CO2e (MT/year)	2,518	10	6	2,535

[2] *Emission factors from 40 CFR Part 98 Subpart C, Tables C-1 & C-2.*

Total 2020 CO_2e Upstream + Direct (MT/year)	3,687

Facility-Wide Actual Co-Pollutant Emissions from GHG Sources

	Total POM	Formaldehyde	Benzene	Acetaldehyde	1,3-Butadiene	1,1,1-Trichloroethane	Napthalene	Ethylbenz	Toluene	Xylenes
Natural Gas[3]										
Emission Factor (lb/MMBtu)	6.83E-07	7.35E-05	2.06E-06	-	-	-	5.98E-07	-	3.33E-06	-
Emissions (lbs/year)	0.03	3.00	0.08	-	-	-	0.02	-	0.14	-
Propane[4]										
Emission Factor (lb/MMBtu)	6.83E-07	7.35E-05	2.06E-06	-	-		5.98E-07		3.33E-06	
Emissions (lbs/year)	1.70E-04	1.83E-02	5.13E-04	0.00E+00	0.00E+00	-	1.49E-04	-	8.31E-04	-
Diesel[5]										
Emission Factor (lb/MMBtu)	0.0002	0.0012	0.0009	0.0008	3.91E-05	-	-	-	0.0004	0.0003
Emissions (lbs/year)	0.0023	0.0163	0.0129	0.0106	0.0005	-	-	-	0.0056	0.0039
Gasoline[5]										
Emission Factor (lb/MMBtu)	0.0002	0.0012	0.0009	0.0008	3.91E-05	-	-	-	0.0004	0.0003
Emissions (lbs/year)	0.0017	0.0118	0.0093	0.0077	0.0004	-	-	-	0.0041	0.0029
Total HAP Co-Pollutant Emissions (lbs/year)	0.03	3.05	0.11	0.02	0.00	-	0.02	-	0.15	0.01
Total HAP Co-Pollutant Emissions (tons/year)	1.60E-05	0.0015	5.34E-05			-	1.23E-05	-	7.33E-05	0.00

	Hexane	Arsenic	Beryllium	Cadmium	Chromium	Cobalt	Lead	Manganes	Mercury	Nickel	Selenium
Natural Gas[3]											
Emission Factor (lb/MMBtu)	1.76E-03	1.96E-07	1.18E-08	1.08E-06	1.37E-06	8.24E-08	4.90E-07	3.73E-07	2.55E-07	2.06E-06	2.35E-08
Emissions (lbs/year)	72.01	0.01	0.00	0.04	0.06	0.00	0.02	0.02	0.01	0.08	0.00
Propane[4]											
Emission Factor (lb/MMBtu)	1.76E-03	1.96E-07	1.18E-08	1.08E-06	1.37E-06	8.24E-08	4.90E-07	3.73E-07	2.55E-07	2.06E-06	2.35E-08
Emissions (lbs/year)	4.40E-01	4.89E-05	2.93E-06	2.69E-04	3.42E-04	2.05E-05	1.22E-04	9.29E-05	6.35E-05	5.13E-04	5.87E-06
Diesel[5]											
Emission Factor (lb/MMBtu)	-	-	-	-	-	-	-	-	-	-	-
Emissions (lbs/year)	-	-	-	-	-	-	-	-	-	-	-
Gasoline[5]											
Emission Factor (lb/MMBtu)	-	-	-	-	-	-	-	-	-	-	-
Emissions (lbs/year)	-	-	-	-	-	-	-	-	-	-	-
Total HAP Co-Pollutant Emissions (lbs/year)	72.45	0.01	0.0005	0.04	0.06	0.0034	0.02	0.02	0.01	0.08	0.001
Total HAP Co-Pollutant Emissions (tons/year)	3.62E-02	4.03E-06	2.42E-07	2.21E-05	2.82E-05	1.69E-06	1.01E-05	7.65E-06	5.23E-06	4.23E-05	4.83E-07

Natural Gas[3]	NO_x	CO	SO_2	Total PM	VOCs
Emission Factor (lb/MMBtu)	9.80E-02	8.24E-02	5.88E-04	7.45E-03	5.39E-03
Emissions (lbs/year)	4,000.80	3,360.67	24.00	304.06	220.04
Propane[4]					
Emission Factor (lb/MMBtu)	AFLEET	AFLEET	AFLEET	AFLEET	AFLEET
Emissions (lbs/year)	94.67	898.27	0.03	15.43	10.85
Diesel[4]					
Emission Factor (lb/MMBtu)	AFLEET	AFLEET	AFLEET	AFLEET	AFLEET
Emissions (lbs/year)	51.57	17.48	0.76	7.35	2.75
Gasoline[4]					
Emission Factor (lb/MMBtu)	AFLEET	AFLEET	AFLEET	AFLEET	AFLEET
Emissions (lbs/year)	0.04	1.50	0	0.03	0.15

[3] *Emission factors for natural gas are taken from AP-42, Section 1.4 ("Natural Gas Combustion"), Tables 1.4-3 & 1.4-4. AP-42, Section 1.4 ("Natural Gas Combustion"), Tables 1.4-3 & 1.4-4.*
Where AP-42 provides a value in units of lb/10^6 scf, the value was converted to lb/MMBtu as follows:
(EF, lb/MMBtu) = (EF, lb/10^6 scf) x (scf /1020 Btu) x [10^6 Btu/MMBtu]
NOTE: The footnotes to AP-42 Tables 1.4-3 & 1.4.4 indicate that a value of 1020 Btu/scf should be used to convert the emission factor (in lb/10^6 scf) to lb/MMBtu.

