CLCPA 7(3) Disproportionate Burden Analysis

Applicant Name:
Buffalo Biodiesel, Inc.

Facility Name and Address:

Buffalo Biodiesel, Inc. – Used Cooking Oil (UCO) and Yellow Grease Processing Facility
225 Sawyer Avenue
Tonawanda, NY 14150

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Date / Revision Date:
June 18, 2026

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Acronyms

BBD	Buffalo Biodiesel, Inc.
UCO	Used Cooking Oil
DAC	Disadvantaged Community
CLCPA	Climate Leadership and Community Protection Act
EJ	Environmental Justice
PPP	Public Participation Plan
DBA	Disadvantaged Burden Analysis
NYSDEC	New York State Department of Environmental Conservation
LEQ	Equivalent Continuous Noise Level
PTE	Potential to Emit
POTW	Publicly Owned Treatment Works
VOC	Volatile Organic Compound
NO_x	Nitrogen Oxides
SO_2	Sulfur Dioxide
CO_2e	Carbon Dioxide Equivalent
PM	Particulate Matter
TSS	Total Suspended Solids
BOD	Biological Oxygen Demand
AST	Aboveground Storage Tank
MMBtu	Million British Thermal Units
SCF	Standard Cubic Feet
CP-29	Commissioner Policy 29 – Environmental Justice
HAP	Hazardous Air Pollutant

1. INTRODUCTION

Buffalo Biodiesel, Inc. ("BBD") is an existing Used Cooking Oil (UCO) and Yellow Grease Processing facility located at 225 Sawyer Avenue, Tonawanda, NY 14150 (the "Facility"). The Facility has operated at its current Facility since 2005. BBD is in the process of submitting a Part 360 Solid Waste Management Facility Permit application, consistent with updates to NYSDEC regulations governing UCO and yellow grease processing.

Because the Facility is located within a New York State Disadvantaged Community (DAC) under the Climate Leadership and Community Protection Act (CLCPA), an Environmental Justice (EJ) Review, Disadvantaged Burden Analysis (DBA), and Public Participation Plan (PPP) documentation are required.

This report evaluates the potential environmental and public health impacts of the Facility on surrounding DAC populations and demonstrates that the operations do not result in disproportionately high or adverse environmental burdens.

2. REGULATORY FRAMEWORK

The permitting of Buffalo Biodiesel, Inc. is governed by several New York State environmental regulatory programs designed to protect public health, natural resources, and disadvantaged communities. Because the Facility is located within a CLCPA-designated Disadvantaged Community (DAC), enhanced EJ review and public participation requirements apply. This section summarizes the primary regulatory authorities and identifies which regulations govern each environmental impact pathway relevant to the EJ analysis.

Environmental Justice Regulations

i. NYSDEC Commissioner Policy 29 (CP-29)

CP-29 provides guidance for incorporating environmental justice concerns into the NYSDEC environmental review process and the DEC application of the State Quality Review Act and requires the preparation and submission of a draft Public Participation plan (PPP) to help ensure meaningful and effective public participation throughout the NYSDEC environmental permit review process. Public participation in the NYSDEC environmental permit review process means a program of activities that provides opportunities for stakeholders to be informed about and involved during the review of a proposed action. The objective of the PPP is to outline and describe the program of activities that the applicant will implement to actively seek and enhance public participation during the application review process.

ii. Climate Leadership and Community Protection Act (CLCPA) §7(3)

CLCPA 7(3) requires that when considering and issuing permits, NYSDEC shall not disproportionately burden disadvantaged communities and shall also prioritize reductions of greenhouse gas emissions and co-pollutants in disadvantaged communities.

Pursuant to CLCPA §7(3), NYSDEC DEP 24-1 outlines the guidance for the disproportionate burden analysis (DBA) required to meet the completeness requirements of 6NYCRR 621.3(a)(13). The DBA must identify and address disproportionate burdens on the DAC to include the following:

- Evaluation of existing environmental burdens such as air, odor, noise, wastewater and ground water.
- Evaluate whether potential impacts from permitting action may create or increase environmental burdens in a DAC.

This law directly applies to Facility activities of a continuing nature associated with any newly permitted emission sources of GHG and co-pollutants. This includes emissions and increases from stationary and mobile sources directly related to and essential to the proposed action including those from existing equipment or operations. Essential operating functions are those functions critical to the operation of a facility or project without which the facility could not operate and include boiler emissions, truck/mobile-source emissions, noise modeling, and potential environmental releases.

iii. CLCPA Disadvantaged Communities Mapping Tool

The mapping tool identifies census tracts meeting DAC criteria.

The parcel at 225 Sawyer Avenue falls within a DAC, requiring:

- Enhanced PPP as per CP-29
- CLCPA 7(3) Disproportionate Burden Analysis (DBA) as per DEP 24-1
- Existing Burden Report (EBR) as per Environmental Justice Siting Law (EJSL)

iv. Environmental Justice Siting Law (EJSL) Existing Burden Report (EBR)

The EJSL requires the preparation of an EBR for projects subject to an applicable permit that may directly or indirectly cause or contribute more than a de minimum amount of pollution to any disproportionate pollution burden on a disadvantaged community (DAC). An existing burden report will be utilized to establish:

- relevant baseline data on existing burdens;
- existing environmental or public health stressors;
- potential or projected contribution to existing pollution burdens, and;
- potential benefits of a proposed project to an identified disadvantaged community.

The additional requirements of EJSL for impacts from any pollution the facility may emit, discharge, or cause can be incorporated into the disproportionate burden analysis (DBA)

prepared under DEP 24-1. In addition to the analysis of potential impacts of greenhouse gases (GHGs) and co-pollutants required under CLCPA Section 7(3), the analysis must also consider other relevant pollution impacts on the DAC under the basic statutory provisions of the EJSL, including impacts to overall air quality, water quality, noise, and odors. Where there is an increase in pollution, the basic analysis outline described in Section V.6 of DEP 24-1 may be used in evaluating other relevant pollution impacts within the DAC.

3. SITE LOCATION & COMMUNITY PROFILE

3.1 Facility Location

BBD. operates an existing used cooking oil and yellow grease processing Facility located at 225 Sawyer Avenue, Tonawanda, NY 14150.

Town of Tonawanda's Zoning Code provides industrial zoning (Article 22, Chapter 215) to support existing heavy industry with new Mixed-Use Industrial (MU-I) zones, while maintaining General Industrial (GI) for major manufacturers. The Facility is situated within the General Industrial (GI) zoning district, which is intended to accommodate the types of operations engaged in by BBD. The immediate surroundings consist primarily of:

- Industrial and commercial operations
- Trucking and logistics activities
- Warehousing and storage facilities
- A transportation corridor with consistent vehicle movement

The site is positioned within a long-established industrial corridor in the Town of Tonawanda, compatible with the Facility's existing operations and permitted land uses.

3.2 Disadvantaged Community Designation

According to the New York State CLCPA Disadvantaged Communities (DAC) Mapping Tool, the census tract encompassing 225 Sawyer Avenue is designated as a Disadvantaged Community. This designation reflects multiple socioeconomic, environmental, and public health indicators used by the State to identify communities experiencing cumulative burdens.

- Because the Facility is located fully within a DAC: An Existing Burden Report (EBR)
- A CLCPA §7(3) Disproportionate Burden Analysis (DBA) must be developed in accordance with NYSDEC DEP 24-1
- An enhanced Public Participation Plan (PPP) must be prepared and implemented as per NYSDEC Commissioner Policy 29 NYSDEC Commissioner Policy 29

3.3 Community Characteristics

The facility falls under the census tract 36029008400 which is considered DAC by Climate Act. DAC indicators and characteristics of community surrounding the Facility:

- Mixed Residential and Industrial Land Use: The surrounding corridor contains a mix of industrial and residential land uses. Residential neighborhoods and community resources are located within approximately one mile of the Facility. DAC indicators relevant to our activities were identified through the Disadvantaged Communities Criteria Map which includes traffic exposure, air quality sensitivity, and health effects associated with nearby industrial activity, truck traffic, and wastewater infrastructure. Baseline data for number of vehicles, diesel trucks, and emissions for the area rely heavily on activity. Industrial activity and proximity to the I-190 and I-290 creates moderate traffic during peak hours of 11:00am – 1:00pm.
- Historical Environmental Burdens**:** The surrounding area has historically supported industrial and manufacturing uses, including former solid waste management facilities, energy infrastructure, trucking operations, tank farms, rail infrastructure, and heavy commercial activity. Baseline environmental burden indicators relevant to the DAC include cumulative industrial exposure, proximity to remedial and inactive waste sites, wastewater infrastructure burden, and long-term industrial land use. The FEAF identifies nearby historical solid waste management facility site codes 915042 and 91548 within the surrounding industrial corridor. The adjacent 3M property is also identified in the Environmental Justice Report as a NYSDEC Superfund and inactive hazardous waste disposal site. Existing industrial operations within the area contribute to cumulative noise, diesel emissions, and industrial activity levels that are reflected in DAC environmental burden indicators. They contribute to the tracts proximity to regulated sites and industrial land use metrics as presented in table 1. The facility activity will not add to these burdens as discussed in the impacts section of the document.
- Presence of Nearby Sensitive Receptors**:** Within one mile of the Facility, residences, small businesses, and community resources are present; however, none are located adjacent to the Facility. The distance and roads act as a buffer to Facility operations.
- Absence of Immediate Proximity Sensitive Facilities: No schools, hospitals, day care centers, or long-term care facilities were identified adjacent to the Facility or within the immediate operational influence zone of approximately 1 mile radius from the active processing and truck unloading areas. This reduces the potential for direct exposure to sensitive populations.
- Health outcome sensitivities: Baseline data in the area suggests an overall higher volume of COPD, heart attacks, and respiratory disease related ED visits. This indicates increased environmental stressors, air pollution exposure, and poor socioeconomic conditions in the community. Table 1 outlines DEC indicators relevant to our case and what % higher they compare to census tracts statewide.

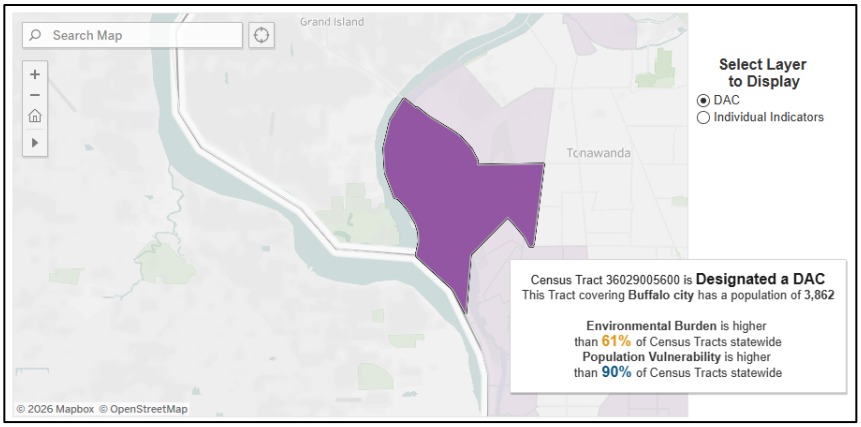


Figure 1: DAC designation for relevant zone

Table 1: DAC indicators

DAC Indicator	% tile
Potential Pollution Exposures	
Traffic: number of vehicles	70
Traffic: diesel trucks	87
Particulate matter (PM 2.5)	72
Benzene concentration	28
Historic Discrimination or Disinvestment due to Land Use and Facilities	
Proximity to remediation sites	100
Proximity to regulated management plan sites	100
Industrial/ manufacturing/ mining land use	99
Health Outcome Sensitivities	
Asthma emergency department visits	64
COPD emergency department visits	96
Heart attack (MI) hospitalization	97

4. PROJECT DESCRIPTION

BBD operates an established Used Cooking Oil (UCO) and yellow grease processing Facility at 225 Sawyer Avenue, Tonawanda, NY. The Facility has functioned in this capacity since 2005 and serves as a critical part of the regional collection and recycling network for organic waste oils. The processed material is used as feedstock for biodiesel manufacturing, supporting renewable energy production and reducing reliance on petroleum-based diesel. The Facility's operations involve the controlled receipt, handling, processing, storage, and shipment of UCO and yellow grease under strict engineering and environmental management systems. All processing activities are conducted within enclosed or contained structures designed to minimize environmental impacts and ensure regulatory compliance.