[4] *Calculated using the AFLEET Tool: https://afleet.esia.anl.gov/afleet*

2021 Combustion Emissions (GHG and Co-Pollutants)

2021 Facility-Wide Fuel Usage			
Fuel Type	**Source**	**MMBtu**	**Gallons**
Natural Gas	Facility Wide NG Usage	52,578	
Propane	Off-Road Propane Usage	296	3,008
Diesel	Off-road Diesel Usage	28	200
Gasoline	Vehicle Gas Usage	10	80

Facility-Wide Upstream Actual GHG Emissions[1]	CO_2	CH_4	N_2O	
Natural Gas				
Upstream Emission Factor (g/MMBtu)	4,984	270	0.06	
Upstream Emissions (MT)	262.05	14.20	0.00	
Propane				
Upstream Emission Factor (g/MMBtu)	16,326	117	0.27	
Upstream Emissions (MT)	5	0.03	0.0001	
Diesel				
Upstream Emission Factor (g/MMBtu)	13,542	115	0.25	
Upstream Emissions (MT)	0.374	0.003	6.90E-06	
Gasoline				
Upstream Emission Factor (g/MMBtu)	18,276	122	0.32	
Upstream Emissions (MT)	0.18	1.22E-03	3.20E-06	
20-year Global Warming Potential (GWP)	1	84	264	**Grand Total CO_2e(Upstream)**
Total Upstream Emissions as CO2e (MT/year)	282	1,196	1	1,479

[1] *Emission factors from the Appendix of NYSDEC "2025 NYS Statewide GHG Emissions Report", Table A1.*

Facility-Wide Direct Actual GHG Emissions[2]	CO_2	CH_4	N_2O	
Natural Gas				
Combustion Emission Factor (kg/MMBtu)	61.71	0.003	0.0006	
Direct Emissions (MT)	3244.58	0.16	0.03	
Propane				
Combustion Emission Factor (kg/MMBtu)	62.87	0.003	0.0006	
Direct Emissions (MT)	18.60	0.0009	0.0002	
Diesel				
Combustion Emission Factor (kg/MMBtu)	73.96	0.003	0.0006	
Direct Emissions (MT)	2.04	0.00008	0.00002	
Gasoline				
Combustion Emission Factor (kg/MMBtu)	70.22	0.003	0.0006	
Direct Emissions (MT)	0.70	3.00E-05	6.00E-06	
20-year Global Warming Potential (GWP)	1	84	264	**Grand Total CO_2e(Direct)**
Total Upstream Emissions as CO2e (MT/year)	3,265	13.3	8	3,286

[2] *Emission factors from 40 CFR Part 98 Subpart C, Tables C-1 & C-2.*

Total 2021 CO_2e Upstream + Direct (MT/year)	4,765

Facility-Wide Actual Co-Pollutant Emissions from GHG Sources

	Total POM	Formaldehyde	Benzene	Acetaldehyde	1,3-Butadiene	1,1,1-Trichloroethane	Napthalene	Ethylbenz	Toluene	Xylenes
Natural Gas[3]										
Emission Factor (lb/MMBtu)	6.83E-07	7.35E-05	2.06E-06	-	-	-	5.98E-07	-	3.33E-06	-
Emissions (lbs/year)	0.04	3.87	0.11			-	0.03	-	0.18	-
Propane[4]										
Emission Factor (lb/MMBtu)	6.83E-07	7.35E-05	2.06E-06	-	-		5.98E-07		3.33E-06	
Emissions (lbs/year)	2.02E-04	2.17E-02	6.09E-04	-	-	-	1.77E-04	-	9.86E-04	-
Diesel[5]										
Emission Factor (lb/MMBtu)	0.0002	0.0012	0.0009	0.0008	3.91E-05	-	-	-	0.0004	0.0003
Emissions (lbs/year)	0.0046	0.0326	0.0258	0.0212	0.0011	-	-	-	0.0113	0.0079
Gasoline[5]										
Emission Factor (lb/MMBtu)	0.0002	0.0012	0.0009	0.0008	3.91E-05	-	-	-	0.0004	0.0003
Emissions (lbs/year)	0.0017	0.0118	0.0093	0.0077	0.0004	-	-	-	0.0041	0.0029
Total Co-Pollutant Emissions (lbs/year)	0.04	3.93	0.14	0.03	0.00	-	0.03	-	0.19	0.01
Total Co-Pollutant Emissions (tons/year)	2.12E-05	0.0020	7.20E-05	1.44E-05	7.35E-07	-	1.58E-05	-	9.58E-05	0.00

	Hexane	Arsenic	Beryllium	Cadmium	Chromium	Cobalt	Lead	Manganes	Mercury	Nickel	Selenium
Natural Gas[3]											
Emission Factor (lb/MMBtu)	1.76E-03	1.96E-07	1.18E-08	1.08E-06	1.37E-06	8.24E-08	4.90E-07	3.73E-07	2.55E-07	2.06E-06	2.35E-08
Emissions (lbs/year)	92.78	0.01	0.00	0.06	0.07	0.00	0.03	0.02	0.01	0.11	0.00
Propane[4]											
Emission Factor (lb/MMBtu)	1.76E-03	1.96E-07	1.18E-08	1.08E-06	1.37E-06	8.24E-08	4.90E-07	3.73E-07	2.55E-07	2.06E-06	2.35E-08
Emissions (lbs/year)	5.22E-01	5.80E-05	3.48E-06	3.19E-04	4.06E-04	2.44E-05	1.45E-04	1.10E-04	7.54E-05	6.09E-04	6.96E-06
Diesel[5]											
Emission Factor (lb/MMBtu)	-	-	-	-	-	-	-	-	-	-	-
Emissions (lbs/year)	-	-	-	-	-	-	-	-	-	-	-
Gasoline[5]											
Emission Factor (lb/MMBtu)	-	-	-	-	-	-	-	-	-	-	-
Emissions (lbs/year)	-	-	-	-	-	-	-	-	-	-	-
Total Co-Pollutant Emissions (lbs/year)	93.31	0.01	0.0006	0.06	0.07	0.0044	0.03	0.02	0.01	0.11	0.001
Total Co-Pollutant Emissions (tons/year)	4.67E-02	5.18E-06	3.11E-07	2.85E-05	3.63E-05	2.18E-06	1.30E-05	9.85E-06	6.74E-06	5.44E-05	6.22E-07

	NO_x	CO	SO_2	Total PM	VOCs
Natural Gas[3]					
Emission Factor (lb/MMBtu)	9.80E-02	8.24E-02	5.88E-04	7.45E-03	5.39E-03
Emissions (lbs/year)	5,155	4,330	31	392	284
Propane[4]					
Emission Factor (lb/MMBtu)	AFLEET	AFLEET	AFLEET	AFLEET	AFLEET
Emissions (lbs/year)	114	1,011	0	17.56	12.50
Diesel[4]					
Emission Factor (lb/MMBtu)	AFLEET	AFLEET	AFLEET	AFLEET	AFLEET
Emissions (lbs/year)	59.02	20.20	0.92	7.75	3.15
Gasoline[4]					
Emission Factor (lb/MMBtu)	AFLEET	AFLEET	AFLEET	AFLEET	AFLEET
Emissions (lbs/year)	0.04	1.50	0	0.03	0.15

[3] *Emission factors for natural gas are taken from AP-42, Section 1.4 ("Natural Gas Combustion"), Tables 1.4-3 & 1.4-4. AP-42, Section 1.4 ("Natural Gas Combustion"), Tables 1.4-3 & 1.4-4.*
[4] *Calculated using the AFLEET Tool: https://afleet.esia.anl.gov/afleet*

2022 Combustion Emissions (GHG and Co-Pollutants)

2022 Facility-Wide Fuel Usage			
Fuel Type	Source	MMBtu	Gallons
Natural Gas	Facility Wide NG Usage	48,794	
Propane	Off-Road Propane Usage	318	3,472
Diesel	Off-road Diesel Usage	24	175
Gasoline	Vehicle Gas Usage	10	80

Facility-Wide Upstream Actual GHG Emissions[1]				
Natural Gas	CO_2	CH_4	N_2O	
Upstream Emission Factor (g/MMBtu)	12549	337	0.14	
Upstream Emissions (MT)	612.31	16.44	0.01	
Propane				
Upstream Emission Factor (g/MMBtu)	16,326	117	0.27	
Upstream Emissions (MT)	5	0.04	0.0001	
Diesel				
Upstream Emission Factor (g/MMBtu)	13,542	115	0.25	
Upstream Emissions (MT)	0.327	0.003	6.04E-06	
Gasoline				
Upstream Emission Factor (g/MMBtu)	18,276	122	0.32	
Upstream Emissions (MT)	0.18	1.22E-03	3.20E-06	
20-year Global Warming Potential (GWP)	1	84	264	**Grand Total CO_2e(Upstream)**
Total Upstream Emissions as CO2e (MT/year)	632	1,385	2	2,019

[1] *Emission factors from the Appendix of NYSDEC "2024 NYS Statewide GHG Emissions Report", Table A1.*

Facility-Wide Direct Actual GHG Emissions[2]				
Natural Gas	CO_2	CH_4	N_2O	
Combustion Emission Factor (kg/MMBtu)	61.71	0.003	0.0006	
Direct Emissions (MT)	3011.06	0.15	0.03	
Propane				
Combustion Emission Factor (kg/MMBtu)	62.87	0.003	0.0006	
Direct Emissions (MT)	20.01	0.0010	0.0002	
Diesel				
Combustion Emission Factor (kg/MMBtu)	73.96	0.003	0.0006	
Direct Emissions (MT)	1.79	0.00007	0.00001	
Gasoline				
Combustion Emission Factor (kg/MMBtu)	70.22	0.003	0.0006	
Direct Emissions (MT)	0.70	3.00E-05	6.00E-06	
20-year Global Warming Potential (GWP)	1	84	264	**Grand Total CO_2e(Direct)**
Total Upstream Emissions as CO2e (MT/year)	3,031	12	8	3,051

[2] *Emission factors from 40 CFR Part 98 Subpart C, Tables C-1 & C-2.*

Total 2022 CO_2e Upstream + Direct (MT/year)	5,070

Facility-Wide Actual Co-Pollutant Emissions from GHG Sources

	Total POM	Formaldehyde	Benzene	Acetaldehyde	1,3-Butadiene	1,1,1-Trichloroethane	Napthalene	Ethylbenz	Toluene	Xylenes
Natural Gas[3]										
Emission Factor (lb/MMBtu)	6.83E-07	7.35E-05	2.06E-06	-	-	-	5.98E-07		3.33E-06	-
Emissions (lbs/year)	0.03	3.59	0.10	-	-	-	0.03	-	0.16	-
Propane[4]										
Emission Factor (lb/MMBtu)	6.83E-07	7.35E-05	2.06E-06	-	-		5.98E-07		3.33E-06	
Emissions (lbs/year)	2.17E-04	2.34E-02	6.55E-04	-	-	-	1.90E-04	-	1.06E-03	-
Diesel[5]										
Emission Factor (lb/MMBtu)	0.0002	0.0012	0.0009	0.0008	3.91E-05	-	-	-	0.0004	0.0003
Emissions (lbs/year)	0.0041	0.0285	0.0225	0.0185	0.0009	-	-	-	0.0099	0.0069
Gasoline[5]										
Emission Factor (lb/MMBtu)	0.0002	0.0012	0.0009	0.0008	3.91E-05	-	-	-	0.0004	0.0003
Emissions (lbs/year)	0.0017	0.0118	0.0093	0.0077	0.0004	-	-	-	0.0041	0.0029
Total Co-Pollutant Emissions (lbs/year)	0.04	3.65	0.13	0.03	0.00	-	0.03	-	0.18	0.01
Total Co-Pollutant Emissions (tons/year)	1.96E-05	0.0018	6.65E-05	1.31E-05	6.68E-07	-	1.47E-05	-	8.88E-05	0.00

	Hexane	Arsenic	Beryllium	Cadmium	Chromium	Cobalt	Lead	Manganes	Mercury	Nickel	Selenium
Natural Gas[3]											
Emission Factor (lb/MMBtu)	1.76E-03	1.96E-07	1.18E-08	1.08E-06	1.37E-06	8.24E-08	4.90E-07	3.73E-07	2.55E-07	2.06E-06	2.35E-08
Emissions (lbs/year)	86.11	0.01	0.00	0.05	0.07	0.00	0.02	0.02	0.01	0.10	0.00
Propane[4]											
Emission Factor (lb/MMBtu)	1.76E-03	1.96E-07	1.18E-08	1.08E-06	1.37E-06	8.24E-08	4.90E-07	3.73E-07	2.55E-07	2.06E-06	2.35E-08
Emissions (lbs/year)	5.62E-01	6.24E-05	3.74E-06	3.43E-04	4.37E-04	2.62E-05	1.56E-04	1.19E-04	8.11E-05	6.55E-04	7.49E-06
Diesel[5]											
Emission Factor (lb/MMBtu)	-	-	-	-	-	-	-	-	-	-	-
Emissions (lbs/year)	-	-	-	-	-	-	-	-	-	-	-
Gasoline[5]											
Emission Factor (lb/MMBtu)	-	-	-	-	-	-	-	-	-	-	-
Emissions (lbs/year)	-	-	-	-	-	-	-	-	-	-	-
Total Co-Pollutant Emissions (lbs/year)	86.67	0.01	0.0006	0.05	0.07	0.0040	0.02	0.02	0.01	0.10	0.001
Total Co-Pollutant Emissions (tons/year)	4.33E-02	4.81E-06	2.89E-07	2.65E-05	3.37E-05	2.02E-06	1.20E-05	9.15E-06	6.26E-06	5.06E-05	5.78E-07