Facility Operations Overview

The primary functions of the Facility include:

I. Collection and Receipt of Used Cooking Oil
UCO and yellow grease are delivered to the Facility from Buffalo Biodiesel's collection routes and regional depots. All unloading occurs on sealed concrete surfaces.

II. Processing and Pretreatment
Once received, materials undergo a series of controlled processing steps, including:
- Heating and thermal conditioning to facilitate separation
- Settling and gravity clarification to divide oil, water, and solids
- Sludge removal and separation for off-site beneficial use
- Water pretreatment, including pH adjustment and solids removal, to meet discharge permit requirements.

These processes take place indoors or within covered tanks to eliminate fugitive emissions and minimize odor.

III. Short-Term Storage
Refined oil is stored temporarily in aboveground covered vertical tanks or indoor storage tanks until shipment. Storage systems are provided with full secondary containment to prevent soil or groundwater impacts.

IV. Outbound Shipping
Finished feedstock is loaded into tanker vehicles and transported to biodiesel production facilities. All loading operations occur on impervious surfaces within controlled zones.

5. Disadvantaged Burden Analysis (DBA)

A Disadvantaged Burden Analysis (DBA) is required for projects located within or affecting a CLCPA designated Disadvantaged Community and serves as a structured evaluation of whether Facility operations may create or contribute to disproportionate environmental burdens. The DBA aligns with CLCPA §7(3) and NYSDEC guidance, ensuring that emissions, wastewater, noise, odor, and traffic are reviewed transparently and consistently. This analysis is necessary for BBD because the Facility operates within a mapped Disadvantaged Community and must demonstrate that its activities do not increase existing community stressors.

Consistent with state guidance, this analysis evaluates direct and indirect emissions, including mobile-source activity affecting the surrounding area. Emission controls, indoor processing, limited truck activity, and established wastewater and odor management systems collectively minimize potential community impacts.

5.1 EJ Burden Screening

DAC indicators relevant to the site reflect conditions documented in the Sawyer Avenue industrial corridor. These include:

- Potential Pollution Exposures: This is affected by the number of vehicles and diesel trucks who contribute to particulate matter (PM 2.5) and benzene concentration.
- Local health: Emergency Department visits for relevant cases such as asthma, COPD, and heart attacks.
- Historic Burdens: Presence of remediation sites and proximity to regulated management greatly contribute to climate change risks. DAC data from the criteria map shows 100% higher risks.
- Air quality data has also been reported in section 5.11 and 6 to compare existing and potential impacts. Check reference *21*.

These indicators establish baseline community conditions for EJ screening.

5.2 CLCPA IMPACT ASSESSMENT

5.2.1 AIR EMISSIONS ASSESSMENT

This section summarizes annual air emissions associated with BBD including:

- Stationary sources – three natural-gas-fired boilers; and
- Mobile sources – box trucks, vacuum trucks, and tractor trucks used for collection and product transport.

Emissions are calculated using EPA fuel-based emission factors (AP-42, 40 CFR Part 98) and CLCPA/DAR-style CO_2e methods and are compared qualitatively with major-source thresholds under the Clean Air Act and NYSDEC Part 201.

5.2.2 Stationary Source Emissions – Natural Gas Boilers

The Facility operates three small natural-gas boilers with a combined heat input of 1.7 MMBtu/hr. Emissions were computed from AP-42 Section 1.4 factors assuming 8,760 hr/yr of potential operation.

Table 6 of Appendix B. Natural Gas Boiler Emissions (Three Units Combined, PTE)

- Criteria pollutants
    - NO_x: 0.73 tpy
    - CO: 0.61 tpy
    - VOC: 0.04 tpy
    - $PM/PM_{10}/PM_{2.5}$: 0.06 tpy
    - SO_2: ≈0.002 tpy
    - Benzene: 0.000017 tpy

- Greenhouse gases (40 CFR Part 98 factors)
    - CO_2: 871 tpy
    - CH_4: 0.016 tpy
    - N_2O: 0.0016 tpy
    - Total CO_2e: ≈872 tpy
- Hazardous Air Pollutants (HAPs)
    - Maximum single HAP (hexane): ≈0.01 tpy
    - Total HAPs: ≈0.01 tpy

These values represent potential to emit (PTE) at full-load, 24-hr operation; actual emissions are lower in practice.

5.2.3 Mobile Source Emissions – Truck Fleets

On-road vehicles are treated as mobile sources for air permitting but are included in this CLCPA and Environmental Justice analysis because they contribute to community level air burdens. Calculations in Appendix B follow CLCPA §7(3) and DAR 21 guidance. DAC mile percentages were estimated by overlaying truck routes with DAC boundary maps from Appendix A and visually measuring route segments within the DAC and 150-meter buffer. Because GPS logged DAC mileage is unavailable, this mapping-based method provides a reasonable, transparent estimate. These percentages were applied to annual miles traveled for vehicles serving New York state for the Facility within DAC tract 36029008400.

i. Box Trucks – Ford E-450 (19 rucks)

The Box trucks travelled roughly 44827.3 miles of which 38103.21 miles were within DAC zones based on reasonable estimates. These trucks are rated for 11 miles per gallon and produce 46.5 tons of CO_2e per year (tpy) of which 39.5 ton is within DACs.

Criteria pollutants from box-truck fleet:

- CO: 0.196 tpy
- PM_{10}: 0.003 tpy
- $PM_{2.5}$: 0.003 tpy
- NOx: 0.0248 tpy
- VOC: 0.00459 tpy
- SOx: 0.000255 tpy
- Benzene: 0.000000436 tpy

ii. Vacuum Trucks – Mack MD742 (61 trucks)

The Vac trucks travelled roughly 263011 miles total and 223559.35 miles within DAC zones at 5.8 mi/gal. CO_2e emission is 514 tpy total and 437 tpy within DACs.

Criteria pollutants from vac-truck fleet:

- CO: 0.195 tpy
- PM_{10}: 0.000722 tpy
- $PM_{2.5}$: 0.000722 tpy
- NOx: 0.167 tpy
- VOC: 0.0266 tpy
- SOx: 0.00302 tpy
- Benzene: 0.00000485 tpy

iii. Tractor Trucks – Kenworth (11 trucks, statewide)

Long-haul combination trucks or tractor trucks travelled statewide roughly 466409.4 miles and less than 2% of it was within the relevant DAC zone at 9 mi/gal. Total CO_2e emission within service area DAC zone is 11.8 tpy of the overall 590 tpy.

Even though long haul combination trucks briefly pass through the DAC 36029004800 and has insignificant emissions it is helpful to have a reference for the overall emissions throughout the state.

Total criteria pollutants from tractor truck fleet:

- CO: 0.014910 tpy
- PM_{10}: 0.000031 tpy
- $PM_{2.5}$: 0.00031 tpy
- NOx: 0.01604 tpy
- VOC: 0.000288 tpy
- SOx: 0.001635 tpy
- Benzene: 0.00000555 tpy

Total Mobile-Source Emissions

Summing all truck fleets:

- CO_2e (all trucks):
  - Box trucks: 46.5 tpy
  - Vacuum trucks: 514 tpy
  - Tractor trucks: 590 tpy
  - Total mobile CO_2e: ≈1150.5 tpy of which 488.3 tpy was within DACs

- Criteria pollutants (all trucks):
    - CO: 0.2289 tpy
    - NOx: 0.1935
    - PM10: 0.0.000856
    - PM2.5: 0.000856
    - VOC: 0.031414
    - SOx: 0.003297

5.2.4 Facility-Wide Emissions Summary

For EJ and CLCPA purposes, boiler and truck emissions are considered together to show total air burdens associated with Facility operations within DAC 36029008400.

i. Greenhouse Gases (CO_2e)

- Stationary (boilers): ≈ 872 tpy CO_2e
- Mobile (all vehicles): ≈ 488.3 tpy CO_2e
- Total associated CO_2e: ≈ 1360.3 tpy

ii. Criteria Pollutants

Approximate Facility-wide totals (mobile + boilers):

- NO_x: 0.95299 tpy
- CO: ≈ 0.8821 tpy
- PM_{10}: ≈ 0.061017 tpy
- $PM_{2.5}$: ≈ 0.061017 tpy
- VOC: 0.07733 tpy
- SO_2: ≈ 0.005921 tpy
- Benzene = 000001084 tpy

For comparison, the major-source threshold for any criteria pollutant under Title V is generally 100 tons per year *(12).* BBD's emissions are well under 2% of that level for every pollutant.

iii. Hazardous Air Pollutants

- Maximum single HAP: ≈0.01 tpy
- Total HAPs: ≈0.01 tpy

These thresholds 10 tpy for any single hazardous air pollutant and 25 tpy for all combined HAPs define a "major source" under Clean Air Act Section 112, with

facilities emitting below these levels classified as “area sources” subject to fewer federal HAP requirements *(14).*

The Facility’s estimated GHG emissions and associated co-pollutants may be reduced through continued equipment maintenance, operational efficiency improvements, and minimization of unnecessary fuel use and truck idling within the DAC. Planning truck routes to avoid or minimize passing through DAC for pickups and drop-offs. In addition, the Facility’s production of renewable biodiesel supports the displacement of petroleum-based fuels, which may contribute to broader regional reductions in GHG emissions and related air pollutants over time.

5.3 Odor Impacts

BBD manages odor generating activities in accordance with 6 NYCRR Part 360.19(i). Key odor controls include:

- Enclosed operations: Heating, separation, sludge processing, and wastewater handling occur indoors or in covered tanks, limiting atmospheric exposure.
- Sludge management: Sludge is removed within 1–7 days, preventing decomposition related odor.
- Unloading controls: Short duration odor potential during truck unloading is mitigated through immediate enclosed pumping to enclosed tanks
- No documented complaints: The Facility has not received any odor complaints, nor have nuisance conditions been reported to the Facility.

Based on these controls and operational design, odor impacts remain minimal, fully contained within the site, and do not create disproportionate effects on the surrounding DAC zones.

5.4 Noise Impacts

BBD was evaluated for potential noise impacts associated with its Facility operations in accordance with 6 NYCRR Part 360.19(j). A formal noise survey was conducted on June 10, 2022, with full documentation provided in Appendix C – Noise Study.

Key survey findings include:

- Nighttime LEQ: 61.5 dBA at Monitoring Location M-1 (Appendix C)
- Daytime LEQ: 60.7 dBA at Monitoring Location M-1 (Appendix C)
- Dominant noise source: General traffic on Sawyer Avenue, not BBD’s operations
- No tonal, impulsive, or atypical noise signatures associated with Facility equipment
- All primary processing activities occur indoors, substantially reducing transmission of mechanical noise (Facility Operation Manual, Section 3.4)

Enclosed processing areas for heating and separation help reduce mechanical noise. Paved surfaces lower impact noise from regular equipment maintenance or tool handling. Truck movements are brief and typical for a General Industrial zone, resulting in low overall noise from normal Facility operations.

The Sawyer Avenue area is an established industrial zone with no nearby schools, hospitals, or other sensitive locations. Residential areas are separated from the Facility by distance, roads, and other industrial sites, which help buffer the noise from the Facility. Measured noise levels meet NYCRR Part 360 requirements and do not create added impacts on the surrounding Disadvantaged Community under CLCPA §7(3) or CP-29.

5.5 Visual/ Industrial Presence

The Facility maintains a minimal visual footprint, with all processing conducted indoors and no expansion beyond the existing structure. An eight-foot covered perimeter fence fully screens onsite activities, equipment, and tank areas from public view, ensuring an orderly, unobtrusive, and aesthetically consistent appearance within the surrounding industrial corridor.5.6 Traffic

Traffic near the Facility is typical of an industrial area with regular truck activity. Buffalo Biodiesel minimizes added traffic through staggered truck scheduling, planned outdoor unloading, no-idling requirements, and direct routing to onsite bays. Vehicles avoid street queueing, and GPS-managed routes reduce unnecessary circulation within the surrounding Disadvantaged Community.

5.7 Wastewater Discharge and Water Quality Impact

BBD generates wastewater as a byproduct of its Used Cooking Oil (UCO) phase separation and sludge dewatering operations. All wastewater is fully contained onsite, pretreated, tested, and discharged to the Town of Tonawanda sanitary sewer system under Industrial Sewer Connection Permit #646 (Issued January 2, 2025; Valid till December 31, 2027). The Facility takes measure to prevent any contamination of groundwater, stormwater, surface waters, or any natural waterway.

5.7.1 Wastewater Generation and Collection

Approximately 15-25% of the incoming UCO consists of water. Water is separated from the oil during the following steps in the refining process:

- UCO heat tank processing: Thermal conditioning in the heat tanks (heating to 160°F or 74°C) promotes gravity separation, causing denser water layer to settle at the bottom of the tank. This condition is maintained for 10-20 hours before an operator draws off the water layer and transfers into the water pretreatment holding tank.
- Sludge dewatering in the filter press: Sludge The press removes water/ fluids trapped inside solid sludge matter. An estimated 3,000 gallons of water are recovered per cycle and sent to water tanks for stabilization and testing.

- Settlement in raw UCO storage tanks: UCO stored in the ASTs or temporary tanks undergoes passive settling. Water naturally separates and settles at the bottom due to density differences. These tanks are routinely managed, and the water is sent to tanks for pretreatment.

5.7.2 Wastewater Pretreatment Process

To ensure consistent, predictable quality and prevent any untreated process water from entering the sewer system, the Facility follows pretreatment steps and meets the Town of Tonawanda's wastewater discharge criteria (Industrial Sewer Connection Permit# 646).

The following are the pretreatment processes in place:

- pH adjustment and mixing: Caustic (99% NaOH – Sodium Hydroxide beads) is added to a full water tank and mixed with the help of air bubbles. Uniform mixing throughout the tank eliminates any pockets of low pH before further settling occurs.
- Settling and solids separation: Wastewater is allowed to settle for 16-24 hours so any solid can naturally separate. This assists the solids removal process and provides clarified/ stable water condition for the grease trap.
- Grease Trap: The final step before sewer discharge is passing water through a grease trap. Any residual oil or settled solids are captured by the trap.

5.7.3 Discharge Location and Regulation

BBD's wastewater discharge is regulated by:

- Town of Tonawanda Sewer Use Ordinance #2-2000 (Page 1 TOT Permit # 646)
- Industrial Sewer Connection Permit #646
- 6 NYCRR Part 360/361 Facility operation requirements

i. Authorized Wastewater Streams

As stated in Appendix D, allowable discharge streams include:

- Sanitary discharge (approximately 8,000 gallon per day)
- Cooling water
- Process wastewater from oil/water separator
- Limited drum cleaning wastewater (500 gallon per day)

ii. Discharge Limits and Monitoring

Permit #646 requires independent laboratory analysis prior to discharge twice every month, at least 14 days apart. Table 2 provides the parameters tested and their limits for compliance. These parameters are also included in Table 3 of the Facility Operation Manual.

Table 2: Water test parameters

Parameter	Limit	Purpose
pH	5.0-9.5 SU	Compliance
Oil and grease	300 mg/l	Compliance
Biological Oxygen Demand	250 mg/l	Surcharge
Total Suspended Solids	250 mg/l	Surcharge
Total Phosphorus	6.0 mg/l	Surcharge
Total Arsenic	.5 mg/l	Compliance
Total Zinc	4.4 mg/l	Compliance
Total Copper	2.6 mg/l	Compliance
Total Chrome	1.5 mg/l	Compliance
Total Cyanide	1.1 mg/l	Compliance
Total Mercury	0.001 mg/l	Compliance

Based on 3-4 of Appendix D, the permit also requires:

- Self-monitoring reports (SMRs) must be submitted monthly
- 24-hour violation notification
- Compliance with unannounced sampling by Town of Tonawanda
- Discharges are allowed only between 7:00 a.m.- 5:00 p.m. daily.

5.7.4 Laboratory Testing and Compliance Status

BBD conducts wastewater sampling twice per month, as required by the Town of Tonawanda (TOT) Industrial Sewer Connection Permit. Grab samples are collected from grease trap discharge pipes, which are monitoring point designated by the permit. All analysis is performed by Alpha Analytical Labs with full documentation maintained for each sample. Additionally, the company performs quality assurance checks, including pH test prior to discharge and centrifuge verification to confirm solid content is below a 5% threshold.

Three recent certified laboratory reports (done on October 21st, November 7th, and November 26th) were reviewed against permit limits. All parameters not listed below were also within limits.

Summary of Findings (Three Reports):

- Oil & grease: All values below 300 mg/L
- pH: All within 5.0 – 9.5 SU following pretreatment
- BOD: Below 250 mg/L limit in all samples
- TSS: Below 250 mg/L limit
- Total Phosphorus: Below 6.0 mg/L

- Mercury: All measurements below 0.001 mg/L regulatory limit
- All metals: Arsenic, Zinc, Copper, Chrome, Nickel all below discharge thresholds

These results demonstrate full compliance with Appendix D discharge limitation. Wastewater is fully regulated, closely monitored, and discharged to a publicly owned treatment works (POTW) after treatment and verification. No groundwater or surface water pathway exists.
This significantly reduces any potential DAC water burden.

5.8 Soil/Groundwater Risk

As part of wastewater pretreatment, all clarified process water passes through a grease trap prior to discharge, ensuring removal of residual oil and settled solids in accordance with Industrial Sewer Connection Permit #646. The grease trap also functions as a final safeguard in the wastewater system, providing last-stage filtration to prevent oily water from entering stormwater pathways or contacting groundwater. Because all drainage is routed to the sanitary system through sealed concrete floors, the trap acts as a final check after pH adjustment and settling, ensuring no untreated material leaves the Facility. Grab samples collected at the grease trap discharge point confirm compliance and minimize potential burdens on the surrounding Disadvantaged Community.

5.9 Impacts on Water Quality and EJ Considerations

5.9.1 No Exposure Pathway to Community or Environment

- All wastewater is fully contained indoors and routed through designated tanks and pretreatment equipment.
- Floors are sealed concrete eliminating unintentional pathways.
- Final discharge flows directly to a municipal POTW, which provides additional treatment before release.

5.9.2 Minimal EJ Water Burden

Because all wastewater goes to the POTW and meets pretreatment standards, the EJ community does not bear additional water quality risk. High risk pollutants such as Oil & Grease, BOD, Metals, and Mercury are all significantly below permit limits in recent analyses.

Wastewater discharges from BBD are fully compliant, monitored, and controlled. No water quality impact to the surrounding DAC community is expected, and no disproportionate environmental burden exists.

5.9.3 Facility-Specific Burden Analysis Summary

Table 3: DBA Summary

Burden Category	Assessment Summary
Air Pollution	Low – boilers and fleet emissions minimal
Odor	Low – indoor processing, covered tanks
Noise	Low – below standards; traffic is main noise source
Water Quality	Low – no discharges except pretreated sanitary
Soil/Groundwater Risk	Low – contained operations on concrete
Traffic	Low – moderate vehicle frequency
Visual/Industrial Presence	Low – existing Facility, no expansion footprint

5.11 Cumulative Impact Conclusion

The surrounding DAC currently experiences elevated baseline environmental burdens associated with industrial land use, transportation activity, and historical manufacturing operations. Relevant DAC indicators include traffic, diesel truck, PM2.5 exposure, industrial/manufacturing land use, proximity to remediation sites, and COPD emergency department visits. These existing indicators and their relative % severity (*table 1*) to other tracts allows to draw comparisons on how the Facility operations will impact existing conditions.

Current ambient air conditions in Tonawanda show PM10 concentrations of approximately 23 $\mu g/m^3$, PM2.5 concentrations of approximately 7 $\mu g/m^3$, NO_2 concentrations of approximately 13 $\mu g/m^3$, and O_3 concentrations of approximately 70 $\mu g/m^3$, all categorized as “Fair.” Existing SO_2 (~3 $\mu g/m^3$) and CO (~160 $\mu g/m^3$) concentrations remain within “Excellent” ranges. These existing conditions reflect ongoing regional industrial and mobile-source activity (*20*).

Proposed Facility-wide emissions include approximately 1,638.5 tpy CO_2e, consisting of approximately 872 tpy CO_2e from boilers and 766.5 tpy CO_2e from mobile sources. Criteria pollutant emissions remain comparatively low. Compared to the existing industrial corridor conditions and elevated regional DAC indicators, these emissions represent incremental additions within an already industrialized transportation corridor rather than establishment of a new major emissions source.

Truck-related emissions remain associated with existing industrial routes already characterized by elevated diesel truck exposure and vehicle traffic. PM and combustion-related emissions occur within an area already identified with elevated PM2.5 burdens; however, current ambient monitoring data indicates regional particulate concentrations remain within “Fair” air quality ranges. Benzene-related impacts remain comparatively limited relative to other DAC indicators, consistent with the lower benzene exposure percentile ranking (28th percentile).

Noise impacts remain consistent with existing industrial corridor conditions. Measured nighttime LEQ was approximately 61.5 dBA and daytime LEQ was approximately 60.7 dBA, with dominant noise sources identified as general traffic along Sawyer Avenue rather than Facility operations. Truck movements and unloading activities are short-duration and occur within a General Industrial zoning district already characterized by industrial and transportation noise.

Odor impacts remain localized and controlled through indoor processing, covered tanks, sludge removal procedures, and controlled unloading operations. Existing industrial operations already contribute to corridor odor conditions, and no documented odor complaints or nuisance conditions have been reported for the Facility.

Visual impacts remain limited due to existing industrial land use, perimeter fencing, covered processing areas, and surrounding industrial buffers which obstruct direct views of operations from nearby receptors. The Facility does not expand beyond the existing industrial footprint.

Water quality impacts remain limited due to secondary containment systems, wastewater pretreatment, spill prevention controls, paved unloading areas, and regulated discharge to the Town of Tonawanda sewer system. Proposed upgrades to ASTs and containment systems reduce potential release risks compared to previous operating configurations.

5.12 CLCPA & Environmental Justice Context

Because 225 Sawyer Avenue is located within a CLCPA designated Disadvantaged Community, CLCPA §7(3), CP-29, and DEP-24-1 require that all associated emissions be evaluated for potential disproportionate burden. Consistent with DAR-21 and the CLCPA Mobile Emissions Addendum, this assessment considers stationary boiler emissions, indirect mobile-source emissions, and co-pollutants within the DAC and its 150-meter buffer boundary.

The analysis demonstrates that Facility-related emissions remain low, controlled, and well below regulatory significance thresholds.

Key findings include:

- Facility-wide emissions remain far below Title V major-source thresholds and CP-29/EJ concern levels.
- Natural-gas combustion results in inherently low PM and SO_2 formation, with minimal criteria pollutants and HAPs (all <0.01 tpy).
- Mobile-source emissions are limited by capped annual miles, efficient engines, and optimized routing. DAC zone mileage was calculated using mapped truck routes and CLCPA required spatial overlays.
- When compared to regional background from legacy industrial activity and transportation corridors, BBD's incremental contribution is small and tightly controlled.

Based on these updated emissions, BBD operates as a low-emitting facility within the Sawyer Avenue industrial corridor. The quantitative evidence supports the conclusion that, while CLCPA §7(3) and CP-29 review is required procedurally, the Facility does not create or exacerbate a disproportionate environmental burden on the surrounding Disadvantaged Community.