Natural Gas[3]	NO_x	CO	SO_2	Total PM	VOCs
Emission Factor (lb/MMBtu)	9.80E-02	8.24E-02	5.88E-04	7.45E-03	5.39E-03
Emissions (lbs/year)	4,784	4,018	29	364	263
Propane[4]					
Emission Factor (lb/MMBtu)	AFLEET	AFLEET	AFLEET	AFLEET	AFLEET
Emissions (lbs/year)	132	1,126	0	20.46	14.16
Diesel[4]					
Emission Factor (lb/MMBtu)	AFLEET	AFLEET	AFLEET	AFLEET	AFLEET
Emissions (lbs/year)	65.95	22.74	1.06	8.90	3.53
Gasoline[4]					
Emission Factor (lb/MMBtu)	AFLEET	AFLEET	AFLEET	AFLEET	AFLEET
Emissions (lbs/year)	0.04	1.50	0	0.03	0.15

[3] *Emission factors for natural gas are taken from AP-42, Section 1.4 ("Natural Gas Combustion"), Tables 1.4-3 & 1.4-4. AP-42, Section 1.4 ("Natural Gas Combustion"), Tables 1.4-3 & 1.4-4.*
Where AP-42 provides a value in units of $lb/10^6$ scf, the value was converted to lb/MMBtu as follows:
(EF, lb/MMBtu) = (EF, $lb/10^6$ scf) x (scf /1020 Btu) x [10^6 Btu/MMBtu]
NOTE: The footnotes to AP-42 Tables 1.4-3 & 1.4.4 indicate that a value of 1020 Btu/scf should be used to convert the emission factor (in $lb/10^6$ scf) to lb/MMBtu.

[4] *Calculated using the AFLEET Tool: https://afleet.esia.anl.gov/afleet*

2023 Combustion Emissions (GHG and Co-Pollutants)

2023 Facility-Wide Fuel Usage			
Fuel Type	**Source**	**MMBtu**	**Gallons**
Natural Gas	Facility Wide NG Usage	48,364	
Propane	Off-Road Propane Usage	294	2,344
Diesel	Off-road Diesel Usage	44	320
Gasoline	Vehicle Gas Usage	18	145

Facility-Wide Upstream Actual GHG Emissions[1]	CO_2	CH_4	N_2O	
Natural Gas				
Upstream Emission Factor (g/MMBtu)	4,984	270	0.06	
Upstream Emissions (MT)	203.39	11.02	0.00	
Propane				
Upstream Emission Factor (g/MMBtu)	16,326	117	0.27	
Upstream Emissions (MT)	5	0.03	0.0001	
Diesel				
Upstream Emission Factor (g/MMBtu)	13,542	115	0.25	
Upstream Emissions (MT)	0.598	0.005	1.10E-05	
Gasoline				
Upstream Emission Factor (g/MMBtu)	18,338	124.00	0.3200	
Upstream Emissions (MT)	0.33	2.25E-03	5.80E-06	
20-year Global Warming Potential (GWP)	1	84	264	**Grand Total CO_2e(Upstream)**
Total Upstream Emissions as CO2e (MT/year)	223	929	1	1,153

[1] *Emission factors from the Appendix of NYSDEC "2025 NYS Statewide GHG Emissions Report", Table A1.*

Facility-Wide Direct Actual GHG Emissions[2]	CO_2	CH_4	N_2O	
Natural Gas				
Combustion Emission Factor (kg/MMBtu)	61.71	0.003	0.0006	
Direct Emissions (MT)	2984.56	0.15	0.03	
Propane				
Combustion Emission Factor (kg/MMBtu)	62.87	0.003	0.0006	
Direct Emissions (MT)	18.50	0.0009	0.0002	
Diesel				
Combustion Emission Factor (kg/MMBtu)	73.96	0.003	0.0006	
Direct Emissions (MT)	3.27	0.00013	0.00003	
Gasoline				
Combustion Emission Factor (kg/MMBtu)	70.22	0.003	0.0006	
Direct Emissions (MT)	1.27	5.44E-05	1.09E-05	
20-year Global Warming Potential (GWP)	1	84	264	**Grand Total CO_2e(Direct)**
Total Upstream Emissions as CO2e (MT/year)	3,005	12	8	3,025

[2] *Emission factors from 40 CFR Part 98 Subpart C, Tables C-1 & C-2.*

Total 2023 CO_2e Upstream + Direct (MT/year)	4,178

Facility-Wide Actual Co-Pollutant Emissions from GHG Sources

	Total POM	Formaldehyde	Benzene	Acetaldehyde	1,3-Butadiene	1,1,1-Trichloroethane	Napthalene	Ethylbenz	Toluene	Xylenes	Hexane	Arsenic	Beryllium	Cadmium	Chromium	Cobalt	Lead	Manganes	Mercury	Nickel	Selenium
Natural Gas[3]																					
Emission Factor (lb/MMBtu)	6.83E-07	7.35E-05	2.06E-06	-	-	-	5.98E-07		3.33E-06	-	1.76E-03	1.96E-07	1.18E-08	1.08E-06	1.37E-06	8.24E-08	4.90E-07	3.73E-07	2.55E-07	2.06E-06	2.35E-08
Emissions (lbs/year)	0.03	3.56	0.10	-	-	-	0.03	-	0.16	-	85.35	0.01	0.00	0.05	0.07	0.00	0.02	0.02	0.01	0.10	0.00
Propane[4]																					
Emission Factor (lb/MMBtu)	6.83E-07	7.35E-05	2.06E-06	-	-		5.98E-07		3.33E-06		1.76E-03	1.96E-07	1.18E-08	1.08E-06	1.37E-06	8.24E-08	4.90E-07	3.73E-07	2.55E-07	2.06E-06	2.35E-08
Emissions (lbs/year)	2.01E-04	2.16E-02	6.06E-04	-	-	-	1.76E-04	-	9.81E-04	-	5.19E-01	5.77E-05	3.46E-06	3.17E-04	4.04E-04	2.42E-05	1.44E-04	1.10E-04	7.50E-05	6.06E-04	6.92E-06
Diesel[5]																					
Emission Factor (lb/MMBtu)	0.0002	0.0012	0.0009	0.0008	3.91E-05	-	-	-	0.0004	0.0003	-	-	-	-	-	-	-	-	-	-	-
Emissions (lbs/year)	0.0074	0.0521	0.0412	0.0339	0.0017	-	-	-	0.0181	0.0126	-	-	-	-	-	-	-	-	-	-	-
Gasoline[5]																					
Emission Factor (lb/MMBtu)	0.0002	0.0012	0.0009	0.0008	3.91E-05	-	-	-	0.0004	0.0003	-	-	-	-	-	-	-	-	-	-	-
Emissions (lbs/year)	0.0030	0.0214	0.0169	0.0139	0.0007	-	-	-	0.0074	0.0052	-	-	-	-	-	-	-	-	-	-	-
Total Co-Pollutant Emissions (lbs/year)	0.04	3.65	0.16	0.05	0.00	-	0.03	-	0.19	0.02	85.87	0.01	0.0006	0.05	0.07	0.0040	0.02	0.02	0.01	0.10	0.001
Total Co-Pollutant Emissions (tons/year)	2.18E-05	0.0018	7.91E-05	2.39E-05	1.22E-06	-	1.45E-05	-	9.38E-05	0.00	4.29E-02	4.77E-06	2.86E-07	2.62E-05	3.34E-05	2.00E-06	1.19E-05	9.06E-06	6.20E-06	5.01E-05	5.72E-07