5.13 Regulatory Significance

- The three boilers qualify as small combustion units with PTE far below State facility or Title V thresholds, and fully compatible with Air Facility Registration–scale emissions under NYSDEC Part 201 (*15)*
- On-road trucks are regulated primarily through federal mobile-source programs, not stationary-source air permits, but are conservatively included here for CLCPA and EJ evaluation
- Even when all mobile and stationary sources are combined, the Facility's emissions remain well below any major-source applicability thresholds for criteria pollutants, HAPs, or greenhouse gases

6. MITIGATION MEASURES

BBD has implemented comprehensive operational and engineering controls to ensure that air emissions, odors, noise, wastewater, and traffic do not contribute to disproportionate impacts on the surrounding Disadvantaged Community. These measures are consistent with the Facility's Operations Manual and EJ/DBA findings and reflect upgrades made during the Part 360/361-8 permitting process.

1. **Enclosed Processing and Covered Storage Tanks**
   All UCO and yellow grease processing, heating, separation, and material handling occur inside the main building or within covered containment systems. Newly retrofitted or enclosed tanks prevent vapor release, eliminate rainwater intrusion, and reduce wastewater generation which is consistent with required odor and air controls mentioned earlier.
2. **Odor Management and Housekeeping**
   Daily Facility wide sanitation, immediate cleanup of unloading areas, routine tank maintenance, rapid material turnover, and clean concrete work surfaces prevent residual buildup, decomposition, and fugitive odors. Sludge and wastewater are never stored long term.
3. **Controlled Sludge and Wastewater Handling**
   Water and sludge generated during phase separation are fully contained indoors. Wastewater is pretreated through pH adjustment, settling, and grease trap separation prior to discharge under Permit #646. Sludge is filtered, stabilized, and transported off-site within 1–7 days to permitted digesters. These practices along with grease traps eliminate exposure pathways and minimize EJ water burdens.
4. **Noise Mitigation Through Enclosure and Updated Equipment Practices**
   Processing equipment, pumps, compressors, and trucks operate inside enclosed structures that reduce mechanical noise. A formal noise study confirmed that measured

levels meet Part 360 standards and that traffic is the dominant noise source near the property line.

5. **Spill Prevention and Overfill Protection**
   Secondary containment retrofits, sealed concrete pads, overfill alarms, supervised loading, overfill protection devices, and routine inspections ensure spills are prevented and swiftly managed. Daily checks of tanks, troughs, pumps, and offloading areas further minimize potential releases.
6. **Traffic and Emissions Management for EJ Compliance**
   GPS-based routing, staggered fleet scheduling, reduced idling protocols, and avoidance of peak-hour departures limit truck emissions and reduce time within DAC corridors. These measures complement the Facility's low stationary emissions and support CLCPA §7(3) findings of no disproportionate air burden.

Based on the impact analysis in section 5.11 these additional measures can be taken:

- Disadvantaged Community Route Optimization: Section 5.11 identified elevated existing DAC transportation burdens, including traffic exposure in the 70th percentile and diesel truck exposure in the 87th percentile. To reduce additional localized mobile-source impacts within the DAC, BBD will continue implementing fleet routing procedures that prioritize major industrial transportation corridors and highways, including I-190 and I-290, while minimizing unnecessary travel on secondary local roads near residential receptors. Dispatch scheduling and reduced-idling protocols will also be maintained to limit localized diesel particulate matter, NO_x, and co-pollutant exposure within the surrounding DAC.
- On-Site Physical Mitigation and Green Infrastructure: Section 5.11 identified elevated existing industrial land use burdens (99th percentile), PM2.5 exposure (72nd percentile), and cumulative historical industrial impacts within the surrounding DAC. To provide localized physical mitigation beyond baseline regulatory requirements, BBD will implement and maintain a targeted green infrastructure buffer along portions of the facility perimeter facing the DAC buffer area. Native deciduous and evergreen tree species will be planted and maintained to assist with interception of roadway dust and particulate matter, provide additional visual buffering between the industrial corridor and nearby receptors, reduce localized heat island effects, and contribute to localized carbon sequestration within the industrial corridor.

7. SUMMARY

This Environmental Justice (EJ) and Disadvantaged Community (DAC) Impact Assessment was prepared by Buffalo Biodiesel, Inc. Used Cooking Oil (UCO) and Yellow Grease Processing Facility located at 225 Sawyer Avenue, Tonawanda, New York. The evaluation was completed in support of the Facility's application for a 6 NYCRR Part 360 Solid Waste Management Facility Permit, as the project site is located within a Disadvantaged Community designated under the New York State Climate Leadership and Community Protection Act (CLCPA).This assessment evaluates potential impacts associated with continued Facility operations, including air emissions, odor, noise, wastewater, soil and groundwater, traffic, and visual or industrial presence. The Facility has operated at this location since 2005 within an established industrial corridor and does not involve expansion of the existing operational footprint.

Air emissions were evaluated for both stationary and mobile sources. Stationary emissions from natural gas fired boilers were calculated and demonstrate low emission levels that do not approach Title V major source thresholds for criteria pollutants or hazardous air pollutants. Mobile source emissions associated with UCO collection and transport activities were conservatively evaluated using mapped truck routes.

Noise and odor impacts are minimized through enclosed processing activities, covered storage systems, and established operational controls. A formal noise study confirmed that measured sound levels comply with Part 360 requirements and that ambient noise conditions near the Facility boundary are dominated by existing traffic rather than Facility operations. All primary processing activities occur indoors or within covered systems, and no odor nuisance conditions have been documented.

Wastewater generation, pretreatment, and discharge are fully regulated and managed under Town of Tonawanda Industrial Sewer Connection Permit #646. All process water is contained onsite, pretreated for pH adjustment, settling, and grease separation, and discharged to TOT Sewer System following verification through certified laboratory testing. Recent lab analysis confirms consistent compliance with applicable discharge limits. Grease traps and oil water separation systems provide additional protection prior to discharge.

Traffic impacts associated with Facility operations were evaluated and determined to be low, reflecting moderate vehicle frequency and the use of routing and scheduling controls. Visual and land use impacts are similarly limited, as the Facility operates within a long established industrial area consistent with surrounding land uses.

Based on the evaluation of all applicable impact categories and consideration of cumulative conditions within the surrounding Disadvantaged Community, the assessment concludes that the continued operation of Buffalo Biodiesel, Inc. does not result in disproportionately high or adverse environmental or public health burdens. The Facility's controlled operations, compliance history, and documented mitigation measures demonstrate consistency with CLCPA §7(3) requirements and NYSDEC Commissioner Policy 29.8.

FINDINGS & CONCLUSION

This Environmental Justice assessment demonstrates that BBD's operations remain protective of the surrounding Disadvantaged Community. After reviewing operational data, environmental controls, and EJ criteria, the Facility is compliant with all applicable Part 360 EJ and DAC requirements, and no significant environmental impacts are anticipated. The project does not create a disproportionate burden on the community. Consistent with EPA GHGRP guidance, the Facility's criteria pollutant emissions are far below the 100 tons per year limit under Title V.

Indoor processing, enclosed storage, enhanced odor controls, updated noise mitigation, and strict wastewater management collectively minimize off-site impacts and prevent exposure pathways. Mobile and stationary emissions remain low and aligned with CLCPA expectations. Overall, the Facility's design, controls, and management practices are sufficient to protect public health and the environment while supporting continued compliance with EJ and DAC standards.

In addition to maintaining low environmental impacts, BBD provides a significant positive contribution to sustainability and renewable energy generation. The company collects thousands of gallons of used cooking oil from restaurants, food service establishments, and communities across New York and surrounding states, preventing this waste material from entering landfills, sewer systems, or waterways where it can cause blockages, pollution, and long-term environmental harm. Once collected, the used cooking oil is processed and repurposed as feedstock for biodiesel production, a renewable, lower-carbon transportation fuel that reduces dependence on petroleum diesel. According to the Company's mission, BBD supports a circular economy by turning a waste byproduct into a clean-burning biofuel that reduces lifecycle greenhouse gas emissions and advances New York State's climate and sustainability goals. Through responsible collection, recycling, and renewable-energy support, BBD plays a meaningful role in environmental protection while contributing to broader CLCPA-aligned climate and decarbonization objectives.

Appendix A – CLCPA DAC On-Road Vehicle Route Map

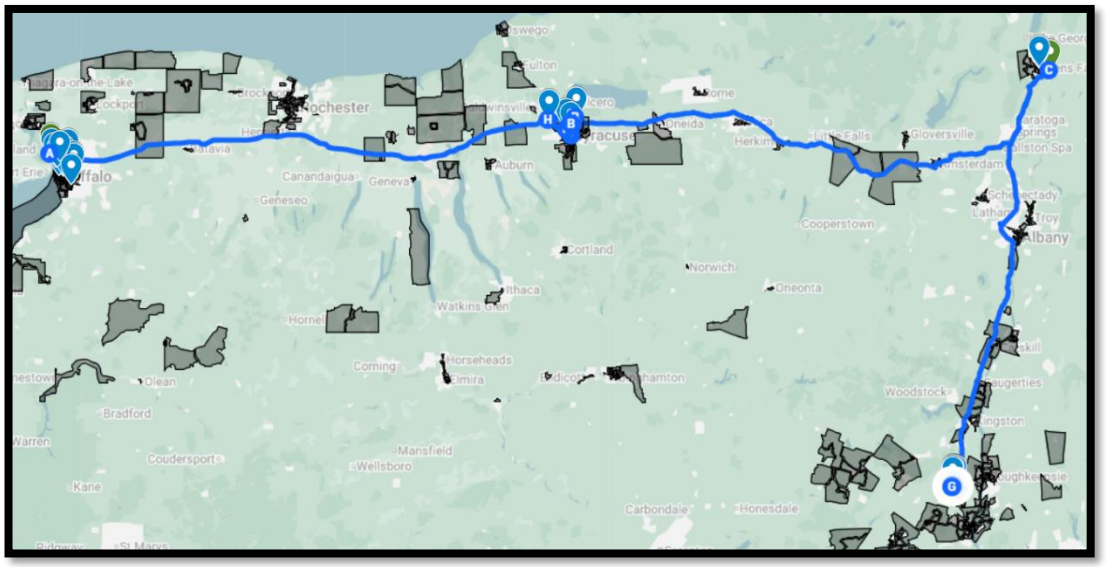


Figure 2: State wide truck route

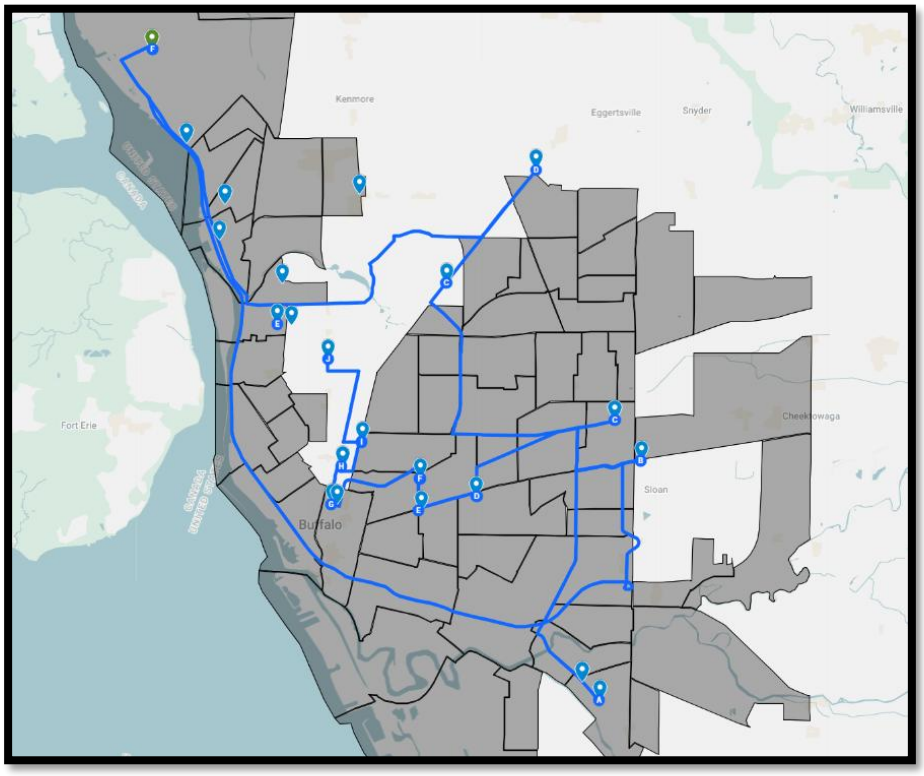


Figure 3: Local truck routes (vac and box)

Appendix B – Boiler & Truck Emission Calculations (DARR-21 Based)

Table 3, 4 and 5 contains relevant information for CO_2e emission calculation. An example using box trucks for gallon per year-based calculation has been provided later. Co-pollutants (CO, PM, SO, VOCs, etc.) have been calculated using the AFLEET online resource provided by DEC. Figure x and Figure x provides the preset that was used for box truck, the individual factor, and the associated results. This data has also been reported in Tables 3, 4 and 5. This should provide a demonstration of the calculation and data reporting process.

Table 4: Box truck emission calculation

BOX TRUCK				
Vehicle Model	**Make Year**	**Miles Per Gallon (mi/gal)**	**Fuel Consumption Data Source**	**Total Number of Trucks**
Ford E450 Van 2023	2025	11.00	Reference 18	19
Annual miles + buffer (mi)	**%DAC**	**DAC miles (mi)**	**Fuel (total miles) (gal/yr)**	-
44827.3	85.00	38103.21	4075.21	-
GHG	**EPA Factor (kg/gal)**	**GWP_{20}**	**Emissions (CO_2e) (kg/yr)**	**US tons per year (tpy)**
CO_2	10.21	-	4.16E+04	4.59E+01
CH_4	1.05E-04	84.00	35.77	3.94E-02
N_2O	4.74E-04	264.00	510.06	5.62E-01
-	-	Total CO_2e	4.22E+04	4.65E+01
-	-	-	Total CO_2e (DAC)	3.95E+01
Air Pollutant	**EPA Factor (g/mi)**	**Emissions(kg/yr)**	**Total tpy**	**DAC tpy**
CO	7.78E-01	34.88	3.84E-02	3.27E-02
NOx	5.90E-01	26.44	2.91E-02	2.48E-02
PM10	3.00E-03	0.14	1.50E-04	1.27E-04
PM2.5	3.00E-03	0.14	1.50E-04	1.27E-04
VOC	1.09E-01	4.90	5.40E-03	4.59E-03
SOx	6.1E-03	2.72E-01	3.00E-04	2.55E-04
Benzene	8.82E-06	-	4.36E-07	3.71E-07

Table 5: Vacuum truck emission calculation

VACUUM TRUCK				
Vehicle Model	**Make Year**	**Miles Per Gallon (mi/gal)**	**Fuel Consumption Data Source**	**Total Number of Trucks**
Mack MD742	2022	5.8	Reference 17	61
Annual miles + buffer (mi)	**%DAC**	**DAC miles**	**Fuel (total miles) (gal/yr)**	
263011	85	223559.35	45346.72	-
GHG	**EPA Factor (kg/gal)**	**GWP_{20}**	**Emissions (CO_2e) (kg/yr)**	**tpy**
CO_2	10.21	-	4.63E+05	5.10E+02
CH_4	5.51E-05	84.00	209.88	2.31E-01
N_2O	2.50E-04	264.00	2992.64	3.30E+00
-	-	Total CO2e	4.66E+05	5.14E+02
-	-	-	Total CO_2e (DAC)	4.37E+02
Air Pollutant	**EPA Factor (g/mi)**	**Emissions(kg/yr)**	**Total tpy**	**DAC tpy**
CO	7.78E-01	207.79	2.29E-01	1.95E-01
NOx	5.90E-01	178.58	1.97E-01	1.67E-01
PM10	3.00E-03	0.77	8.50E-04	7.22E-04
PM2.5	3.00E-03	0.77	8.50E-04	7.22E-04
VOC	1.09E-01	28.39	3.13E-02	2.66E-02
SOx	1.22E-02	3.22	3.55E-03	3.02E-03
Benzene	1.67E-05	-	4.85 E-06	4.12E-06

Table 6: Statewide tractor truck emission calculation

TRACTOR TRUCK (Statewide)				
Vehicle Model	**Make Year**	**Miles Per Gallon (mi/gal)**	**Fuel Consumption Data Source**	**Total Number of Trucks**
Kenworth 2024	2024	9	Reference 16	11
Annual miles + buffer (mi)	**%DAC**	**DAC miles**	**Fuel (total miles) (gal/yr)**	
466409.4	2.00	163243.29	51823.27	-
GHG	**EPA Factor (kg/gal)**	**GWP_{20}**	**Emissions (kg/yr)**	**tpy**
CO_2	10.21	-	5.29E+05	5.83E+02
CH_4	8.55E-05	84.00	372.19	4.10E-01
N_2O	3.88E-04	264.00	5306.99	5.85E+00
		Total CO2e	534794.74	5.90E+02
			Total CO2e (DAC)	1.18E+01
Air Pollutant	**EPA Factor (g/mi)**	**Emissions(kg/yr)**	**Total tpy**	**DAC tpy**
CO	1.45E+00	6.76E+02	7.45E-01	1.49E-02
NOx	1.56E+00	7.28E+02	8.02E-01	1.60E-02
PM10	3.00E-03	1.40E+00	1.54E-03	3.08E-05
PM2.5	3.00E-03	1.40E+00	1.54E-03	3.08E-05
VOC	2.80E-02	1.31E+01	1.44E-02	2.88E-04
SOx	7.87E-03	7.42E+01	8.17E-02	1.63E-03
Benzene	1.08E-05	-	5.55E-06	1.94E-06

Notes:

[a] Emission factors for CH_4, and N_2O came from Table 4 Mobile Combustion CH_4 and N_2O for On-Road Diesel and Alternative Fuel Vehicles based on the Emission Factors Hub data by EPA (*2*)

[b] CO_2e calculations apply the 20-year Global Warming Potentials (GWPs) specified under 6 NYCRR Part 496.5, as required for CLCPA Section 7(2) and 7(3) analyses.

[c] Emissions factor based Global Warming Potentials (GWPs) from 40 CFR Part 98, Table A-1 (January 2025): CO_2 GWP = 1; CH_4 GWP = 84; N_2O GWP = 264

[d] Conservatively assumes PM = PM_{10} = $PM_{2.5}$

[e] Benzene average emission factor came from AP-42 1.3 table 1.3-9 (*21*)

Methodology Clarification (Example using Box Trucks):
CH_4 and N_2O emission factors were obtained from EPA emission factors for on-road diesel vehicles presented in Table 4: Mobile Combustion CH_4 and N_2O Emission Factors for On-Road Diesel and Alternative Fuel Vehicles. The factors were converted from g/mile to kg/gallon to align with the fuel consumption-based calculation methodology used in this analysis. Conversion was performed using the assumed vehicle fuel economy of 11 mi/gal for the 2025 Ford E450 box truck fleet.

From the EPA factors hub table 4 – mobile combustion CH_4 and N_2O emission factors are 0.0095 and 0.0431 g/mile for medium and heavy-duty vehicles running on diesel.

Vehicle fuel economy for box truck (*18*): 11 mi/gal

Conversion equation:

$$EF_{kg/gal} = \frac{EF_{g/mi} \times MPG}{1000}$$

Where:

- $EF_{kg/gal}$= emission factor in kg/gal
- $EF_{g/mi}$= EPA emission factor in g/mi
- MPG = vehicle fuel economy (mi/gal)
- 1000 = grams per kilogram conversion factor

Example CH_4 conversion:

$$EF_{CH4}(\frac{kg}{gal}) = 9.5 \times 10^{-3}\ g/mi \times 11\ mi/gal \times \frac{1\ kg}{1000\ g} = 1.045 \times 10^{-4}\ kg/gal$$

Example N_2O conversion:

$$EF_{N2O}(\frac{kg}{gal}) = 4.31 \times 10^{-2}\ g/mi \times 11\ mi/gal \times \frac{1\ kg}{1000\ g} = 4.741 \times 10^{-4}\ kg/gal$$

Now using kg/gal data and the respective GWP_{20} values for CO_2, CH_4 and N_2O we can compute the total ton per year (tpy) CO_2e produced. Simply multiply the EPA factor, GPW_{20} value and the total fuel consumed per year.

Calculation Steps:

I. $Gallons\_Used\ (\frac{gal}{yr}) = Miles\ /\ MPG$
II. $CO_2(kg) = Gallons_{Used} \times EF_{CO2}$
III. $CH4\ (kg) = Fuel\ (\frac{gal}{yr}) \times EF_{CH4}\ (\frac{kg}{gal})$
IV. $N2O = Fuel\left(\frac{gal}{yr}\right) \times EF_{N2O}\ (\frac{kg}{gal})$
V. $CH4\_CO2e = CH4\_kg \times GWP20\_CH4$
VI. $N2O\_CO2e = N2O\_kg \times GWP20\_N2O$
VII. $Total\_CO2e = CO2\_kg + CH4\_CO2e + N2O\_CO2e$ (reported in US tons per year)

Criteria pollutant emissions

Co pollutants and their emission factors were determined using AFLEET Tool. Inputs for the AFLEET Tool such as the total yearly miles, gallon usage, diesel equivalent miles per gallon, and make year along with resultant emission factors and emitted ton per year values are detailed on tables 3, 4, and 5. Therefore, the co-pollutant data reported is strictly based on the AFLEET tool calculations and vehicle data inputs. See figure *4.* For benzene, average emission factor data from the EPA AP-24 Section 1.3 table 1.3-9 (*21*) . Since the value was in lb/10^3gal it was converted to lb/10^3yr by multiplying the value with the total fuel gallon consumed per year. Conversion from pounds to US tons by using factor 0.0005 and adjusting the 10^3 denominator gives the average ton per year value for benzene emissions. Factor reported in tables are in g/mi. For SOx, the factor was given in g/Btu in the background data tab of the AFLEET Tool. The conversion to g/mi is provided below along with figure *5* which shows the factor for BOX truck co pollutant calculation. This factor happened to be 5.45E-07 g/Btu for all three cases.

Converting g/Btu to lb and g/mi

This calculation is done by the excel sheet automatically. Footprint-Onroad tab of the AFLEET tool gives well-to-wheel for the box truck case as 101.3. The SOx emission factor is 5.45E-07 g/Btu reported in the background data tab (figure *5*). For 101.3 barrels and 42 gal/ barrel, that's total 4,255 gal of diesel used. Using typically accepted LHV for petroleum as 128500 Btu/gal you get 4,255 x 5.45E-07 x 128500 = 299 g

SO_x. 299 g is approximately 0.65 lbs. this number is correct as the Footprint-Onroad reports 0.6 lb SO_x.

Now, converting 299 g to g/ mile = 299 /44,872 = 6.1E-03 g/mi. This example is using box truck.