Natural Gas[3]	NO_x	CO	SO_2	Total PM	VOCs
Emission Factor (lb/MMBtu)	9.80E-02	8.24E-02	5.88E-04	7.45E-03	5.39E-03
Emissions (lbs/year)	4,741.60	3,982.94	28.45	360.36	260.79
Propane[4]					
Emission Factor (lb/MMBtu)	AFLEET	AFLEET	AFLEET	AFLEET	AFLEET
Emissions (lbs/year)	86.33	845.91	0.03	13.34	10.10
Diesel[4]					
Emission Factor (lb/MMBtu)	AFLEET	AFLEET	AFLEET	AFLEET	AFLEET
Emissions (lbs/year)	48.49	16.35	0.68	6.04	2.58
Gasoline[4]					
Emission Factor (lb/MMBtu)	AFLEET	AFLEET	AFLEET	AFLEET	AFLEET
Emissions (lbs/year)	0.04	1.50	0	0.03	0.15

[3] *Emission factors for natural gas are taken from AP-42, Section 1.4 ("Natural Gas Combustion"), Tables 1.4-3 & 1.4-4. AP-42, Section 1.4 ("Natural Gas Combustion"), Tables 1.4-3 & 1.4-4.*
Where AP-42 provides a value in units of lb/10^6 scf, the value was converted to lb/MMBtu as follows:
(EF, lb/MMBtu) = (EF, lb/10^6 scf) x (scf /1020 Btu) x [10^6 Btu/MMBtu]
NOTE: The footnotes to AP-42 Tables 1.4-3 & 1.4.4 indicate that a value of 1020 Btu/scf should be used to convert the emission factor (in lb/10^6 scf) to lb/MMBtu.

[4] *Calculated using the AFLEET Tool: https://afleet.esia.anl.gov/afleet*

2024 Combustion Emissions (GHG and Co-Pollutants)

2024 Facility-Wide Fuel Usage			
Fuel Type	**Source**	**MMBtu**	**Gallons**
Natural Gas	Facility Wide NG Usage	44,219	
Propane	Off-Road Propane Usage	351	2,600
Diesel	Off-road Diesel Usage	14	100
Gasoline	Vehicle Gas Usage	13	100

Facility-Wide Upstream Actual GHG Emissions[1]	CO_2	CH_4	N_2O	
Natural Gas				
Upstream Emission Factor (g/MMBtu)	4,984	270	0.06	
Upstream Emissions (MT)	220.39	11.94	0.00	
Propane				
Upstream Emission Factor (g/MMBtu)	16,326	117	0.27	
Upstream Emissions (MT)	5	0.03	0.0001	
Diesel				
Upstream Emission Factor (g/MMBtu)	13,542	115	0.25	
Upstream Emissions (MT)	0.187	0.002	3.45E-06	
Gasoline				
Upstream Emission Factor (g/MMBtu)	18,276	122	0.32	
Upstream Emissions (MT)	0.23	0.0015	4.00E-06	
20-year Global Warming Potential (GWP)	1	84	264	**Grand Total CO_2e(Upstream)**
Total Upstream Emissions as CO2e (MT/year)	240	1,006	1	1,247

[1] *Emission factors from the Appendix of NYSDEC "2025 NYS Statewide GHG Emissions Report", Table A1.*

Facility-Wide Direct Actual GHG Emissions[2]	CO_2	CH_4	N_2O	
Natural Gas				
Combustion Emission Factor (kg/MMBtu)	61.71	0.003	0.0006	
Direct Emissions (MT)	2728.76	0.13	0.03	
Propane				
Combustion Emission Factor (kg/MMBtu)	62.87	0.003	0.0006	
Direct Emissions (MT)	22.07	0.0011	0.0002	
Diesel				
Combustion Emission Factor (kg/MMBtu)	73.96	0.003	0.0006	
Direct Emissions (MT)	1.02	4.14E-05	8.28E-06	
Gasoline				
Combustion Emission Factor (kg/MMBtu)	70.22	0.003	0.0006	
Direct Emissions (MT)	0.88	3.75E-05	7.50E-06	
20-year Global Warming Potential (GWP)	1	84	264	**Grand Total CO_2e(Direct)**
Total Upstream Emissions as CO2e (MT/year)	2,749	11	7	2,767

[2] *Emission factors from 40 CFR Part 98 Subpart C, Tables C-1 & C-2.*

Total 2024 CO_2e Upstream + Direct (MT/year)	4,014

Facility-Wide Actual Co-Pollutant Emissions from GHG Sources

	Total POM	Formaldehyde	Benzene	Acetaldehyde	1,3-Butadiene	1,1,1-Trichloroethane	Napthalene	Ethylbenz	Toluene	Xylenes
Natural Gas[3]										
Emission Factor (lb/MMBtu)	6.83E-07	7.35E-05	2.06E-06	-	-	-	5.98E-07	-	3.33E-06	-
Emissions (lbs/year)	0.03	3.25	0.09	-	-	-	0.03	-	0.15	-
Propane[4]										
Emission Factor (lb/MMBtu)	6.83E-07	7.35E-05	2.06E-06	-	-		5.98E-07		3.33E-06	
Emissions (lbs/year)	2.40E-04	2.58E-02	7.23E-04	-	-	-	2.10E-04	-	1.17E-03	-
Diesel[5]										
Emission Factor (lb/MMBtu)	0.0002	0.0012	0.0009	0.0008	3.91E-05	-	-	-	0.0004	0.0003
Emissions (lbs/year)	0.0074	0.0521	0.0412	0.0339	0.0017	-	-	-	0.0181	0.0126
Gasoline[5]										
Emission Factor (lb/MMBtu)	0.0002	0.0012	0.0009	0.0008	3.91E-05	-	-	-	0.0004	0.0003
Emissions (lbs/year)	0.0030	0.0214	0.0169	0.0139	0.0007	-	-	-	0.0074	0.0052
Total Co-Pollutant Emissions (lbs/year)	0.04	3.35	0.15	0.05	0.00	-	0.03	-	0.17	0.02
Total Co-Pollutant Emissions (tons/year)	2.04E-05	0.0017	7.49E-05	2.39E-05	1.22E-06	-	1.33E-05	-	8.70E-05	0.00

	Hexane	Arsenic	Beryllium	Cadmium	Chromium	Cobalt	Lead	Manganes	Mercury	Nickel	Selenium
Natural Gas[3]											
Emission Factor (lb/MMBtu)	1.76E-03	1.96E-07	1.18E-08	1.08E-06	1.37E-06	8.24E-08	4.90E-07	3.73E-07	2.55E-07	2.06E-06	2.35E-08
Emissions (lbs/year)	78.03	0.01	0.001	0.05	0.06	0.00	0.02	0.02	0.01	0.09	0.001
Propane[4]											
Emission Factor (lb/MMBtu)	1.76E-03	1.96E-07	1.18E-08	1.08E-06	1.37E-06	8.24E-08	4.90E-07	3.73E-07	2.55E-07	2.06E-06	2.35E-08
Emissions (lbs/year)	6.20E-01	6.88E-05	4.13E-06	3.79E-04	4.82E-04	2.89E-05	1.72E-04	1.31E-04	8.95E-05	7.23E-04	8.26E-06
Diesel[5]											
Emission Factor (lb/MMBtu)	-	-	-	-	-	-	-	-	-	-	-
Emissions (lbs/year)	-	-	-	-	-	-	-	-	-	-	-
Gasoline[5]											
Emission Factor (lb/MMBtu)	-	-	-	-	-	-	-	-	-	-	-
Emissions (lbs/year)	-	-	-	-	-	-	-	-	-	-	-
Total Co-Pollutant Emissions (lbs/year)	78.65	0.01	0.0005	0.05	0.06	0.0037	0.02	0.02	0.01	0.09	0.001
Total Co-Pollutant Emissions (tons/year)	3.93E-02	4.37E-06	2.62E-07	2.40E-05	3.06E-05	1.84E-06	1.09E-05	8.30E-06	5.68E-06	4.59E-05	5.24E-07

Natural Gas[3]	NO_x	CO	SO_2	Total PM	VOCs
Emission Factor (lb/MMBtu)	9.80E-02	8.24E-02	5.88E-04	7.45E-03	5.39E-03
Emissions (lbs/year)	4,335.20	3,641.57	26.01	329.48	238.44
Propane[4]					
Emission Factor (lb/MMBtu)	AFLEET	AFLEET	AFLEET	AFLEET	AFLEET
Emissions (lbs/year)	94.60	907.65	0.00	14.64	10.92
Diesel[4]					
Emission Factor (lb/MMBtu)	AFLEET	AFLEET	AFLEET	AFLEET	AFLEET
Emissions (lbs/year)	1.67	0.58	0.03	0.24	0.08
Gasoline[4]					
Emission Factor (lb/MMBtu)	AFLEET	AFLEET	AFLEET	AFLEET	AFLEET
Emissions (lbs/year)	0.04	1.50	0	0.03	0.15

[3] *Emission factors for natural gas are taken from AP-42, Section 1.4 ("Natural Gas Combustion"), Tables 1.4-3 & 1.4-4. AP-42, Section 1.4 ("Natural Gas Combustion"), Tables 1.4-3 & 1.4-4.*
Where AP-42 provides a value in units of lb/10^6 scf, the value was converted to lb/MMBtu as follows:
(EF, lb/MMBtu) = (EF, lb/10^6 scf) x (scf /1020 Btu) x [10^6 Btu/MMBtu]
NOTE: The footnotes to AP-42 Tables 1.4-3 & 1.4.4 indicate that a value of 1020 Btu/scf should be used to convert the emission factor (in lb/10^6 scf) to lb/MMBtu.

[4] *Calculated using the AFLEET Tool: https://afleet.esia.anl.gov/afleet*

AFLEET Off-Road Inputs

2020

Off Road Equipment	Fuel Type	Horsepower	Hours/year
Railcar Mover Switchmaster 9000	Diesel	140	38
John Deere Tractor 5400	Diesel	70	3
Hyster S50ft Forklift	Propane	110	209
Hyster S50ft Forklift	Propane	110	209
Hyster S80XL2BC Forklift	Propane	200	209
Hyster S80XL2BC Forklift	Propane	200	209
Hyster H50FT Forklift	Propane	110	209
JLG 45IC Boom Lift	Diesel	23	75
JLG450AJ	Propane	61	156

2021

Off Road Equipment	Fuel Type	Horsepower	Hours/year
Railcar Mover Switchmaster 9000	Diesel	140	52
John Deere Tractor 5400	Diesel	70	4
Hyster S50ft Forklift	Propane	110	254
Hyster S50ft Forklift	Propane	110	254
Hyster S80XL2BC Forklift	Propane	200	254
Hyster S80XL2BC Forklift	Propane	200	254
Hyster H50FT Forklift	Propane	110	254
JLG 45IC Boom Lift	Diesel	23	78
JLG450AJ	Propane	61	156

2022

Off Road Equipment	Fuel Type	Horsepower	Hours/year
Railcar Mover Switchmaster 9000	Diesel	140	48
John Deere Tractor 5400	Diesel	70	4
Hyster S50ft Forklift	Propane	110	300
Hyster S50ft Forklift	Propane	110	300
Hyster S80XL2BC Forklift	Propane	200	300
Hyster S80XL2BC Forklift	Propane	200	300
Hyster H50FT Forklift	Propane	110	300
JLG 45IC Boom Lift	Diesel	23	78
JLG450AJ	Propane	61	156