9035	PENNSYLVANIA	Transit Bus, Diesel	VOC (Evap)
9036	RHODE ISLAND	Transit Bus, Diesel	VOC (Evap)
9037	SOUTH CAROLINA	Transit Bus, Diesel	VOC (Evap)
9038	SOUTH DAKOTA	Transit Bus, Diesel	VOC (Evap)
9039	TENNESSEE	Transit Bus, Diesel	VOC (Evap)
9040	TEXAS	Transit Bus, Diesel	VOC (Evap)
9041	UTAH	Transit Bus, Diesel	VOC (Evap)
9042	VERMONT	Transit Bus, Diesel	VOC (Evap)
9043	VIRGINIA	Transit Bus, Diesel	VOC (Evap)
9044	WASHINGTON	Transit Bus, Diesel	VOC (Evap)
9045	WEST VIRGINIA	Transit Bus, Diesel	VOC (Evap)
9046	WISCONSIN	Transit Bus, Diesel	VOC (Evap)
9047	WYOMING	Transit Bus, Diesel	VOC (Evap)
9048			
9049	**State Emission Factors for Use in AFLEET Tool**		

9050	**State**	**Vehicle type**	**Pollutant (g/mi)**	**2025**	**2026**	**2027**	**2028**
9051	NEW YORK	Combination long-haul truck, diesel	CO	1.447	1.428	1.408	1.389
9052	NEW YORK	Combination long-haul truck, diesel	NOx	1.561	1.256	0.952	0.647
9053	NEW YORK	Combination long-haul truck, diesel	PM10	0.003	0.003	0.002	0.002
9054	NEW YORK	Combination long-haul truck, diesel	PM10 (TBW)	0.156	0.157	0.157	0.158
9055	NEW YORK	Combination long-haul truck, diesel	PM2.5	0.003	0.003	0.002	0.002
9056	NEW YORK	Combination long-haul truck, diesel	PM2.5 (TBW)	0.049	0.049	0.050	0.050
9057	NEW YORK	Combination long-haul truck, diesel	VOC	0.028	0.026	0.024	0.023
9058	NEW YORK	Combination long-haul truck, diesel	VOC (Evap)	0.042	0.040	0.039	0.037
9059	NEW YORK	Combination short-haul truck, diesel	CO	1.524	1.505	1.487	1.469
9060	NEW YORK	Combination short-haul truck, diesel	NOx	1.777	1.430	1.084	0.737
9061	NEW YORK	Combination short-haul truck, diesel	PM10	0.004	0.004	0.003	0.003
9062	NEW YORK	Combination short-haul truck, diesel	PM10 (TBW)	0.175	0.175	0.176	0.176
9063	NEW YORK	Combination short-haul truck, diesel	PM2.5	0.004	0.003	0.003	0.003
9064	NEW YORK	Combination short-haul truck, diesel	PM2.5 (TBW)	0.056	0.056	0.056	0.056

Footprint-Rail | Footprint-Marine | Footprint Output | CFI | CFI Output | EV Rate | Charger TCO | Charger TCO Output | IR | IR Output | Background Data | Sheet1

Figure 4: AFLEET Tool (Spreadsheet) Background Data Tab.

1863	PM2.5: Total	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.008	0.010	0.01
1864	SOx: Total	0.089	0.126	0.118	0.118	0.133	0.133	0.170	0.208	0.279	0.39
1865	BC: Total	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00
1866	OC: Total	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.00
1867											
1868	**GHGs, Petroleum Use, and Air Pollutants**				Share of CD mile	Share of CD miles	EV Type				
1869	Pump to Wheel				49%	97%	EV300				

1870		Gasoline	Diesel	Gasoline H	Gasoline PHE	Gasoline EREV	EV	G.H2 FCV	Diesel HEV	Diesel HHV	B20
1871	Petroleum Use (gallon/Btu)	0.933	1.000				0.000	0.000			0.80
1872	GHGs (g/Btu)	0.077	0.080				0.000	0.000			0.08
1881	LD SOx	4.56E-07	5.45E-07	4.56E-07	2.34E-07	1.50E-08	0.00E+00	0.00E+00			4.36E-0
1882	LD SOx (CD)				2.22E-07	4.41E-07					
1883	HD CO: Total										
1884	HD NOx: Total										
1885	HD PM10										
1886	HD PM10 (TBW)										
1887	HD PM2.5										
1888	HD PM2.5 (TBW)										
1889	HD VOC										
1890	HD VOC (Evap)										
1891	HD SOx: Total	4.56E-07	5.45E-07	4.56E-07			0.00E+00	0.00E+00	5.45E-07	5.45E-07	4.36E-0
1892											
1893											
1894	**Fuel Specifications**										

1895		LHV	HHV	Density	Carbon	Sulfur content
				grams/g		

Footprint-Onroad | Footprint-Offroad | Footprint-Marine | Footprint Output | CFI | CFI Output | EV Rate | Charger TCO | Charger TCO Output | Footprint-Rail | IR | IR Output | Background Data | Sheet

Figure 5: SOx emission factor

Table 7: Boiler Emission

Equipment ID		Boiler #1		Boiler #2		Boiler #3		Total	
Equipment Rating	(MMBtu/ hr.)	0.400		0.400		0.900		1.70	
	(scf/hr)	392		392		882		1,666.67	
Pollutant	Emissions Factor		Emissions					PTE Total	
	EF	Units	(lbs/ hr)	(tpy)	(lbs/ hr)	(tpy)	(lbs/ hr)	(tpy)	(lbs/ hr)	(tpy)
Criteria Pollutants[c]										
VOC	6	lb/10^6 scf	0.002	0.01	0.002	0.01	0.005	0.02	**0.009**	**0.04**
NO_X	100	lb/10^6 scf	0.039	0.17	0.039	0.17	0.088	0.39	**0.167**	**0.73**
CO	84	lb/10^6 scf	0.033	0.14	0.033	0.14	0.074	0.32	**0.140**	**0.61**
$PM/PM_{10}/PM_{2.5}$[d]	7.6	lb/10^6 scf	0.003	0.01	0.003	0.01	0.007	0.03	**0.013**	**0.06**
SO_2	0.6	lb/10^6 scf	0.0002	0.0010	0.0002	0.0010	0.0005	0.0023	**0.00**	**0.00**
Greenhouse Gases[e]										
CO_2	53.06	kg/MMBtu	46.79	204.94	46.79	204.94	105.28	461.12	**199**	**871**
CH_4	1.0E-03	kg/MMBtu	8.8E-04	3.9E-03	8.8E-04	3.9E-03	2.0E-03	8.7E-03	**3.7E-03**	**1.6E-02**
N_2O	1.0E-04	kg/MMBtu	8.8E-05	3.9E-04	8.8E-05	3.9E-04	2.0E-04	8.7E-04	**3.7E-04**	**1.6E-03**
CO_2e[f]	53.11	kg/MMBtu	46.84	205.15	46.84	205.15	105.39	461.60	**199**	**872**
Hazardous Air Pollutants (HAPs)[g]										
2-Methylnaphthalene	2.4E-05	lb/10^6 scf	9.4E-09	4.1E-08	9.4E-09	4.1E-08	2.1E-08	9.3E-08	**4.0E-08**	**1.8E-07**
3-Methylcholanthrene	1.8E-06	lb/10^6 scf	7.1E-10	3.1E-09	7.1E-10	3.1E-09	1.6E-09	7.0E-09	**3.0E-09**	**1.3E-08**
7,12-Dimethylbenz(a)anthracene	1.6E-05	lb/10^6 scf	6.3E-09	2.7E-08	6.3E-09	2.7E-08	1.4E-08	6.2E-08	**2.7E-08**	**1.2E-07**
Acenaphthene	1.8E-06	lb/10^6 scf	7.1E-10	3.1E-09	7.1E-10	3.1E-09	1.6E-09	7.0E-09	**3.0E-09**	**1.3E-08**
Acenaphthylene	1.8E-06	lb/10^6 scf	7.1E-10	3.1E-09	7.1E-10	3.1E-09	1.6E-09	7.0E-09	**3.0E-09**	**1.3E-08**
Anthracene	2.4E-06	lb/10^6 scf	9.4E-10	4.1E-09	9.4E-10	4.1E-09	2.1E-09	9.3E-09	**4.0E-09**	**1.8E-08**
Arsenic	2.0E-04	lb/10^6 scf	7.8E-08	3.4E-07	7.8E-08	3.4E-07	1.8E-07	7.7E-07	**3.3E-07**	**1.5E-06**
Benz(a)anthracene	1.8E-06	lb/10^6 scf	7.1E-10	3.1E-09	7.1E-10	3.1E-09	1.6E-09	7.0E-09	**3.0E-09**	**1.3E-08**

Benzene	2.3E-03	lb/10^6 scf	9.0E-07	4.0E-06	9.0E-07	4.0E-06	2.0E-06	8.9E-06	**3.8E-06**	**1.7E-05**
Benzo(a)pyrene	1.2E-06	lb/10^6 scf	4.7E-10	2.1E-09	4.7E-10	2.1E-09	1.1E-09	4.6E-09	**2.0E-09**	**8.8E-09**
Benzo(b)fluoranthene	1.8E-06	lb/10^6 scf	7.1E-10	3.1E-09	7.1E-10	3.1E-09	1.6E-09	7.0E-09	**3.0E-09**	**1.3E-08**
Benzo(g,h,i)perylene	1.2E-06	lb/10^6 scf	4.7E-10	2.1E-09	4.7E-10	2.1E-09	1.1E-09	4.6E-09	**2.0E-09**	**8.8E-09**
Benzo(k)fluoranthene	1.8E-06	lb/10^6 scf	7.1E-10	3.1E-09	7.1E-10	3.1E-09	1.6E-09	7.0E-09	**3.0E-09**	**1.3E-08**
Beryllium	1.2E-05	lb/10^6 scf	4.7E-09	2.1E-08	4.7E-09	2.1E-08	1.1E-08	4.6E-08	**2.0E-08**	**8.8E-08**
Cadmium	1.1E-03	lb/10^6 scf	4.3E-07	1.9E-06	4.3E-07	1.9E-06	9.7E-07	4.3E-06	**1.8E-06**	**8.0E-06**
Chromium	1.4E-03	lb/10^6 scf	5.5E-07	2.4E-06	5.5E-07	2.4E-06	1.2E-06	5.4E-06	**2.3E-06**	**1.0E-05**
Chrysene	1.8E-06	lb/10^6 scf	7.1E-10	3.1E-09	7.1E-10	3.1E-09	1.6E-09	7.0E-09	**3.0E-09**	**1.3E-08**
Cobalt	8.4E-05	lb/10^6 scf	3.3E-08	1.4E-07	3.3E-08	1.4E-07	7.4E-08	3.2E-07	**1.4E-07**	**6.1E-07**
Dibenzo(a,h)anthracene	1.2E-06	lb/10^6 scf	4.7E-10	2.1E-09	4.7E-10	2.1E-09	1.1E-09	4.6E-09	**2.0E-09**	**8.8E-09**
Dichlorobenzene	1.2E-03	lb/10^6 scf	4.7E-07	2.1E-06	4.7E-07	2.1E-06	1.1E-06	4.6E-06	**2.0E-06**	**8.8E-06**
Fluoranthene	3.0E-06	lb/10^6 scf	1.2E-09	5.2E-09	1.2E-09	5.2E-09	2.6E-09	1.2E-08	**5.0E-09**	**2.2E-08**
Fluorene	2.8E-06	lb/10^6 scf	1.1E-09	4.8E-09	1.1E-09	4.8E-09	2.5E-09	1.1E-08	**4.7E-09**	**2.0E-08**
Formaldehyde	7.5E-02	lb/10^6 scf	2.9E-05	1.3E-04	2.9E-05	1.3E-04	6.6E-05	2.9E-04	**1.3E-04**	**5.5E-04**
Hexane	1.8E+00	lb/10^6 scf	7.1E-04	3.1E-03	7.1E-04	3.1E-03	1.6E-03	7.0E-03	**3.0E-03**	**1.3E-02**
Indeno(1,2,3-cd)pyrene	1.8E-06	lb/10^6 scf	7.1E-10	3.1E-09	7.1E-10	3.1E-09	1.6E-09	7.0E-09	**3.0E-09**	**1.3E-08**
Manganese	3.8E-04	lb/10^6 scf	1.5E-07	6.5E-07	1.5E-07	6.5E-07	3.4E-07	1.5E-06	**6.3E-07**	**2.8E-06**
Mercury	2.6E-04	lb/10^6 scf	1.0E-07	4.5E-07	1.0E-07	4.5E-07	2.3E-07	1.0E-06	**4.3E-07**	**1.9E-06**
Naphthalene	6.1E-04	lb/10^6 scf	2.4E-07	1.0E-06	2.4E-07	1.0E-06	5.4E-07	2.4E-06	**1.0E-06**	**4.5E-06**
Nickel	2.1E-03	lb/10^6 scf	8.2E-07	3.6E-06	8.2E-07	3.6E-06	1.9E-06	8.1E-06	**3.5E-06**	**1.5E-05**
Phenanthrene	1.7E-05	lb/10^6 scf	6.7E-09	2.9E-08	6.7E-09	2.9E-08	1.5E-08	6.6E-08	**2.8E-08**	**1.2E-07**
Pyrene	5.0E-06	lb/10^6 scf	2.0E-09	8.6E-09	2.0E-09	8.6E-09	4.4E-09	1.9E-08	**8.3E-09**	**3.7E-08**
Selenium	2.4E-05	lb/10^6 scf	9.4E-09	4.1E-08	9.4E-09	4.1E-08	2.1E-08	9.3E-08	**4.0E-08**	**1.8E-07**
Toluene	3.4E-03	lb/10^6 scf	1.3E-06	5.8E-06	1.3E-06	5.8E-06	3.0E-06	1.3E-05	**5.7E-06**	**2.5E-05**
Max Single HAP (Hexane) =			**0.0007**	**0.0031**	**0.0007**	**0.0031**	**0.0016**	**0.0070**	**0.00**	**0.01**
Total HAPs =			**0.0007**	**0.0032**	**0.0007**	**0.0032**	**0.0017**	**0.0073**	**0.00**	**0.01**