2023

Off Road Equipment	Fuel Type	Horsepower	Hours/year
Railcar Mover Switchmaster 9000	Diesel	140	44
John Deere Tractor 5400	Diesel	70	3
Hyster S50ft Forklift	Propane	110	188
Hyster S50ft Forklift	Propane	110	188
Hyster S80XL2BC Forklift	Propane	200	188

Hyster S80XL2BC Forklift	Propane	200	188
Hyster H50FT Forklift	Propane	110	188
JLG 45IC Boom Lift	Diesel	23	78
JLG450AJ	Propane	61	156

2024

Off Road Equipment	Fuel Type	Horsepower	Hours/year
Railcar Mover Switchmaster 9000	Diesel	140	37
John Deere Tractor 5400	Diesel	70	3
Hyster S50ft Forklift	Propane	110	213
Hyster S50ft Forklift	Propane	110	213
Hyster S80XL2BC Forklift	Propane	200	213
Hyster S80XL2BC Forklift	Propane	200	213
Hyster H50FT Forklift	Propane	110	213
JLG 45IC Boom Lift	Diesel	23	78
JLG450AJ	Propane	61	156

Off-Road Equipment AFLEET Results - Combined

2020

Pollutant	lbs/year
CO	898.27
NOx	94.67
PM10	8.65
PM2.5	6.78
VOC	0.03
SOx	10.85

2021

Pollutant	lbs/year
CO	1010.87
NOx	113.66
PM10	9.41
PM2.5	8.147
VOC	0.04
SOx	12.5

2022

Pollutant	lbs/year
CO	1125.69
NOx	132.27
PM10	10.97
PM2.5	9.49
VOC	0.03
SOx	14.16

2023

Pollutant	lbs/year
CO	845.91
NOx	86.33
PM10	7.14
PM2.5	6.2
VOC	0.03
SOx	10.1

2024

Pollutant	lbs/year
CO	908.23
NOx	96.27
PM10	7.98
PM2.5	6.9
VOC	0.03
SOx	11

AFLEET On-Road Inputs

On Road Equipment	Fuel Type	Average Miles/year[1]
Pickup Truck	Gasoline	400

[1] *Specific annual mileage unavailable*

On-Road Equipment AFLEET Results

Pollutant	lbs/year
CO	1.5
NOx	0.04
PM10	0.02
PM2.5	0.01
VOC	0.15
SOx	0

Future RTO		
Rated Capacity:	4	MMBtu/hr
Assumed to operate:	8,760	hrs/yr
PTE Natural Gas Usage:	35,040	MMBtu/yr

1 PTE - "Upstream" GHG Emissions Resulting from Extraction, Production & Transmission of Natural Gas

	GREENHOUSE GASES				
	CO_2	CH_4	N_2O	TOTAL CO2e (20 yr GWP)	*NOTES*
Upstream Emission Factor (g/MMBtu) [1]	4,984	270	0.06	*27,641*	
Upstream Emission Factor (lb/MMBtu)	10.978	5.95E-01	1.3E-04	*60.883*	*= (Upstream Emission Factor, g/MMBtu) x [lb / 454 g]*
Upstream Emissions (lb/yr)	3.85E+05	2.08E+04	4.6E+00	*2.13E+06*	*= (Maximum Natural Gas Usage, MMBtu/yr) x (Upstream EF, lb/MMBtu)*
Upstream Emissions (ton/yr)	192.33	10.42	0.00	*1.07E+03*	*= (Upstream Emissions, lb/yr) x [ton/ 2000 lb]*
20-yr Global Warming Potential (GWP) [2]	1	84	264	---	
Upstream Emissions as CO2e (tons/yr)	192.33	875	0.61	1,068	*= (Upstream Emissions, ton/yr) x (20-yr GWP)*

[1] *Emission factors from the Appendix of NYSDEC "2025 NYS Statewide GHG Emissions Report", Table A1.*

[2] *GWP values from 6 NYCRR 496.5. (NOTE: These values reflect the 20-year GWP values for each compound. These values differ from the 100-yr GWP values that are used for permitting and NSR evaluations).*

2 PTE - Direct GHG Emissions from Combustion of Natural Gas

	GREENHOUSE GASES				
	CO_2	CH_4	N_2O	TOTAL CO2e (20 yr GWP)	*NOTES*
Combustion Emission Factor (kg/MMBtu) [1]	53.06	1.0E-03	1.0E-04	---	
Combustion Emission Factor (lb/MMBtu)	116.7	2.2E-03	2.2E-04	---	*= (Combustion Emission Factor, kg/MMBtu) x [2.2 lb / kg]*
Combustion Emissions (lb/yr)	4.1E+06	7.7E+01	7.7E+00	---	*= (Maximum Natural Gas Usage, MMBtu/yr) x (Combustion EF, lb/MMBtu)*
Combustion Emissions (ton/yr)	2.05E+03	3.9E-02	3.9E-03	---	*= (Combustion Emissions, lb/yr) x [ton/ 2000 lb]*
20-yr Global Warming Potential (GWP) [2]	1	84	264	---	
Combustion Emissions as CO2e (tons/yr)	2,045	3.24	1.02	2,049	*= (Combustion Emissions, ton/yr) x (20-yr GWP)*

[1] *Emission factors from 40 CFR Part 98 Subpart C, Tables C-1 & C-2.*

[2] *GWP values from 6 NYCRR 496.5. (NOTE: These values reflect the 20-year GWP values for each compound. These values differ from the 100-yr GWP values that are used for permitting and NSR evaluations).*

3 PTE - Total GHG Emissions from Use of Natural Gas

	GREENHOUSE GASES				
	CO_2	CH_4	N_2O	TOTAL CO2e (20 yr GWP)	*NOTES*
Total Emissions (tons/yr)	2,237	10	6.17E-03	---	*= (Upstream GHG Emissions, tons/yr) + (Direct GHG Emissions, tons/yr)*
Total Emissions as CO2e (tons/yr)	2,237	878	1.63	3,118	*= (Upstream GHG Emissions, tons as CO2e/yr) + (Direct GHG Emissions, tons as CO2e/yr)*
Total Emissions as CO2e (metric tonnes/yr)	*2,030*	*797*	*1.48*	*2,828*	*= (Total Emissions as CO2e, tons/yr) x [(0.9072 metric tonne)/ (ton)]*