Boiler Emission Calculation Notes:

[a] Emissions were calculated based on the following equation:

$$Emissions = Emissions\ Factor\left(\frac{lb}{10^6\ scf}\ or\ \frac{mass}{MMBtu}\right) \times (fuel\ consumption\ rate\ \left(\frac{MMBtu}{hr}\ or\ \frac{scf}{hr}\right)\ \times Conversion\ Factor$$

[b] Annual emissions based on a continuous 8,760 hrs./yr

[c] Emissions factors from AP-42, Section 1.4, Tables 1.4-1 and 1.4-2 for small uncontrolled boilers

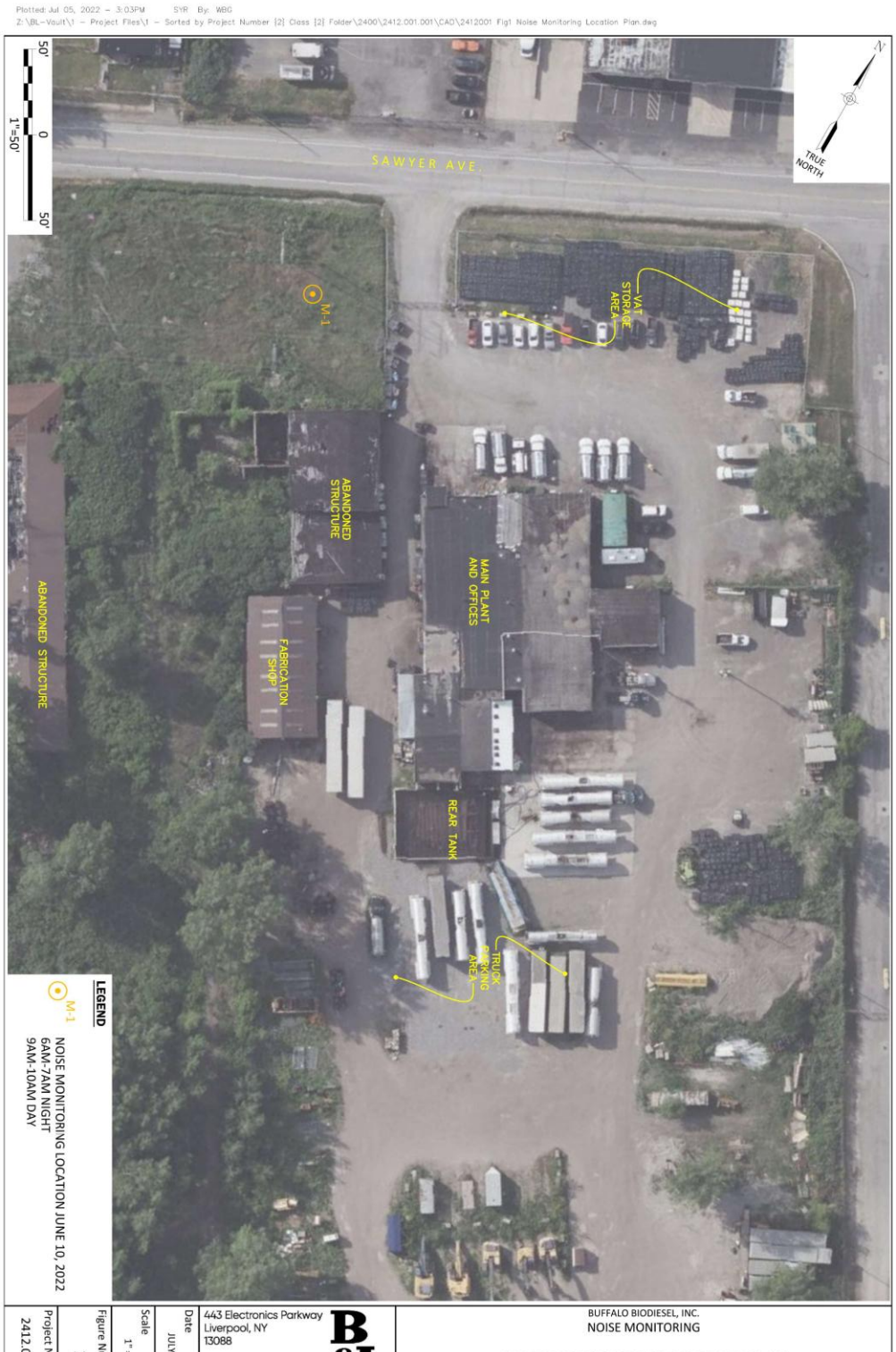
[d] Conservatively assumes PM = PM_{10} = $PM_{2.5}$

[e] Emissions factor from 40 CFR Part 98, Subpart C, Table C-1 and Table C-2 for natural gas

[f] Emissions factor based Global Warming Potentials (GWPs) from 40 CFR Part 98, Table A-1 (January 2025): CO_2 GWP = 1; CH_4 GWP = 84; N_2O GWP = 264

[g] Emissions factors from AP-42, Section 1.4, Tables 1.4-3 and 1.4-4

Appendix C – Noise Study



Session Report

6/13/2022

Information Panel

Name	BuffaloBiodiesel_M1_Nighttime
Start Time	6/10/2022 5:46:37 AM
Stop Time	6/10/2022 7:04:47 AM
Device Name	BGM050004
Model Type	SoundPro DL
Device Firmware Rev	R.13H
Comments	

Summary Data Panel

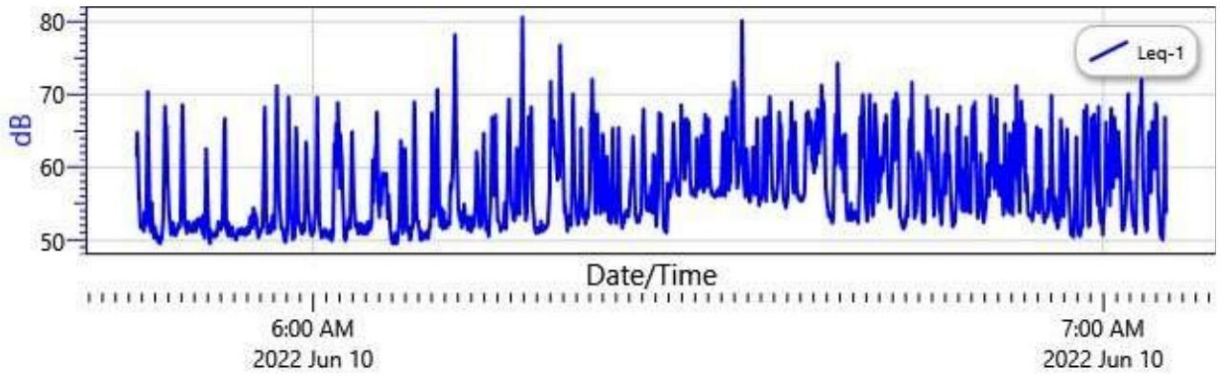
Description	Meter	Value	Description	Meter	Value
Leq	1	61.5 dB			
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	SLOW	Bandwidth	1	OFF

Calibration History

Date	Calibration Action	Level	Cal. Model Type	Serial Number	Cert. Due Date
6/10/2022 5:34:27 AM	Calibration	114.0			
6/10/2022 7:08:00 AM	Verification	114.0			

Logged Data Chart

BuffaloBiodiesel_M1_Nighttime: Logged Data Chart



Session Report

6/13/2022

Information Panel

Name	BuffaloBiodiesel_M1_Daytime
Start Time	6/10/2022 8:27:42 AM
Stop Time	6/10/2022 10:00:53 AM
Device Name	BGM050004
Model Type	SoundPro DL
Device Firmware Rev	R.13H
Comments	

Summary Data Panel

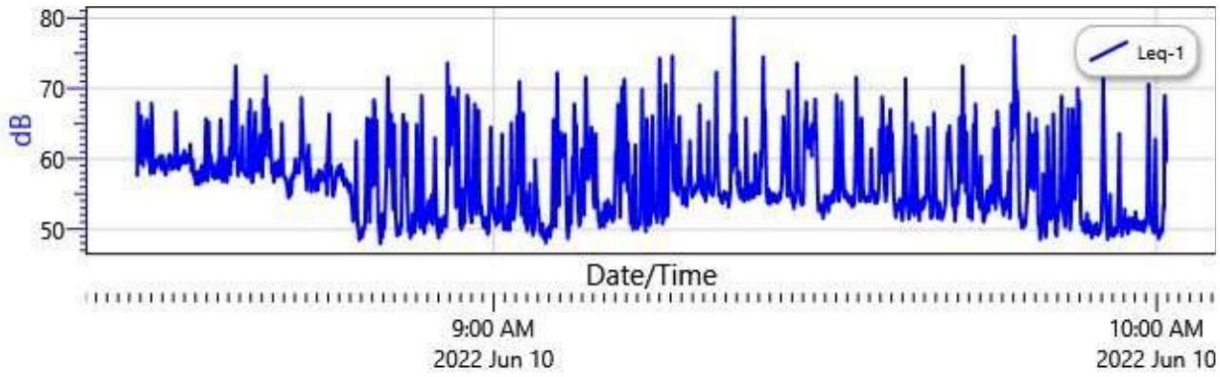
Description	Meter	Value	Description	Meter	Value
Leq	1	60.7 dB			
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	SLOW	Bandwidth	1	OFF

Calibration History

Date	Calibration Action	Level	Cal. Model Type	Serial Number	Cert. Due Date
6/10/2022 8:25:07 AM	Calibration	114.0			
6/10/2022 10:04:11 AM	Verification	114.0			

Logged Data Chart

BuffaloBiodiesel_M1_Daytime: Logged Data Chart



FA00727

TSI INCORPORATED – OCONOMOWOC
1060 Corporate Center Drive, Oconomowoc, WI 53066 USA
tel 651 490 2811 + toll free 800 245 0779 + web www.tsi.com

Certificate of Calibration

Certificate No:1005921 BGM050004

Submitted By: ECO RENTAL SOLUTIONS LLC
5900 HOLLIS STREET STE T2
EMERYVILLE, CA 94608-2008

Serial Number:	BGM050004	Date Received:	3/18/2022
Customer ID:	FA00727	Date Issued:	4/19/2022
Model:	SOUNDPRO DL-2 SLM	Valid Until:	4/19/2023

Test Conditions:

Temperature:	18°C to 29°C
Humidity:	20% to 80%
Barometric Pressure:	890 mbar to 1050 mbar

Model Conditions:

As Found:	DAMAGED
As Left:	IN TOLERANCE

SubAssemblies:

Description:	Serial Number:
MICROPHONE QE 7052 1/2 IN. ELECTRET	53997
TYPE 2 PREAMP	0122 0314

Calibrated per Procedure:53V899

Reference Standard(s):

I.D. Number	Device	Last Calibration	Date Calibration Due
EF000100	QUEST-CAL	3/31/2021	3/31/2022
ET0000556	B&K ENSEMBLE	6/18/2020	6/18/2022

Measurement Uncertainty:

ACOUSTIC +/- 0.19DB
Estimated at 95% Confidence Level (k=2)

Calibrated By: Paul M. Wegmann 4/19/2022
PAUL WEGMANN Service Technician

This report certifies that all calibration equipment used in the test is traceable to NIST, and applies only to the unit identified under equipment above. This report must not be reproduced except in its entirety without the written approval of TSI Incorporated.