4 PTE - Emissions of Co-Pollutants (Hazardous Air Pollutants) from Combustion of Natural Gas

	POTENTIAL TO EMIT FOR CO-POLLUTANTS (= HAZARDOUS AIR POLLUTANTS)																
	TOTAL POM	Formaldehyde	Benzene	Naphthalene	Toluene	Hexane	Arsenic	Beryllium	Cadmium	Chromium	Cobalt	Lead	Manganese	Mercury	Nickel	Selenium	TOTAL HAPs [2]
Emission Factor (lb/MMBtu) [1]	6.83E-07	7.35E-05	2.06E-06	5.98E-07	3.33E-06	1.76E-03	1.96E-07	1.18E-08	1.08E-06	1.37E-06	8.24E-08	4.90E-07	3.73E-07	2.55E-07	2.06E-06	2.35E-08	---
Emissions (lb/yr)	2.63E-09	2.83E-07	7.94E-09	2.31E-09	1.28E-08	6.80E-06	7.56E-10	4.53E-11	4.16E-09	5.29E-09	3.17E-10	1.89E-09	1.44E-09	9.82E-10	7.94E-09	9.07E-11	7.13E-06
Emissions (ton/yr)	1.32E-12	1.42E-10	3.97E-12	1.15E-12	6.42E-12	3.40E-09	3.78E-13	2.27E-14	2.08E-12	2.65E-12	1.59E-13	9.45E-13	7.18E-13	4.91E-13	3.97E-12	4.53E-14	3.57E-09

[1] *Emission factors (lb/MMBtu fuel input) taken from AP-42, Section 1.4 ("Natural Gas Combustion"),Tables 1.4-2, 1.4-3 & 1.4-4.*

[2] *Naphthalene is a listed HAP as well as part of "TOTAL POM". For the computation of "TOTAL HAPs", the value for "Naphthalene" as a listed HAP has been excluded so that Naphthalene is not double-counted.*

CLCPA Section 7(3) Disproportionate Burden Analysis Worksheet

DEC Application No. (if known): 9-2911-00036/00151				
Name of Applicant: Daniel M. Planter				
Email: dan_planter@goodyear.com		Phone: 716-236-2651		
Mailing Address:	Street: 5000 Goodyear Drive			
	City: Niagara Falls	State: NY	Zip: 14304	
Project Location: Goodyear Manufacturing Plant				
	Street: 5000 Goodyear Drive			
	City: Niagara Falls	State: NY	Zip: 14304	
Project Description: AIr State Facility Permit Renewal				

This worksheet lists disadvantaged community (DAC) indicators that are potentially related to air quality or air-related health effects. The full lists of DAC indicators are contained in Tables 2 and 3 of the New York State Climate Justice Working Group Draft Disadvantaged Communities Criteria and List Technical Documentation (March 9, 2022) and the disadvantaged community criteria maps. The worksheet should be used to identify DAC indicators that are relevant to the potential greenhouse gas (GHG) and co-pollutant impacts of a specific action.

Using Table 1 of this worksheet, applicants should enter the percentile values for each DAC indicator from the disadvantaged communities criteria map and then identify the DAC indicators that are relevant to the specific project. Where a relevant DAC indicator is identified, a qualitative response whether the action will have a positive or negative impact on the pollution burdens or health vulnerabilities associated with the indicator should also be provided. The response should be based on the action without measures that may reduce or eliminate GHG and co-pollutants (i.e., “design measures”).

The impacts of the action on the environmental burdens and health vulnerabilities identified by the relevant DAC indicators must be discussed in the disproportionate burden analysis provided with the permit application. The analysis must also identify and discuss any proposed measures to reduce or eliminate GHG and co-pollutant impacts from the proposed action.

See Table 1 on page 2.

Table 1. CLCPA Section 7(3) Disproportionate Burden Analysis Worksheet

DAC Indicator	%tile[1]	Relevant?		Impact?	
Potential Pollution Exposures					
Traffic: number of vehicles	81	✓ Yes	__ No	✓ Positive	__ Negative
Traffic: diesel trucks	81	✓ Yes	__ No	✓ Positive	__ Negative
Particulate matter (PM 2.5)	80	✓ Yes	__ No	✓ Positive	__ Negative
Benzene concentration	50	__ Yes	✓ No	__ Positive	__ Negative
Land Use and Facilities Associated with Historical Discrimination or Disinvestment [2]					
Proximity to remediation sites	96	__ Yes	✓ No	__ Positive	__ Negative
Proximity to regulated management plan sites	100	__ Yes	✓ No	__ Positive	__ Negative
Proximity to major oil storage facilities	0	__ Yes	✓ No	__ Positive	__ Negative
Proximity to power generation facilities	51	__ Yes	✓ No	__ Positive	__ Negative
Proximity to active landfills	0	__ Yes	✓ No	__ Positive	__ Negative
Proximity to municipal waste combustors	75	__ Yes	✓ No	__ Positive	__ Negative
Proximity to scrap metal processors	0	__ Yes	✓ No	__ Positive	__ Negative
Industrial/manufacturing/mining land use	94	✓ Yes	__ No	✓ Positive	__ Negative
Health Outcome Sensitivities					
Asthma emergency department visits	63	__ Yes	✓ No	__ Positive	__ Negative
COPD emergency department visits	82	__ Yes	✓ No	__ Positive	__ Negative
Heart attack (MI) hospitalization	100	__ Yes	✓ No	__ Positive	__ Negative
Premature deaths	81	__ Yes	✓ No	__ Positive	__ Negative
Low birthweight	84	__ Yes	✓ No	__ Positive	__ Negative
Percent without health insurance	60	__ Yes	✓ No	__ Positive	__ Negative
Percent with disabilities	79	__ Yes	✓ No	__ Positive	__ Negative
Percent adults age 65+	45	__ Yes	✓ No	__ Positive	__ Negative

[1] Enter the indicator percentile value obtained from the disadvantaged community criteria map for the disadvantaged community the project is located in or may affect. The disadvantaged communities criteria maps are located on-line at: **https://climate.ny.gov/Resources/Disadvantaged-Communities-Criteria**

[2] If the proposed action involves a land use listed in this section and has the potential to emit GHG or co-pollutants that affect or are likely to affect a disadvantaged community, the DAC indicator is relevant.

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