Appendix D – Town of Tonawanda Sewer Discharge Permit #646

Permit No. 646

TOWN OF TONAWANDA

INDUSTRIAL SEWER CONNECTION PERMIT

Company Name: Buffalo Biodiesel, Inc.
Division Name (if Applicable)

Mailing Address: 17 Court Street
Street or P.O. Box
Buffalo, NY 14207
City, State and Zip Code

Facility Address: 225 Sawyer Ave.
Street or P.O. Box
Tonawanda, New York 14150
City, State and Zip Code

The above Industrial User is authorized to discharge industrial wastewater to the Town of Tonawanda sewer system in compliance with the Town's Sewer Use Ordinance Number 2-2000, any applicable provisions of Federal or State law or regulation, and in accordance with discharge point(s), effluent limitations, monitoring requirements, and other conditions set forth herein.

This permit is granted in accordance with the application filed on January 2, 2025 *in the office of the Pretreatment Administrator, and in conformity with plans, specifications, and other data submitted to the Town in support of the above application.*

Effective Date: January 2, 2025

Expiration Date: December 31, 2027

Permit No. 646

Date: 1-2-24 Signed: Paul K Morrow

Paul Morrow
Town of Tonawanda
Pretreatment Coordinator

Permit No. 646

Modified Date: _____

WASTEWATER STREAMS AUTHORIZED FOR DISCHARGE

WASTEWATER STREAM	APPROXIMATE FLOW(GPD)	YES	NO
A. Sanitary Discharge	8,000	X	
B. Cooling Water			
C. Boiler Blowdown			
D. Process Wastewater			
E. Other	Drum Cleaning- 500 GPD	X	
F. Other		X	

PART 1 - WASTEWATER DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS

A. LOCALLY DERIVED LIMITATIONS

The industrial user shall comply with the following locally derived effluent limitations effective as of: ***January 2, 2025. All discharge is to take place between the hours of 7 a.m. and 5 p.m., no discharge is allowed outside of the hours.***

MONITORING LOCATION: Discharge Pipe from Oil Water Separator

SAMPLE TYPE: Grab

PARAMETERS	SAMPLE FREQUENCY	LIMIT	PURPOSE
pH	2x per Month *	5.0-9.5 SU	Compliance
Oil and Grease	"	300 mg/l	"
BOD	"	250 mg/l	Surcharge
TSS	"	"	"
Total Phosphorus	"	6.0 mg/l	"
Total Zinc	"	4.4 mg/l	Compliance
Total Arsenic	"	0.5 mg/l	Compliance
Total Mercury	"	0.001 mg/l	Compliance
Total Copper	"	2.6 mg/l	Compliance
Total Chrome	"	1.5 mg/l	Compliance
Total Nickel	"	5.0 mg/l	Compliance
Total Cyanide	"	1.1 mg/l	Compliance
Flow	Monthly		

BOD= Biochemical Oxygen Demand, TSS= Total Suspended Solids

*Two times per month at least 14 days apart.

Note: The complete list of discharge limitations for dischargers to the Town Treatment Plant is contained in the Town's Local Law 2-2000. On the basis of the application and previous monitoring, parameters deemed applicable to this discharge have been excerpted and their limitations included above. The discharger should be aware that all other limitations apply and should consider all such limitations when considering process changes or plant modifications.

PART II - SPECIAL CONDITIONS/COMPLIANCE SCHEDULE

1. *The Industrial User shall develop, within 6 months of the effective date of this permit, an accidental spill prevention/slug control/SPCC plan(s) to eliminate or minimize the accidental or slug discharge of pollutants into the sewer system, which could have an effect on the Town's treatment plant, sludge, or cause the Town to violate its SPDES permit.*

PART III - REPORTING REQUIREMENTS

1. *All Industries requiring submittal of self-monitoring reports (SMR's) must submit all laboratory results on all discharged samples. If a lab analysis was performed using an EPA approved test method, then those results must be included in the SMR.*
   Persons signing SMR's must be a responsible company official, ie; owner, corporate manager, or supervise more than two hundred fifty (250) employees. Any of the above may appoint a company representative to sign SMR's but written notice must be supplied to this office authorizing said employee to sign.

The following statement will be required on all SMR's and baseline monitoring reports (BMR):

" I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violation."

2. *If an Industrial User knows in advance of the need for a bypass, it shall submit prior notice to the Town, if possible at least ten days before the date of the bypass. An Industrial User shall submit oral notice of an unanticipated bypass or slug discharge that exceeds applicable Pretreatment Standards to the Town within 24 hours from the time the Industrial User becomes aware of the bypass or slug discharge. A written submission shall also be provided within 5 days of the time the Industrial User becomes aware of the bypass or slug discharge. The written submission shall contain a description of the bypass or slug discharge and its cause; the duration of the bypass/ slug discharge , including exact dates and times, and, if the bypass has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass/ slug discharge. The Town may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.*

3. *The Industrial User shall notify the Town 30 days prior to the introduction of new wastewater or pollutants or any substantial change in the volume or characteristics of the wastewater being introduced into the POTW from the User's industrial processes. The Industrial User Is required to notify the Town immediately of any changes to its facility affecting it potential for slug discharge.*

4. *Any upset experienced by the Industrial User of its treatment that places it in a temporary state of non-compliance with wastewater discharge limitations contained in this permit or other limitations specified in the Town's Ordinance shall be reported to the Town within 24 hours of first awareness of the commencement of the upset. Immediate resampling for the non-compliance pollutant shall begin. A detailed report shall be filed within 5 days.*

5. *The Industrial User is required to submit to the Town reports on the results of its sampling of the pollutants specified in Part I of this Permit. This report shall also contain monthly flows.*

6. *Analytical procedures must be performed in accordance with 40 CFR Part 136. Additional pollutants not contained in Part 136 must be performed using validated analytical methods approved by EPA (40 CFR 403.12 [g] [4]).*

7. *All self-monitoring reports shall be submitted to the following address by the 25th day of the month following the reporting period:*

Paul Morrow, Pretreatment Coordinator
Wastewater Treatment Facility
Two Mile Creek Road
Tonawanda, New York 14150

PART IV - STANDARD CONDITIONS

1. *The Industrial User shall comply with all the general prohibitive discharge standards in Article IV of the Local Law 2-2000.*

   a. *BOD 250 mg/l, SS 250 mg/l, P 6 mg/l are not to be construed as discharge limits of the above pollutants but as a baseline for generating abnormal sewer charges. Permitees that sample more frequently than required for surchargeable parameters and have a greater then 30% variation in flow per reportable day will have a flow averaged used for surcharge calculation.*

2. RIGHT OF ENTRY

The Industrial User shall, after reasonable notification by the Town, allow the Town or its representatives, exhibiting proper credentials and identification, to enter upon the premises of the User, at all reasonable hours, for the purposes of inspection, sampling, or records inspection. Reasonable hours in the context of inspection and sampling includes any time the Industrial User is operating any process which results in a process wastewater discharge to the Town's sewerage system.

3. RECORDS RETENTION

The Industrial User shall retain and preserve for no less than three (3) years, any records, books, documents, memoranda, reports, correspondence and all summaries thereof, relating to monitoring, sampling and chemical analysis made by or in behalf of the User in connection with its discharge.

a) All records that pertain to matters that are the subject of special orders or any other enforcement or litigation activities brought by the Town shall be retained and preserved by the Industrial User until all enforcement activities have concluded and all periods of limitation with respect to any and all appeals have expired.

4. CONFIDENTIAL INFORMATION

Except for data determined to be confidential under Article VII, Section 4 of the Town's Ordinance, all reports required by this permit shall be available for public inspection at the office of the Pretreatment Coordinator, Wastewater Treatment Facility, Two Mile Creek Road, Tonawanda, New York 14150.

5. RECORDING OF RESULTS

For each measurement or sample taken pursuant to the requirements of this permit, the user shall record the following information:

a) The exact place, date and time of sampling;
b) The dates the analyses were performed;
c) The person(s) who performed the analyses;
d) The analytical techniques or methods used, and
e) The results of all required analyses.
f) Where sanitary sewer discharge is measured by a mechanical or electronic device, accuracy of device shall be certified correct every year by the manufacturer
g) Where sanitary sewer discharge is measured as consumed water, the water meter must be certified as per the following schedule: meter size 5/8 to 1 inch every ten years, meter size 1 inch to 4 inch every five years, and meter size 4 inches and larger every year.

6. DILUTION

No Industrial User shall increase the use of potable or process water or, in any way, attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this permit

7. PROPER DISPOSAL OF PRETREATMENT SLUDGES AND SPENT CHEMICALS

The disposal of sludges and spent chemicals generated shall be done in accordance with Section 405 of the Clean Water Act and Subtitles C and D of the Resource Conservation and Recovery Act.

8. TOXIC SUBSTANCES

All waters shall be maintained free of toxic substances in concentrations that are toxic to or produce detrimental physiological responses in human, plant, animal, or aquatic life.

9. SIGNATORY REQUIREMENTS

All reports required by this permit shall be signed by a principal executive officer of the User, or his designee.

10. REVOCATION OF PERMIT

The permit issued to the Industrial User by the Town may be revoked when after inspection, monitoring or analysis it is determined that the discharge of wastewater to the sanitary sewer is in violation of Federal, State, or local laws, ordinances, or regulations. Additionally, falsification or intentional misrepresentation of data or statements pertaining to the permit application or any other required reporting form, shall be cause for permit revocation.

11. LIMITATIONS ON PERMIT TRANSFER

Transfer of permit. Industrial waste permits are issued to a specific user for a specific operation. In the event of any change in ownership of the industrial facility, the permittee shall notify the new owner of the existence of the permit by letter, a copy of which shall be forwarded to the Pretreatment Administrator 30 days prior to change of ownership. A new industrial waste permit must be issued to the new owner.

12. FALSIFYING INFORMATION OR TAMPERING WITH MONITORING EQUIPMENT

Knowingly making any false statement on any report or other document required by this permit or knowingly rendered any monitoring device or method inaccurate, may result in punishment under the criminal law of the Town, as well as being subjected to civil penalties and relief.

13. MODIFICATION OR REVISION OF THE PERMIT

a) *The terms and conditions of this permit may be subject to modification by the Town at any time as limitations or requirements as identified the Town's Ordinance, are modified or other just cause exists.*
b) *This permit may also be modified to incorporate special conditions resulting from the issuance of a special order.*
c) *The terms and conditions may be modified as a result of EPA promulgating a new federal Pretreatment standard.*
d) *Any permit modifications which result in new conditions in the permit shall include a reasonable time schedule for compliance if necessary.*

Permit No: 646

14. DUTY TO REAPPLY

The Town shall notify a User sixty (60) days prior to the expiration of the User's Permit. Within thirty (30) days of the notification, the User shall reapply for re- issuance of the permit on a form provided by the Town.

15. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

16. LIMITATIONS

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any invasion of personal rights, nor any infringement of Federal, State or Local regulations.

17. ENFORCEMENT OF THE SEWER USE LAW AND PERMITS

The Town has developed and received USEPA approval of its Enforcement Response Plan which details the standard responses to be taken by the Town when it encounters various violations of the Sewer Use Law or the terms of this permit. Copies of this document are available at the office of the Pretreatment Administrator. Town of Tonawanda Sewer Use Ordinance 2-2000 Article VI 165-33 allows for punitive Administrative fines of up to $5,000 per day. The Town of Tonawanda may also maintain an action or proceeding in the name of the Town of Tonawanda in a court of competent jurisdiction for injunctive relief of any violation Article 6 of the Town Sewer Use Ordinance 2-2000

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